

Edited by

Irmeli Mustalahti

## Footprints in Forests

Effects and Impacts of Finnish Forestry Assistance

### **FOOTPRINTS IN FORESTS**

# EFFECTS AND IMPACTS OF FINNISH FORESTRY ASSISTANCE

Edited by Irmeli Mustalahti

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### **CONTENTS**

1.	FINNISH FORESTRY ASSISTANCE: CHANGE IN CONTINUITY	7
	Juhani Koponen and Irmeli Mustalahti	
2.	DOES FINNISH FORESTRY AID MATTER? SOME QUESTIONS CONCERNING THE ASSESSMENT OF ITS EFFECTS AND IMPACTS	
	Juhani Koponen	
	Introduction The rise of sustainable forest management The world's forests and forest transitions Finnish aid in the world's forests National trends Vietnam: Biomass transition Nepal: Rise of community forestry Tanzania: Promise betrayed Aid and forest governance Conclusion Comments: Vesa Kaarakka	20 21 24 27 31 33 36 40 45
	Comments: vesa kaarakka	50
3.	FOREST CONSERVATION AND HUMAN DISPLACEMENT LESSONS FROM THE DEREMA CORRIDOR, TANZANIA  Salla Rantala and Heini Vihemäki	1
	Introduction Access and agency in displacement processes and outcomes Study area: History of resource use and livelihoods in Derema Finnish aid in the East Usambaras Institutional framework of conservation and displacement in Derema Establishment of the Derema Corridor Villagers' strategies and limits to their agency Equity and legitimacy of compensation Conclusions	55 57 58 60 62 69 73 75
	Comments: George Kajembe	82

4.	THE IMPACTS OF FORESTRY ASSISTANCE IN NEPAL: INTENDED AND UNINTENDED CHANGES  Sujan Ghimire Sharma
	Introduction
5.	POVERTY REDUCTION THROUGH FORESTRY IN VIETNAM: IMPACTS OF THE VIETNAM-FINLAND FORESTRY SECTOR CO-OPERATION PROGRAMME
	Bui Thi Minh Tam108Poverty reduction and forestry in Vietnam109Background to the VinFinFor Programme112A theoretical framework for forestry, poverty and aid115Methodological challenges in impact evaluation118Methodology of the study119Construction of the counterfactual outcome121Key findings and discussion126Impact of the VinFinFor Programme on the poverty rate127Impact on household expenditure and food security128Impact on household access to credit129Impact on household forestry130Differences in impact for poor and non-poor households132Differences in impact by gender135Conclusions137Comments: Pertti Haaparanta144

6.	DEVELOPMENT, GOVERNANCE AND CONTESTED POWER RELATIONS:	
	THE CASE OF CENTRAL AMERICAN FORESTRY PROGRAMMES	
	René Mendoza Vidaurre and Anja Nygren	
	Introduction	149 153 157
	Impacts on political power relations and gatekeeping mechanisms	163
	Comments: Kari Leppänen	171
7.	THE REALITIES OF PARTICIPATORY FOREST MANAGEMENT: CASE STUDY ANALYSES FROM TANZANIA, MOZAMBIQUE, LAOS AN	D VIETNAM
	Irmeli Mustalahti	
	Introduction	
	Comments: Jesse Ribot	193

8. AUTHORS...... 196

## 1. FINNISH FORESTRY ASSISTANCE: CHANGE IN CONTINUITY

Juhani Koponen and Irmeli Mustalahti

Forestry has been constantly present throughout the 50-year history of Finnish development cooperation, although the forms and modalities of the various forestry interventions have changed greatly. Much has happened during these years, but one thing is clear: the present state of the forests and the benefits derived from them are not what it was hoped they would become when aid was started, either globally or in Finland's long-term partner countries. Although global and national forest policies are generally thought to have improved greatly, with 'sustainable forest management' becoming widely accepted as a goal, sustainability is far from being achieved on the ground. Deforestation continues on the global scale, as well as in almost all of Finland's partner countries. There are a few positive signs, to be sure: in some countries it has been possible to turn the decrease in forest area into an increase, and participatory approaches to forest management in other countries hold potential for stopping the destruction. This book aims to make a contribution to understanding why it has been easier to draft and pass forest and forestry policies than to implement them, and why forestry assistance supporting the new policies is so complex and its impacts are so often contradictory.

The authors of the book are researchers who have followed the changes in Finnish forestry assistance achieved through their research projects in Africa, Asia and Central America. Most of the studies presented here were part of a research project entitled 'Does Finnish Aid Matter,' which assessed the impacts of Finnish aid. This project, funded by the Academy of Finland in 2005–2008, was coordinated by the Institute of Development Studies (IDS) at the University of Helsinki, now part of the Department of Political and Economic Studies at the Faculty of Social Sciences, University of Helsinki. The research was prompted by the fact that, despite the rhetorical prominence of forest and forestry in Finnish discourse, little was known about the actual effects and impacts of the Finnish forestry assistance extended through development cooperation. Many evaluations had been made, but they remained within the managerial frameworks of project operations. Occasionally, some of the higher-profile interventions became the subject of critical public discussion (e.g. Kuvaja et al. 1998 and Atampurge 1992). However, in most

cases, little knowledge has been publicly available as regards what the intended effects and actual unintended impacts were that these interventions had on the forests and more generally in the aid recipient countries. The research found that most of the forestry interventions remained without visible effects, although they may have had impacts.

The methodological starting-point for the present book was maintaining a clear conceptual distinction between the effects and the effectiveness of aid and its impact. These concepts are closely related, of course, but they should not be conflated: the huge donor debate over aid effectiveness is primarily concerned with effects, and has very little to do with impacts. This debate, which was triggered by the World Bank 1998 Report 'Assessing Aid' (Dollar and Pritchett 1998), was subsequently taken up by OECD DAC and culminated in the Paris Declaration of 2005. The concepts of "effects" and "effectiveness" need to be kept separate because development interventions, like all social interventions, have consequences of different kinds and different concepts are needed to differentiate these consequences. In the evaluation literature, the notion of effect is commonly used for the attainment of the shorter-term, explicit goals of aid, whereas impacts are usually defined as the long-term, sustainable changes brought about by a given intervention (e.g. Oakley et al. 1998:33; Roche 1999:20-24).



Map 1. The case study countries in Africa, Asia and Central America.

In evaluations, the difference between effects and impacts is that impacts are more extensive, longer-lasting, and not only planned and desired, but also at times unintended. Here, we operated with a slightly different notion of impact. Following Folke (1998; 2001), we took impacts as events happening throughout the lifetime of the intervention, from conception to the end of the project. Whereas the effects take time to materialise and can properly be gauged only after the end of the intervention, if ever, impacts can be seen unfolding from the first day a particular intervention is conceived – or sometimes even if it is never implemented (see the chapter by Sujan Ghimire in this volume). We also differ in our definition from that used in the logical framework terminology (in so-called logframes), in which "impacts" are equated with the broader goals of the intervention. We see effects as something that can be envisioned beforehand, and which can easily be traced to determine whether they were produced or not. Impacts for us are much harder to detect, as they emerge only in the longer run as indirect consequences of aid intervention. A big difference between impacts and effects is that we do not know beforehand what the impacts might turn out to be - they are things that are unplanned, unintended, or officially unplanned yet triggered off or affected by the intervention.

We assumed from the start that studying the actual impacts, in the sense defined above, would not be easy, an assumption that was amply confirmed during the course of the research. The main problem, of course, is that when we are studying what has happened in forests or the forestry sector, it is difficult to know if what we find is the result of a policy or the result of aid intervention. We may not even be sure what the contribution of 'forestry' has been to what is happening in the forests. This is called the problem of attribution; deciding how to attribute a particular outcome to a particular causal factor. Some development economists have recently claimed to have resolved this problem by introducing randomization (e.g. Dufflo and Kremer 2008), but not everyone is convinced of the reliability of the basic logic and the assumptions underlying the randomization approach.

Societies are complex open systems in constant flux, and it can plausibly be argued that causality works in an utterly different manner in societies and the social sciences from the way it works in nature and the natural sciences. Rather than consisting of chains of causes invariably followed by their effects, social processes can be seen to be flowing from a number of factors having more or less causal power, that is, factors which can condition, determine and/or influence the flow of events. If that is the case, an attempt to firmly attribute one cause to one effect is a chimera. In any case,

an evaluation methodology based on randomization is suitable for studying development aid only in narrow and limited projects. Looking at forestry aid as a whole, there is no way to randomize all of the contextual factors in such a way that only the aid intervention, let alone just Finnish aid intervention, would remain as the sole causal factor. This problem of attribution is further compounded by the fact that forests can mean so many things to so many people. Furthermore, forests are continuously subjected to many outside influences besides aid interventions; and the ideas of what forests should be used for have changed so much that the needs for forests and the sensitivities of the meaning and significance of forests are very different from country to country.

Our methodological starting-point here was that, even if we acknowledged that it is impossible to measure the exact contributions of each and every causal factor, it must still be possible to conduct an informed discussion of these factors by relating them to their contexts. This can be done by what we termed context-specific impact studies. This approach jettisons linear or sequential causal thinking, in which a cause (C) is seen to produce an impact (I) either directly or through one or more intervening variables (C') (Figure 1). Rather, our approach focuses on the political and social setting – the 'context' – in which the intervention takes place, seeing the intervention and the context together as a whole. This makes it possible to see what changes are unfolding in the given context, and to decide what social mechanisms are producing those changes (Figure 2). We do this because of the simple fact that an intervention does not take place in a vacuum: an impact is produced by the interplay between the intervention and the myriad of processes already unfolding at the scene. In more theory-laden terms, the 'successionist' view of causality is replaced by a 'generative' view in which the interventions are seen to work among and with other causal forces, through a set of complex, partly invisible mechanisms (Pawson and Tilley, Ch. 3). Methodologically, we did not take the intervention as the starting-point, but first looked at the major changes that had occurred in the geographical or social area where the intervention was made. Only after examination of the changes was an attempt made to figure out what the contribution of the intervention to these changes might have been. In this 'generative' approach, contextualisation overrides attribution.

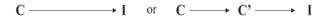


Figure 1. Successionist causality

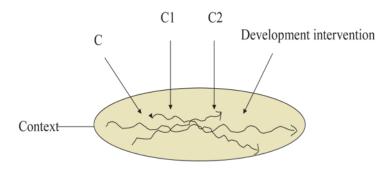


Figure 2. Generative causality

This book is concerned with the effects and impacts of Finnish forest aid and not so much with what drives them, but a few words need to be said about the latter. Perhaps the main thing is to recognize that the Finns have a peculiar relationship both with forests and with development cooperation. Their self-image is that of an independent, self-reliant people, making a living from the forest, and feeling an obligation to always repay their debts. In the 1960s, when developmentalist demands for 'burden-sharing' in international aid activities and in costs of aid in the form of development aid appropriations reached Finland, forestry was an obvious choice as a place for Finns to join in. Finns tend to think that if there is one area in which they excel, and in which they have something to give to the rest of the world, it must be forestry. At the same time, it appeared that forestry was an area where they could use their development aid funds in a way that would also benefit Finland's own economy. Forests and forest industries had been the basis of Finland's own welfare and development. Finland own spectacular development, still fairly recent in the 1960s, had to a great extent been based on the strength of the wood industries. Finnish consultancy companies and manufacturers of forest industry machinery were believed to have internationally top-level know-how and products, marketable in developing countries though development projects.

Thus Finnish forestry aid originally sprang primarily from Finnish visionary considerations and instrumentalist imperatives. In the years that followed, it was continuously guided by these same visions and imperatives, while at the same time following the fads and fashions of developmentalist thinking, rather than respecting the ecological, social and economic conditions in the recipient countries. The early, heavily industryoriented forestry projects have given way to the recent, much more socially and culturally sensitive forestry projects. The emphasis in Finnish forestry aid projects has come a long way from the promotion of forest industries to the promotion of afforestation and reforestation and, further, to aid for national forestry plans and the implementation of participatory forest management (PFM). The effects have varied greatly, but even in cases where effects have not been very apparent, projects may have had significant impacts. A frequent tradeoff has been that between economic gains on the one hand, and losses in natural resources and the environment on the other. Especially in the later interventions, an assessment of their effects and impacts depends greatly on whether these are examined from a professional forestry point of view or put into a wider societal context. In the context-specific viewpoint taken in this book, the impacts of interventions cannot be studied separately from the political and social contexts in which the interventions took place. It is widely understood that forestry depends essentially on economic and socio-political factors; and forestry assistance cannot be implemented without working with various aspects of governance, both in aid-recipient countries as well as among the donor organizations.

Juhani Koponen, the leader of the present research project, is the author of **Chapter 2**, in which he discusses the overall effects and impacts of Finnish forest aid. He reviews the state of the world's forests, and the trends in forestry, both globally and in the main partner countries of Finnish forest aid. He further charts the evolution of global forest policies, examining the possible role of forest aid, both Finnish and other, in all of this. Whereas the legal and institutional framework for forestry seems to be well in place at the national level in partner countries, and this is something that should be largely credited to aid, the situation is starkly different in the forests themselves. The latest FAO statistics suggest that, while deforestation rates are declining on a global scale, they keep accelerating in many of the poorest countries, including most Finnish partners. The only exception is Vietnam, which has gone through a forest transition since the early 1990s, in which the forested area is now growing, although at the expense of biodiversity. Policies and aid have had a role in Vietnam, but the main reasons for the

transition to a growth in forested area are probably to be found in the confluence of several other processes, mostly driven from outside the forest sector. Conversely, in those countries where deforestation continues, such as Tanzania, the decrease in forests is not only or not mainly because of poor forest policies and too little aid, but because other forces and factors, from population growth to low technology, are pushing deforestation. Koponen argues that Finnish forest aid has been guided by an implicit 'Finnish forestry model', which is understood as the combination of high technical expertise and a drive for planning at all levels, with preference given to private actors. Such a Finnish model has been inadequate for effecting change in third-world realities, since the social, economic, cultural and ecological forces and factors that drive the development in third-world forests are so different from those in Finland. The actual impacts of the application of the Finnish model in development aid may be seen more clearly at the systemic level in how the states and administrations in the partner countries work in the forestry sector.

In Chapter 3, Salla Rantala, a PhD candidate at the Viikki Tropical Resources Institute, University of Helsinki, and Heini Vihemäki, a researcher at the World Agroforestry Centre, explore the intended and unintended social consequences of a Finnish-supported forest conservation intervention in the East Usambaras, Tanzania. They analyse the process and outcomes of the establishment of the Derema Corridor in the East Usambaras in its historical and socio-economic contexts. In the process of establishing the Corridor, hundreds of smallholder farmers from five villages, who had previously used the area for cash-crop cultivation and as a source of various non-timber forest products, were excluded from using the land. The main emphasis in this chapter is on how the conservation intervention has shaped the political agency in the affected villages. In addition, the chapter shows how local livelihoods have been affected by the process, and how different groups of people have responded to the changes brought about by the intervention. The diversity of actors and organisations involved in the process at different stages and the multiple arenas of decision-making in which the conditions of conservation and resource control were negotiated increased the unpredictability of the process and its outcomes. Compensation for lost livelihood was sought for the people affected, at first by a large conservation project and later by NGOs, but this turned out to be a highly complex process. Many of the affected farmers who gave up their farming land were paid compensation far less then they had expected. Disruptions in the presence of various organisations and the partial commitment of many actors, resulting in related limited access to information and unclear decision-making authority, constrained the farmers' ability to defend their interests. The more marginalised groups in the society, such as women, considered that their voices were not being heard or adequately taken into account in the compensation process.

In the following Chapter 4, Sujan Ghimire Sharma, a PhD candidate in Sociology at Tribhuvan University, Nepal, looks into two cases of Finnish forestry assistance in Nepal. This chapter illustrates that aid processes and impacts are influenced not only by the objectives and resources of the projects, but also by the interests and the agency of the actors involved. Aid is like a 'game' with different actors and their different interests; so there are agreements and disagreements, compromises and contests, in this game. This leads to both intended and unintended outcomes of aid, which can be discerned at various levels. In the forestry sector in Nepal, the greening of the mid-hills and the clear benefits to the people from community forests are easily seen impacts of the incoming forestry assistance. However, at the local level, aid also provides a space in which some people can aspire to become modern and educated, which endorses social and economic differences. At the national level, the declining actions of the Nepali state as the agent for managing its forests and the dwindling revenue from this renewable resource are also consequences of aid.

Chapter 5 was written by Bui Minh Tam, a Vietnamese PhD candidate at Thammasat University, Thailand, as part of her doctoral dissertation. The chapter presents poverty impact analyses of Finnish aid in Vietnam. Poverty reduction is now considered the ultimate objective of development interventions. Many donor projects in forestry and rural development also aim at this objective, but questions are being raised about the net contribution of foreign aid in the recipient countries' poverty reduction efforts. In the case of Vietnam, the achievements in poverty reduction represent one of the most successful stories in the country's economic development, but the role foreign aid played in that success is not clear. This chapter aims to contribute to the debate on aid effectiveness with respect to poverty reduction through an empirical investigation of the impact of a forestry programme funded by Finland in Cho Don District, Bac Kan province, in the north of Vietnam. The chapter uses a different methodology from the other chapters in the present volume. It assesses the "causal effect" of the programme on the well-being of rural households, as well as their access to credit and on forest plantation using what is called the non-parametric propensity score matching approach. With this approach, the study finds a positive effect of the programme on household consumption, access to credit, and forest plantation, as well as a negative effect on household poverty status. Disaggregation analysis of the impact on the poor and non-poor reveals a negative impact on consumption of poor households versus a positive impact on the non-poor. Simple comparison analysis also supports the conclusion that male-headed households benefitted more from the programme and have done better in improving their livelihoods compared to female-headed households. These findings point to the critical need for pro-poor targeting and consideration of gender equality in the designing and planning of future poverty reduction programmes.

Chapter 6 on the Central American forestry programmes is based on the long-term field work of René Mendoza Vidaurre, a PhD candidate in Development Studies at Anvers University, Belgium, who wrote the chapter together with Anja Nygren, who has carried out long term socio-political research in the area. The chapter analyses the opportunities and constraints faced by the Finnish forestry aid programme implemented in 1992-2003 in Nicaragua and Honduras, which aimed to promote good governance and improve the well-being of forest-based communities through PFM approaches. Special attention is paid to the political economy of the forestry programmes, and the ambiguous networks of power through which the strategic gatekeepers at different social levels were able to capture many of the critical resources targeted for community forest development. The results of these analyses indicate that, without special attention to wider socio-economic processes and political power relations, participatory forest approaches as such remain weak policy instruments for sustainable forest management. The opportunities of forest development programmes to encourage sustainable forest management and alleviate rural poverty largely depend on the institutional capacities for good governance and the removal of hierarchical production-trade networks.

The last chapter, **Chapter 7**, written by *Irmeli Mustalahti*, reviews the findings of a number of studies undertaken by the author and other researchers regarding the viability of PFM in Tanzania, Mozambique, Laos and Vietnam. In the case study countries, Finland has supported various forms of PFM based on the legal and political conditions in the recipient countries. Currently, these countries are in the process of institutionalising these different PFM models within national organs and bodies. In Tanzania, the recent reforms in local government legislation and the land laws, built upon the 2002 Forest Act, support a variety of PFM models. Community forestry legislation in Tanzania is one of the most advanced in the world, as reflected in Tanzanian

law, policy and practice. In Mozambique, despite national policy statements on community participation in natural resources management, the current Forestry and Wildlife Law reflects a prevailing trend in government policies, namely, that the private sector is left to play the leading role in economic development. In both Vietnam and Laos, natural forest land is by law owned and managed by the State on behalf of the nation as a whole. In Vietnam, domestic households, individuals and communities can lease forest land, be assigned roles in forest development and protection by the State, or have their forest use rights and ownership of planted production forests recognised by the State. In Laos, villages are allowed to participate in forestry management activities and share benefits from forests, but cannot lease or own natural production forests. All four case study countries seem to have two critical elements affecting the institutional viability of PFM: (a) forest governance, and (b) forestry extension services. The summary presented in this chapter analyses how and why the problems related to these two factors hinder the processes, with a view to sustaining PFM over the long term and reducing dependency on donor projects.

This book sets out to demonstrate the complex reality of Finnish-supported forestry interventions. The book does not even try to give direct answers as to what are the best practices or the most critical problems; it rather tries to emphasise how the effects and impacts of Finnish forestry assistance can be seen from different perspectives. It is meant to stimulate informed discussion on these issues, in such a way as to contribute to the search for new practices. A suggestion for the start for the discussion has been made in the book itself. All chapters have gone through an external referee process, with the short comments of the referees published at the end of each chapter. The referees are well-known scholars and practitioners from different continents who have followed the changes in forestry policies and development assistance while working in academia and aid organisations, or in government ministries.

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case study countries for facilitation during the collection of information and documents. Our greatest gratitude is to all the case study villages, communities and case study households. Without their warm and welcoming attitude, this book could not have been written. Also, we acknowledge the inputs of the external referees who have given feedback, corrected the contents and otherwise supported the work of the authors. Finally, we also wish to thank the publisher, and the language reviewer and editors at the Development Communication Unit at the Ministry for Foreign Affairs of Finland.

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## 2. DOES FINNISH FORESTRY AID MATTER? SOME QUESTIONS CONCERNING THE ASSESSMENT OF ITS EFFECTS AND IMPACTS

Juhani Koponen

#### Introduction

As the multiple facets and functions of the world's forests have become ever more widely appreciated, it has become increasingly difficult to assess the effects and impacts of international aid to forests and forestry. This is because the ideas of what forests should be used for and why should they be maintained and aided have changed so much. The forest, once seen as a primal force, and a foe of human culture that had to be cleared away for civilization to advance, may now be seen as largely domesticated and subject to everyday economics. Nonetheless, much of the symbolic power of the idea of 'forest' lingers on and is constantly revived in popular imagination. Although those voices speaking against the short-sighted utilitarian use of the forest have strengthened, especially in the richer countries, the forests retain their economic function as providers of wood for immediate human or industrial use: the peak in this respect may still lie ahead. Many other uses for forests have been found, from the collection of what are called non-timber forests products (NTFPs) to outdoor recreation for busy people wishing to temporarily escape the urban treadmill. The pivotal role of forest in local ecosystems has long been understood: to this has now been added their significance to the global environment as a source of biodiversity, a provider of various environmental services, and perhaps most important as a regulator of the global climate system. Underlying these concepts of forest is the question of what actually makes a forest. Will any place filled with enough trees do, or do we expect that place and those trees together with everything growing and living in that place will form a complicated, multifaceted, indigenously evolved ecosystem of its own? Ideas about forests have clearly changed, as have the demands placed on forests. What people need and want from the forest is different in different countries, since the forest is closely intertwined not only with geography and economy, but also with its history and culture.

Thus, when we wish to evaluate the effects and impacts of forestry aid, we need a benchmark against which to measure them. The problem is that such

a benchmark would of necessity be constantly moving. What is regarded as the proper care and use of a forest varies from time to time and place to place. Even the simplest of measures, such as the current extent and quality of existing forests and current trends in forestry immediately raises the question of scale: local, national, or global. Furthermore, as will be shown below, with the data presently available even such simple questions cannot be answered with any degree of accuracy. In any case, just looking at the trees is no longer enough. As we know, you cannot always see the forest when looking at the trees. Forests, whether cleared or preserved, also have their economic, social and cultural functions, which must be accounted for. To further complicate the issue, since forests have entered the international developmentalist discourse, they have become entangled with the internal contradictions of developmentalism. Even if forestry aid has climbed aboard the bandwagon of poverty reduction, that does not mean that the older idea of modernisation has been abandoned. The primary declared goal of development cooperation and other development interventions may no longer be that all the countries in the world should follow a Western development path and "catch up" to developed countries. It may have become more important to relieve abject poverty in the poorest countries in the very gradual and incomplete way as envisaged in the Millennium Development Goals. However, modernization remains a powerful idea which continues to animate much that happens in forestry aid.

Finnish forest assistance has been operating for a long time. It has inevitably followed the fads and fashions of the discourse of both international forestry and the developmentalism. The early forestry projects with their heavy emphasis on forest industry gave way first to afforestation and then to forestry planning which tried to combine the commercial use of forest resources with efforts toward their conservation. To these have recently been added more socially and culturally sensitive forestry projects which often have a participatory approach. Finnish aid operated for a long time with no clear guidelines concerning its overall aims and approaches. The lack of definitions of goals and means has now been to some extent resolved by the adaption of the principles of sustainable forest management defined under the umbrella of the UN, as will be argued below.

Yet one can argue that there are two broad ideas underlying the diversity of approaches and modalities: First, throughout the entire period of Finnish forest aid, there has been an emphasis on the (economically) productive use of forests. Second, during the last 20 years or so this emphasis on forest productivity has been complemented by the conviction that

the private sector, i.e., private companies and independent farmers and forest owners, can play the crucial role in many forest aid projects. These two ideas are the pillars of a 'Finnish forestry model' which Finns perceive as the primary foundation of their own economic development.

### The rise of sustainable forest management

In the international forest discourse, the present buzzword is sustainable forest management, or SFM. As a term, it is not very old, having entered development thinking in the 1980s, in the wake of the Our Common Future report by the Brundtland Commission. The subsequent rise of 'sustainability thinking' reached its apotheosis in the United Nations Conference on Environment and Development, or UNCED, better remembered as the 'Earth Summit', in Rio in 1992. But in forestry, sustainability has long antecedents. The idea of 'sustainable yield' has been part of scientific forestry since its introduction by the Germans in the late 19th century: a popular slogan among Finnish foresters concerning forests has been 'Use it or lose it!' Nonetheless, it took a considerable length of time in international discussions before it was even possible for the UN Member States at the General Assembly to agree in January 2008 on a "Non-legally binding instrument on all types of forests" where sustainability figures prominently. This is a soft law document in which the signatories, while not contractually committing themselves to anything, promise to work globally, regionally and nationally to "achieve progress towards" the achievement by 2015 of the following objectives, which are worth quoting in full (United Nations, 2008):

- Reverse the loss of forest cover worldwide through sustainable forest management (which includes protection, restoration, afforestation and reforestation) and increase efforts to prevent forest degradation;
- Enhance forest-based economic, social and environmental benefits, also improving the livelihoods of forest-dependent people;
- Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests;
- Reverse the decline in official development assistance for sustainable forest management and mobilize significantly increased, new, and additional financial resources from all sources for the implementation of sustainable forest management.

National Forest Programmes (NFPs) are seen as one major means for accomplishing all of the above. What in practice constitutes such a program-

me is an intriguing question. NFPs are not meant to be strict once-andfor-all blueprints, but rather they form a continuous cycle of planning, implementation and monitoring. They should not be restricted to just the narrow sector of traditional forestry, but should also include other sectors and forces affecting the forests. There is very little practical guidance for the construction of the programmes in the existing documents; it is just said that NFPs will identify the actions needed and propose measures and policies. NFP proposals should be based on the proposals for the action of UN bodies such as the Intergovernmental Panel on Forests and the Inter-governmental Forum on Forests, and the successor of these, the United Nations Forum on Forests (UNFF), which also has a mandate to monitor the programmes. NFPs are based on such noble UN principles such as national sovereignty and leadership; partnership and participation of all interested parties, with special regard for indigenous people and local communities; promotion of secure land tenure arrangements, and ecosystem approaches to development. Achieving sustainable forest management is said to require increased and additional financial resources - that is, more aid - and good governance at all levels. These same goals and NFPs, with all their ambiguities, have now been included in Finnish forestry co-operation as well in the so-called Metsälinjaus, taking over and replacing previous goals (discussed in more detail below).

### The world's forests and forest transitions

Meanwhile, what is happening on the ground? Current global trends in forests send a mixed message. One conclusion apparently suggested by data from recent forest resource assessments and research is that trends in the world's forests provide a mirror image of what is happening in world population. Population growth is slowing down at the global level, but growth rates continue to be high in most of the poor countries. Correspondingly, while deforestation rates are declining on a global scale, they continue accelerating in many of the poorest countries. In respect to both population and forests, the loudest alarms are fading. The world population is expected to stabilize at 9 billion around 2050. In the forests, some 13 million hectares were converted to agricultural or other use during the first decade of the new millennium, or otherwise lost through natural causes every year, compared to 16 million hectares per year in the 1990s. The net loss of forest area is further reduced every year by afforestation and the expansion of existing forests in many countries. The net decrease in forest area in the

period 2000–2010 is estimated at 5.2 million hectares per year – down from 8.3 million hectares in 1990–2000 but still an area larger than the whole of Holland or Denmark. (FAO, 2010).

This apparent fit between the grand contours of global population and forest may be taken to imply that the old struggle between humans and the forest continues: where people multiply the trees have to give way. But this is a very rough picture whose attractiveness to researchers is waning. It is well understood that the relationship between people and forests is mediated by technology, and the broader economy, since how people use, or destroy, their forests is crucially dependent on their basic modes of production and consumption. In recent research it has been suggested that there is a clear pattern in how forest stocks change in predictable ways as societies undergo the processes of economic development. Starting from dense forest coverage, deforestation rates accelerate and forest is reduced as economic development with its needs for land and labour accelerate. At some point on the rising curve of economic development, deforestation starts to slow and, finally, the trend turns around. Forest cover stabilises and eventually starts recovering.

This idea is now known as forest transition theory. It was originally proposed and then further developed by Mather (e.g. Mather and Needle 1998) and other researchers (e.g. Rudel et al. 2005). An influential recent study finds that gross domestic product (GDP) per capita of 4,600 USD, roughly the level of today's Belarus or the Dominican Republic, seems to be the threshold above which deforestation no longer takes place; and the transition may happen at much lower GDP levels as well. Indeed it seems to already have taken place in China, India, and Vietnam, for instance. (Kauppi et al. 2006).

The forest transition theory, as it now stands, is rather a generalisation of empirical observations derived from historical studies than a theory in the strict scientific sense. It is obviously a variant of the broader modernisation theory which has been found too simplistic for use in development studies and its predictive power has turned out to be close to zero. It is nevertheless obvious that transition trajectories such as those hinted above have been common in many parts of the world, and the signs are there that there will be more of them. It is thus worthwhile to investigate the factors that may produce such a pattern. No doubt many of the same factors will be included that also play a role in broader economic development: demography and population density, modes of production and consumption, global economic forces, and government policies. No doubt a wide variety of historical

experiences will be found. A recent suggestion is that forest transition may proceed along two paths at least: (a) economic development, where industrial and other off-farm employment opportunities reduce the attractiveness of frontier agriculture and pull farmers off the land, inducing spontaneous regeneration of forests in old fields; or (b) forest scarcity, where the transition starts at the point when forests have been depleted so far that forces are triggered (either economic, such as higher prices of forest products, or environmental, such as droughts and erosion caused by deforestation) that prompt governments and landowners to plant trees, leading to forest stabilisation (Rudel et al. 2005). As will be noted below, these two paths partly overlap, and are hardly the only scenarios.

To become a genuine middle-range theory, forest transition needs to incorporate more sophisticated ideas about causality. This chapter is hardly the proper place to embark on such an ambitious task, but we may briefly note that some help might be gained from the approach mentioned above in the introduction. If forests are seen not in isolation, but as parts of complex social, economic and ecological systems that are in constant flux, causality can be seen to work differently from the way it is assumed to work in the natural - and most forest - sciences. Rather than consisting of chains of discrete causes invariably followed by their effects, social processes can be seen to be flowing from a number of factors with more or less causal power; that is, factors that are conditioning, determining and influencing the flow of events. Here one could think either in terms of an interplay of ultimate and proximate causes (e.g. Diamond 1997:87) or in terms of a stratified reality in which social relations carry causal powers that can be activated or deactivated by contextual circumstances, as posited in critical realism (for a discussion, see e.g. Sayer 1992:103-117). Thinking in these terms will make it possible to locate the root causes of deforestation and forest transitions outside forestry, and to see actions directly related to forestry mainly as proximate factors.

Forest transition has to do more with quantity than the quality of the forests. It is concerned with the amounts of biomass found on forested areas and in growing stocks. Biomass has a direct effect on the environment, since more biomass also sequesters more carbon and conserves soil. However, increased biomass may do little to promote biodiversity; rather, the usual scenario is that the new forest replacing the old is much poorer in this respect. Especially endangered are the moist tropical forests that comprise the most species-rich and diverse ecosystems on Earth. Reforestation and afforestation tend to produce tree-growing fields dominated by monocul-

tures of single species, often exotic. This trend of course has long been recognised in conservationist thinking, which has put a premium on protecting the remaining 'primary' forests with their diverse flora and fauna. As biodiversity has become a contractual obligation in the post-Rio set-up, old forests have been given much emphasis. As noted above, one of the main aims of present global forest policy is to "increase significantly the area of protected forests." In this respect, much remains to be done. FAO classifies 36% of the world's forest area as 'primary' and estimates that they have decreased by more than 40 million hectares since 2000. However, an increasing amount of forest is being designated for conservation of biological diversity: such forest has increased by 95 million hectares since 1990, the largest part being added in 2005–2010 (FAO 2010). Despite the conservation attempts, much global effort has gone towards attempts to find ways and means to simultaneously serve the needs of the economy and the environment – arguably that is what 'sustainable forest management' is all about.

### Finnish aid in the world's forests

Against this backdrop, how has Finnish forestry aid tackled the challenges, and what has its role in producing the outcomes been? At first sight, the answer seems to be cautiously, without much effect. "(T)he results have been overall disappointing in respect of both poverty reduction and environmentally sustainable development," the latest major evaluation of Finnish support to forestry concludes (LTS 2010:69). But, in fact, the wider impacts of Finnish forestry aid may go far beyond its immediate results.

The logic of Finnish forestry aid policies has been more implicit than explicit. While they have followed the lead of the changing international policies, this has occurred with some delays and idiosyncratic emphases. When modernisation held sway, Finland advocated the establishment of forest industries, some of them in very vulnerable environments (the Indian Himalayas, on the edge of the Sahara in Tunisia); and the promotion of industry also suits development strategies promoting self-reliance in a country (Tanzania, Zambia). These efforts were supplemented by some training activities. The energy crises of the 1970s shifted attention to afforestation and, more recently, reforestation (Sudan, Nepal). The need for more comprehensive approaches led to support for forestry planning (i.a. Sri Lanka, Kenya, Thailand). The environmental backlash and the rise of the sustainable development discourse in the 1980s strengthened these trends. The 'new era' underway since the early 1990s brought in more comprehensive program-

ming and local participation, with increasing emphasis on the role of the private sector. Underlying these initiatives has been a strong conviction of the applicability of the 'Finnish forestry model' in developing countries, and the marketability of the expertise of Finnish consultancy companies and the equipment of Finnish manufacturers. Leverage was sought from partnerships with strong financiers such as the World Bank and the Asian Development Bank. Much emphasis was put on the allegedly superior technical quality of Finnish forestry.

The effects and impacts of these Finnish aid efforts have been evaluated and assessed in a number of evaluations and studies, including those which we have carried out. No one so far has dared to ask what the overall contribution of Finnish forestry assistance might have been to the global trends briefly summarized above. One reason for neglecting such a large but pertinent question is obviously that there is no known methodology for making such an assessment. But as was argued in the introduction, we believe that even if it were impossible to measure the exact contributions of each and every causal factor, it should still be possible to conduct an informed discussion of these factors by means of a context-specific study. Instead of linear causal thinking, such a study employs a 'generative' approach to causality, in which the interventions are seen to work together with other causal forces through a set of complex, partly invisible mechanisms. Since interventions produce consequences of many different kinds, the conceptual distinction between the more straightforward and intended effects, and the more indirect, unintended, or officially unplanned impacts, has to be kept clear. What follows below is based on this 'generative' approach.

All evaluations and studies usually agree on the high technical quality of Finnish forestry assistance, a few exceptions notwithstanding. It is not entirely clear, however, what is meant by 'high technical quality'. Even while it appears as the greatest strength of Finnish forestry aid interventions, at the same time it could also be taken as a major weakness. Two major evaluations undertaken by the same company, covering the whole forestry sector during the two decades from 1990 to 2010, did not leave much doubt about their critical thrust beneath the diplomatic language. The first evaluation complained about the lack of a clear strategy for forestry development assistance and an absence of comprehensive analysis as part of the project design. Even logical frameworks were not used before the early 1990s. The evaluators argued that whereas the overall Finnish forestry aid compares favourably with that of other donors, a lack of analysis and narrow vision limit the achievement of wider goals. In the latter evaluation, shortcomings

were still found in the design of the interventions. The fragmentation of a programme was seen as a problem in both evaluations. While the projects of the 1990s were assessed as having been technically sound, they were also isolated, with limited coherence. In the 2000s, a range of modalities were used, some more efficient than others, but it was not always clear why a specific modality had been selected. Earlier, there was a tendency to use financial disbursement as a proxy for impact, or "success", accompanied by a concomitant "lack of impacts on wider goals" and an underlying lack of analysis of the context. In the second evaluation, the high proportion of technical assistance in some interventions and its high cost were also mentioned. (cf. LTS, 2003, I and LTS, 2010)

In any aid relationship, there are obviously two sides, and one of the major findings in the 2010 evaluation was that Finnish aid has worked much better in the more resourceful and organised settings of Vietnam and the Western Balkans than it has done, for instance, in Africa. But if it is correct that Finland as a forest aid donor has been informed by the belief that its own implicit forestry model gives it a 'comparative advantage', or 'value-added' in more recent terms, the question of what the proper Finnish contribution should be can be seen in different ways. It can be lamented, as the LTS 2010 did, that in recent years Finland has not drawn enough on its own experiences (pp. 53, 66); or, as is maintained in much Finnish and other NGO discussion, the belief in the relevance of the Finnish model has been more of an impediment than an enabling factor for aid effectiveness.

One can indeed ask to what extent and how the silvicultural techniques and economic experiences gained in Finnish forests are applicable in the Third World context through development aid. Obviously enough, the forests are different. Tropical, subtropical and temperate forests, while highly diverse in themselves, being moist or dry, commonly harbour many more species, and their ecological dynamics differ profoundly from the leaner boreal forests. Furthermore, the societies, cultures, and economies differ. Finland is a relatively well-governed country with a strong industrial base, and a small, stable population. Almost two-thirds of Finland is covered by forest. Although most of these forests are privately owned, they are closely controlled, and constantly subjected to monitoring and planning interventions. Some 60 per cent of the Finnish forest cover is owned by private individuals, and 10 per cent by forest industries. The State owns some 25 per cent, mainly in the northern and eastern parts of the country. The rest is owned by for example municipalities and churches. Intense management in the form of periodic clear-felling of limited areas has changed the structure

of both forest stands and entire landscapes. Old-growth forests have almost disappeared in the densely populated southern part of Finland, and been drastically reduced elsewhere. This strategy has served Finland well in the sense that it has enabled the growing stock of the forests in the country to reach an all-time high, but it draws criticism for its subservience to forest industry interests and the damage it does to biodiversity. For their owners, Finnish forests provide mainly supplementary income; very few people are actually living in the existing forests and depending on them for their livelihood. Such points are sometimes raised by voices in the Finnish NGO community (lately e.g. Lounela 2009; see also the discussion during the Master Plan drive, Kuvaja et. al. 1998); but they are seldom seriously discussed in public among professionals.

In such a situation, if the exportability of technical superiority in the field of forestry is taken as given, and its historical and social context is overlooked, the belief itself may become a major obstacle to aid effectiveness. As so many determinants and drivers of forest development are situated outside the forest, national forest agencies cannot manage them all; it will be counterproductive to imagine that the root causes of problems can all be tackled by means of an approach dominated by technical fixes. This basic insight is actually rather well captured in the multisectoral logic of National Forest Programmes, but in practice it has proved difficult to get all the sectors involved to cooperate in any way that would be beneficial to the forests.

### **National trends**

Global trends comprise the total of what happens at national and local levels, and the great majority of aid interventions are planned and executed at the national and sub-national levels between the donors and the recipients. In order to gain a more detailed understanding of the effects and impacts of Finnish forestry assistance, we have to look at what happens in the countries where it is or has been active. Taking as indicators the most elementary measurements, i.e., forested area and growing stock, as depicted in the Table 1, the track record of several decades of Finnish assistance and cooperation seems rather sad.

Whereas both the forested area and growing stock have been increasing in Finland itself, in the great majority of partner counties this is not the case. Deforestation continues, and with it the biomass and the carbon stored in trees decreases. Official deforestation rates are quite high in Central America, Sudan, and Tanzania, and somewhat more modest elsewhere.

Table 1. Forest and other wooded land in 1990–2010 – area (a-b) and growing stock (c-d).

COUNTRY		1990	2000	2005	2010	Change, % 1990–2010
Finland	a	21 889	22 459	22 157	22 157	1.2
	b	926	824	1 112	1 112	20.1
	c	1 878	2 082	2 189	2 189	16.6
	d	7	5 266	10	10	46.6
Honduras	a	8 070	6 338	5 744	5 150	-36.2
	b	899	1 187	1 331	1 475	64.1
	c	986	775	702	629	-36.2
	d	N.d.	N.d.	N.d.	N.d.	N.d.
Kenya	a	3 708	3 582	3 522	3 467	-6.5
	b	29 092	28 829	28 710	28 650	-1.5
	c	693	664	645	629	-9.30
	d	466	461	459	458	-1.5
Laos	a	17 314	16 532	16 142	15 751	-9.03
	b	3 472	4 153	4 493	4 834	39.2
	c	1 026	980	957	929	-9.40
	d	20	28	32	34	70
Mozambique	a	43 378	41 188	40 079	39 022	-10.0
	b	15 146	14 856	14 711	14 566	-3.8
	c	1 575	1 495	1 454	1 420	-9.8
	d	298	292	290	287	-3.7
Nepal	a	4 817	3 900	3 636	3 636	-24.5
	b	1 180	1 753	1 897	1 897	60.8
	c	856	694	647	647	-24.4
	d	35	53	67	67	91.4
Nicaragua	a	4 514	3 814	3 464	3 114	-31.0
	b	2 219	2 219	22 197	2 219	0.0
	c	668	565	461	461	-31.0
	d	N.d.	N.d.	N.d.	N.d.	N.d.
Sudan	a	76 381	70 491	70 220	58 082	-23.9
	b	69 949	54 153	52 188	50 224	-28.2.
	c	1 062	980	976	972	-8.5
	d	465	433	418	402	-13.5
Tanzania	a	41 495	37 462	35 445	33 428	-19.4
	b	18 183	14 901	13 260	11 619	-36.1
	c	1 535	1 386	1 311	1 237	-19.4
	d	182	149	132	116	-36.3
Thailand	a	19,549	19,004	18,898	18,972	-2.9
	b	0	0	0	0.	0.0
	c	807	784	780	783	-3.3
	d	N.d	N.d.	N.d.	N.d.	N.d.
Vietnam	a	9 363	11 725	13 077	13 797	46.7
	b	0	1 816	1 791	1 124	
	c	658	855	855	870	32.2
	d	N.d.	N.d.	N.d.	N.d.	N.d.
Zambia	a	52 800	51 134	50 301	49 468	-6.3
	b	5 943	6 009	6 042	6 075	2.2
	c	2 940	2 848	2 802	2 755	-6.3
	d	57	58	58	58	2.2

(a-b)- Area in thousands of hectares for a: forest, and b: other wooded land (OWL), (c-d) Growing stock, volume in million cubic meters over bark for c: forestland d:OWL. Source: FAO (2010) Global Forest Resources Assessment, Country reports.

There is only one exception: Vietnam. In its patently successful modernisation drive, Vietnam seems to have reached its forest transition as well. The area under forest cover has been increasing rapidly since the 1990s, and has bounced back to 41% of the country's area, with the concomitant even if proportionally smaller additions to growing stock, biomass and carbon stock. In Vietnam, the major forest concerns are now the heavy production orientation of much of forest policy, and the worsening biodiversity of forests.

Before discussing the possible causes for and the Finnish contribution to such an uneven performance, an important caveat concerning the above data must be made. The individual numbers must be considered inaccurate and unreliable, in spite of all the efforts that have been put into data collection, not least by Finnish aid. The statistics are taken from the preliminary results of FAO's major undertaking, Global Forest Resources Assessment 2010, which examines the current status and recent trends for dozens of aspects of the world's forests and forestry at ten-year intervals. The FAO assessment relies on national data, which is collated to produce global figures. Information for the assessment is provided both by forestry officials and other specialists in the countries concerned. Especially in the South, only in exceptional cases are the numbers based on anything like a recent and reliable national inventory. Most are estimates and extrapolations of different sorts, sometimes bordering on absurdity. The Kenyan figures, for instance, are linear extrapolations from the figures originally produced in the Finnish-supported Master Plan in 1994 (FAO 2010, Kenya country report, pp. 5, 11). The providers of the Nepali data claimed that Nepal's forest coverage and condition must have significantly improved due to the popularity of community forestry, but official data have not been updated; the latest inventory, implemented by Finnish aid, is from 1999. The Nepalis thought that the figures for 2005 were suspect, and that the data since then should show at least a rising trend. Nonetheless, in the face of a lack of new numbers, they just repeated the 2005 figures as also representing 2010 (FAO 2010, Nepal country report, pp. 5, 7-9).

A further reason for caution is that there are obvious structural pressures towards deviation, although they may skew in different directions. The human predisposition to present any existing trends in the best possible light may in these cases be countered by the temptation to show trends in rather dark terms, in preparation for participation in the REDD initiative that is expected to reward those countries which can in the future show that they have been able to stop previously rapid deforestation (for more concerning REDD, see http://www.un-redd.org).

Yet these are the most comprehensive and up-to-date comparative data available, and the discussion here must be based on them, bearing the uncertainties in mind. One inference from the available statistics is that few of the countries in which the Foreign Ministry of Finland has decided to support forest and forestry-related activities are exceptional from the forest point of view: they are neither among the most forested, nor the most rapidly deforesting countries, nor are they among the most valuable ones in terms of biodiversity. Obviously, the aid choices have been made on other than purely forest-related criteria: forest cooperation has been a by-product of other, ongoing activities. Perhaps the only country where forestry has been the determining influence for Finnish aid is Laos, with its attractive logging potential and strategic location in the middle of tree-hungry emerging economies; despite this, Laos has never been designated as a 'long-term partner country'. Finnish involvement there has been purely on a project by project basis. Because Laos has supplied timber i.a. to Vietnam, the latter has been able to start building up its own forest resources with Finnish support.

Another country where forestry formerly played a visible role, but where the Finnish presence has been very low-key since 1991, is Sudan. It reports a vast, and rapidly decreasing forested area, but its forests contain relatively little biomass in terms of growing stock. This is especially true in the North of Sudan. The most valuable forests are in the South, where Finland has just recently taken the first hesitant steps in forest aid through university cooperation. Mozambique, Tanzania and Zambia are all long-term partners; curiously, forestry cooperation has been most active in Tanzania, which has lost much its indigenous forest and where a major part of the growing stock now consists of exotic species on plantations, especially pine. Zambia's potential, on the other hand, has been somewhat overlooked. Kenya, with its once thriving wood industry, became an important partner in the 1980s; however, this cooperation was suspended in the 1990s for political reasons. Forest aid to Kenya has been revived only in the last few years, but on a very different basis since much of the forest is now gone. Central American pine forests have attracted the Finns since the 1970s; the latest major intervention there took place in 1999-2003 (see the article by Mendoza and Nygren in this book). Below, Finnish aid experiences in forest development aid in three countries, Vietnam, Nepal and Tanzania, are briefly compared in a little more detail.

### Vietnam: Biomass transition

Vietnam's forests, which except for the coastal mangroves have traditionally been concentrated in the highlands, were in a sorry state in the early 1990s, but since then a remarkable change has taken place. Before 1990, deforestation had been accelerating, mainly due to agricultural expansion, although some of the forests had been deliberately destroyed during what is called in Vietnam the American War. The total forest cover of the country was sharply reduced from around 60% in the early 20th century to a low point of 25% in 1991-1993. Now the forested area is back at 41%. This is due to a combination of the rapid spread of plantations and the regrowth of natural forests. Planted forests, which were almost nonexistent until the 1980s, increased to reach 8% of total forests in 2007, but what has made the forest transition in Vietnam unique is the high rate of reforestation. To be sure, this has also meant that forest density and quality have declined: poor forests have increased at the expense of rich ones, and there is now a large proportion of new, young forests. Nonetheless, despite the decreasing density of biomass, the total carbon stock in Vietnamese forests has followed a similar pattern of transition. The unresolved problem is biodiversity. Old-growth forests are still being degraded or cleared, legally and illegally, especially in the Central Highlands. As the new forests are increasingly becoming concentrated on mountains and slopes in the North, some of the forests have become more fragmented (Meyfroidt and Lambin 2008a; FAO 2010, Vietnam country report).

The question for us here is what has the role of government policies and foreign aid in this spectacular transition been. Surely there has been no lack of interventions. The forestry scene in Vietnam has been flooded by a spate of laws and government programmes, supported to varying degrees by the donors. By one reckoning, more than 200 laws and decrees were issued in the 1993–2003 decade, of which by far the most important were the Land Laws of 1993 and 2003. Under the first, households were granted long-term rights to use, transfer, exchange, inherit, rent and mortgage agricultural land. In addition, the allocation of forest land to households became possible. The 2003 Land Law included village communities among grantees of land rights, making community forestry a realistic option. Major national programmes for afforestation, reforestation, and improved forest management included three important programmes known by their numbers, 327, 556, and 661. The two first had the objective of afforesting barren land, whereas the last (661) was more ambitious. Also known as the 5 Million Hectare Reforestation

Programme (5MHRP), Programme 661 was agreed upon by the National Assembly in 1998 and further endorsed by the Ninth Party Congress. Its main objective was to establish and/or restore two million hectares of protected forests and three million hectares of production forests, thereby increasing the forest coverage of the country 43% by 2010. In addition to tree planting, household forestry and community forestry were encouraged by land allocations and financial support, and through training and extension services. Benefit-sharing policies were introduced, and joint-ventures and foreign investment were also encouraged (Vietnam, 2005).

While the 5MHRP seemingly covered almost every aspect of what was happening in the forest sector in Vietnam, in practice it was a USD 2.5 billion investment programme to finance a cluster of reforestation projects. The donors, including Finland, backed it somewhat selectively with some funding and by synchronising their own programmes, such as the small 'Vietnam-Finland Forestry Cooperation Programme' in the northern mountain district of Bac Kan. But 5MHRP was poorly in line with the emerging thinking in global forestry aid, in which large-scale projects in afforestation and reforestation were increasingly falling out of fashion and being superseded by sector programmes emphasising good governance and community participation. Thus, a joint Vietnam-Donor Forest Sector Support Partnership (FSSP) was established, whose signatories agreed to cooperate in a shared commitment to the sustainable management of forests and the conservation of biodiversity in Vietnam. FSSP now supports the implementation of the current National Forest Strategy (NFS, 2006-2020). Further, a Trust Fund for Forests (TFF) has also been established in which a number of bilateral donors, including Finland, have committed to pooling their ODA contributions to Vietnam's forest sector. TFF is now funding two key projects together with the World Bank and the Asian Development Bank.

The role of all the legal and policy interventions in what has actually taken place on the ground is somewhat controversial. According to some studies, the policies and their implementation were plagued by so many shortcomings that they by and large failed in their intentions, while other studies maintain that at least forest land allocation must have contributed to the recovery of the forests. A careful recent study concludes that policies in fact did matter; "forest regrowth in Vietnam was not due to a single process or policy but to a combination of economic and political responses to forest and land scarcity, economic growth, and market integration" (Meyfroidt and Lambin, 2008b:194). The authors suggest that Vietnam's forest transition has not fully followed either the forest scarcity or the economic development

path mentioned above, but combines elements from both and can be seen to represent an alternative "smallholder agricultural intensification path". Population growth and land scarcity led to intensification of agriculture, as labour inputs were increased on the most suitable plots, while the less suitable land could be left for reforestation and the benefits derived from it (ibid, p. 195; cf. Bui Minh's and Mustalahti's chapters in the present book). In this set-up, the contribution of the government's afforestation and reforestation policies, and the donors' support for them, has been broadly supportive but hardly decisive; what they have done is reinforce otherwise indigenously unleashed processes.

The particular value-added by the donor involvement, and especially that of Finland's modest input, is not measurable by any of the methods known in development studies. Donors backed the policies of the government in a haphazard and selective manner, simultaneously criticizing many of their key elements, such as the emphasis on quantitative targets. The environmental effectiveness of TFF has been credited as 'good', while there are still doubts about its impacts on people's livelihood (LTS 2010, p. 15). Finland, who as an 'old friend' had been uninterruptedly running a small aid programme in the country since the 1970s, only became involved in forestry aid later on, in the 1990s. Finland's flagship forestry programme in Bac Kan was in practice a small pilot project which during its lifetime apparently made a positive contribution to the greening of hillsides and also helped to shape the forestry partnership, but its effects on the ground were very limited indeed in terms of numbers of beneficiaries (the 'target group' consisted of some 20,000 people, a drop in the ocean in Vietnam's population of 90 million). Many benefits seem to have been lost after the project was closed down and the resources withdrawn (see Mustalahti in this book).

### Nepal: Rise of community forestry

If past deforestation in Vietnam was understood largely as an internal, domestic problem, Nepal was taken as an international cause celebre. An international alarm was raised in the 1970s. It suddenly seemed that the rapidly growing population was denuding the Nepalese mountains and hills of trees, and that this would trigger severe flooding not only in the Terai lowlands in Nepal but also in neighbouring India and Bangladesh with their teeming hundreds of millions of inhabitants. In the 1980s, it was claimed that the Nepalese forests had been reduced by half in the past twenty years. International agencies joined with some Nepali politicians and officials and seized

upon this potential threat to advocate a massive aid programme to stop the destruction of Nepal's forests. Finland, which began its aid programme in Nepal in the early 1980s, became involved but after a spate of more or less successful projects decided to withdraw after a disagreement over a proposed project.

Some Finnish-supported projects in Nepal located near the major cities of Kathmandu and Pokhara concentrated on afforestation, combined with improvement of the management of the existing wood resources. Other projects were of a more general and technical nature, and had to do with forest resources information or forest sector institutional strengthening. The most significant was the Master Plan for the Forestry Sector, which was financed jointly by the Asian Development Bank and Finland, and drawn up in 1986-88 by the Planning Division of the Ministry of Forests and Soil Conservation under the guidance of two consultancy companies, Jaakko Pöyry of Finland and its associate, Madecor of the Philippines. This Master Plan was meant to lay the basis for the all of policy for the forest sector in Nepal until 2010.

The Nepali Master Plan was drafted following similar exercises which had already been undertaken in some other Asian countries, and the need to listen to local communities and give consideration to the environment had been recognised in international discussion. The structure of the Plan appeared progressive for its time. It put the benefits for the local population - "meeting the basic needs of people for fuelwood, timber, fodder and other forests products" - before conservation interests, which in turn were put before commercial and fiscal interests. The Plan aimed to meet these objectives by promoting people's participation, and developing and strengthening legal and organisational frameworks. Among the development programmes suggested in the Plan, the one grouping together 'community and private forestry' was given major emphasis, receiving 47% of the proposed budget. The second most important was the programme for 'national and leasehold forestry', with 20% of the budget. Other programmes included those for wood-based industries, medicinal and aromatic plants and other minor forest products, and conservation programmes.

It now seems that community forestry has served Nepal well. About 1.2 million hectares of national forests, that is, some 25% of the total, have been handed over to the local communities for management by local user groups. Although ownership of the land has been retained by the State, the communities are allowed to collect revenue for themselves. There are more than 12,000 community forest user groups active in the country, reported as col-

lecting twice as much revenue as the government collects from State forests. What is more, the feeling is spreading that the rate of forest depletion has been slowed or perhaps even stopped and reversed. As noted above, no exact data exist, but a comparison of the available figures gives some support to this suggestion. The last national forest inventory in Nepal was carried out in the early nineties through a Finnish project. According to the inventory, the rate of forest area had been decreasing 1.7% per annum during 1978/79 to 1994, whereas the annual rates of forest and shrubs depletion taken together was 0.5%. Recent local studies indicate that the forest cover is now increasing in many places. Most remarkably, there are indications of this occurring not only in the hills, where most of the community forestry efforts have been focussed, but also in the Terai districts where the advance of community forestry has been much more chequered. A study of 20 Terai districts, quoted in Nepal's country report to Global Forest Resources Assessment 2010, claimed that the annual rate of forest cover increase was 0.06% during the period of 1990/91 to 2000/2001 (FAO 2010, Nepal Country Report, p. 5). While the environmental effects thus appear quite gratifying, the picture in regard to social effects is more problematic. Research undertaken in several places in Nepal suggests that most the tangible benefits from community forestry have accrued to the more well-to-do, upper-caste members of the communities (Pokharel et al., 2007).

The claims made for and against the effects of community forestry in Nepal remain speculative and remain to be verified by hard evidence, but whatever the case will be Finnish aid cannot take much credit for any results. The effects and impacts of early projects were highly localised (see Ghimire's paper in this collection); and the Finns were out of the forestry sector in Nepal during the crucial period when the wider forest dynamics seem to have changed. The impetus for this Finnish withdrawal was stated as a wish to eschew community forestry projects in the hills, which had numerous donors already, and instead to concentrate Finnish efforts on the commercially valuable sal (shorea robusta) forests in the southern Terai lowlands. After a disagreement over a proposed innovative project, Finland decided in 1998 to refrain from any further assistance to the forestry sector in Nepal.

To cut a long story short (told in full in Gyawali and Koponen, 2004, for example), what happened was the Finns were offended by the Nepalese turning down what they thought was a revolutionary idea, which supposedly would have made it possible to save Terai's forests by using them commercially and at the same time collecting hefty revenues for the coffers

of the State. This was to be done by adapting the Finnish forest management model and handing over use of the dense, rapidly growing sal forest to a Finnish-Nepali private venture, which was to log the forests at what was calculated to be a sustainable rate and export logs to India. This despite the fact that the commercial exploitation of forests may under Nepali law only be carried out under government control, and that the export of sal logs to India is specifically forbidden. The plan raised a public outcry in Nepal and brought together strange bedfellows, from some influential NGOs such as FECOFUN (Federation of Community Forestry Users in Nepal) to different private and official interests involved in the lucrative illegal exploitation of the same forests. As soon as this unholy coalition had the ear of the Nepali government, the Finns who were involved – a few key persons – decided that it was futile to try to work in the forestry sector in Nepal and convinced the Helsinki development aid headquarters of this. These key Finns were particularly scornful of the community forestry plan that was publicly proposed as the alternative to the private venture. Only after the passing of a decade has Finland recently returned to forestry in Nepal, funding and implementing a new forest inventory the results of which will help to assess the impacts of the Finnish decision to leave the Nepali forestry sector to its own devices.

## Tanzania: Promise betrayed

Tanzania's case is again different, both in terms of trends in forests and forestry, and the role of Finnish aid. The Finnish presence in Tanzania has been much longer and more consequential than in Vietnam or Nepal. From the outset, the forest sector was envisaged as the main field of cooperation between Tanzania and Finland, and it has remained so even as the support has, less consistently, transformed from one mode to another. Historically, the early heavy emphasis on forest industries gave way to afforestation efforts and led further to broader, more participatory conceptions of forestry development. New forms of cooperation were sought in forestry planning and policy-making and in the conservation and creation of forest resources. Following a change in Tanzanian policies, Finnish support for forestry planning shifted from shoring up the state-led planning machinery to promoting a new forest policy and law that recognizes the importance of communitybased approaches and allows for the transfer of the management of forest resources to local communities and the private sector. Finland has also aspired to be the lead agency in forest-related assistance to Tanzania, and

Dar es Salaam was the first Finnish embassy in which a forestry expert was posted. The results have been somewhat mixed, partly because of the different personal inclinations and capabilities of key staff, but probably because of the relatively small amounts of assistance the Finns have been able to offer to the sector.

Despite the best efforts of the Finns, forests in Tanzania remain a resource that is undervalued, and both underused and overused. There is little doubt that deforestation continues, although nobody knows at exactly what rate. Tanzania is a very large country - covering more than twice the area of Finland – with extraordinarily diverse forest resources whose value has only gradually been appreciated. The c. 33.5 million hectares of forest which are now estimated as remaining forested account for roughly one third of the total land area. These forests and woodlands are many different kinds, from rich, ecologically unique rainforests to degraded bushland. Tanzanian forests continue to retain a high potential value both ecologically and economically. The coastal forests are of great importance for biodiversity. The mighty rainforests of the Eastern Arc mountains, ranging from the Taita Hills in Kenya to Udzungwa in central Tanzania, are relatively limited in area but globally known as biodiversity hotspots, containing hundreds of endemic species. Additionally, the less spectacular but very extensive miombo forests also harbour several ecologically and economically valuable species in addition to the ubiquitous acacia. Economically, forests could make a much larger contribution to the Tanzanian formal GDP and state finances than they are providing at the moment. The current value chains work in such a way that the original producer is left with perhaps only one per cent of the export value; and the taxes, fees, and duties collected by the state are only a fraction – the estimates vary from 4 to 10 percent – of what they should be. The greater part of income from forests is pocketed by middlemen working in collusion with corrupt officials at all levels (see esp. Milldege et al., 2007)

Because of the length of the period – some 40 years – and the diversity of interventions, it is an even harder task in Tanzania than in Vietnam or Nepal to try to succinctly summarise the record of Finnish aid and its possible contribution to what has happened, or not happened, in the forestry sector. What one can say is that all Finnish projects have left a footprint of a sort – whether it is positive or negative, or in reasonable relation to the resources used, is another issue. The parastatal Tanzania Wood Industries holding company Twico no longer functions, but its three subsidiaries, which were renovated with a sizeable Finnish input in the 1970s and 1980s, are still in business in one way or another under either private Tanzanian or foreign

ownership. The new owners purchased these subsidiaries, Fibreboards Africa Ltd in Arusha, Tembo Chipboards in Mombo, and the Sikh (now Masco) Saw Mills Ltd (SSM) in Tanga, an amount roughly equivalent to onetenth of the what Finnish aid had sunk in them (see the calculations in Koponen 2001:98-99). They are now limping on against heavy odds with ageing machinery, an old-fashioned product mix, and an insufficient supply of raw materials. The havoc wreaked by logging for SSM in the East Usambara rain forest has been made good by a subsequent conservation project; but although it was able to establish a strict conservation status for some 10,000 hectares, it was helpless to stop the continuing forest loss and degradation outside these areas. Much of the conservation project's energy in its later phases went into a bitter guarrel over compensation, which left many local inhabitants frustrated (see Rantala and Vihemäki in this book). On the island of Zanzibar, 17 years of Finnish engagement is known to have contributed to the conservation of the existing forests, and to have sponsored government plantations on some 2,000 ha, but it is not clear how much planting of trees took place in the village woodlots. It is possible that the area of forested land the island lost elsewhere through forest destruction during the lifetime of the Finnish projects exceeds the area of new forest created by Finnish intervention; these new forests comprise mainly fast-growing acacia, pine and casuarina, which are often used more as cash crops than as forest trees. (Koponen and Siitonen, 2001).

Finland's influence on policy has been more evident. Within the elaborate 'development partners' framework in Dar es Salaam, Finland has been instrumental in the discussions promoting the policy change which has led to a revision of Tanzanian forest policies and laws to meet the requirements of international best practices. A new forest policy was accepted in 1998, replacing the old colonial policy from 1953; and the Forest Act was passed by Parliament in 2002. This Act divides the responsibility for forest conservation management between the government and other 'stakeholders'. While the government retains responsibility for forests of 'national interest', including areas of high biodiversity value, nature reserves, and mangrove swamps, the management of other types of forest can now be entrusted to local communities, the private sector, or to a special executive agency. The Act even embraces the principle of subsidiarity under which the management of forest resources should be delegated to the "lowest possible level of local management consistent with the furtherance of national policies." But implementation of the Act has been sluggish. The State, in the form of the Forestry and Beekeeping Division (FBD), has been slow to relinquish its hold over the

lucrative forest resources, and it is not clear how the aid funds extended to FBD have been used. The planned new executive agency, to be called Tanzania Forest Services (TFS), has failed to take off. The private sector no doubt is there but remains poorly represented. A sector-wide approach, in the form of the National Forest and Beekeeping Programme (NFBP), was launched in 2001 to pool and coordinate the international support for the implementation of the new policies. For example, the Finnish and Danish district-level support for participatory forest management has been channelled through the NFBP. The early optimism (e.g. LTS 2003, I, p.41) has given way to a more sombre mood. Donors are becoming impatient with the confluence of what is seen as the FDB's perennially weak implementation capacity and its refusal to hand control over to other potential actors, and as a result have suspended their support for the NFBP for the moment.

To be sure, the statistics for forest transferred to some form of local participatory management are at first sight quite impressive, but a closer look reveals a number of weak points. Some four million hectares of forest and woodlands are reported to be under the management of local communities, ca. three-fifths of it directly and exclusively through the Community Based Forest Management (CBFM) approach, and the rest in common with Central or Local Government through Joint Forest Management (JFM). The former mostly consists of ecologically and economically less valuable woodland; while in much of the latter, which includes much of the high biodiversity stock, the 'joint' management is joint in name only (for the case of the Amani Nature Reserve, see Vihemäki, 2009, Ch. 5). At the heart of the problem are the issues of control of the land and sharing of benefits. "There is little evidence that the legal transfer of areas of forest has so far been accompanied by tangible local economic returns from sustainable forest harvesting and utilisation," say two experienced researchers. They warn that "conscious efforts to avoid elite capture" are needed if poorer members of communities are to have any benefits from the schemes (Blomley and Iddi 2009:44). Effects from aid funds allocated to the districts through the NFBP for participatory purposes are yet to be seen.

Much donor effort has gone to promote participatory forest management, and in Tanzania, as stated above, Finland has lately jumped on this bandwagon. Yet even here the Finns have chosen a different emphasis and focused on the economic use of forests through the private sector, targeting plantations in particular, where much of Tanzania's growing stock is. The argument is that, in order to realise the value of the forests, what is needed is the creation of a 'responsible private sector'. The Finnish efforts toward this end came

under some suspicion at the stage when the Embassy of Finland was seen to be pushing for the transfer of the management of a government teak plantation, which was once supported by Finnish aid, to a private company partly owned by FINNFUND (a Finnish development finance company). After abandoning this, the Finns have cautiously argued that private sector involvement will "enhance the plantation management and increase the value-added and tax revenues" (Indufor, 2008:49). While there no doubt is a sound technical point here, this line of argument overlooks the fact that a 'private sector', in collusion with official elements, is already deeply involved in the exploitation of Tanzanian forest resources, and not only in the timber trade but in the charcoal business as well (World Bank, 2010). What is advocated here is the replacement of one segment of the 'private sector' by another one, largely foreign.

## Aid and forest governance

Nowadays one hears less talk of the 'destruction of tropical forests' and much more of 'sustainable forest management', to the extent that some prefer to say that the discourse or the narrative has changed. At the same time, the 'governance' notion has increasingly come to inform the forest and forestry aid discourse. Like any policy concept, 'governance' is a malleable notion which can be used for a number of purposes. Its basic thrust can be taken as anti-statist, since it tries to capture and guide the shift away from 'government', understood as a top-down, state-led, 'command and control' economy and polity, towards a more flexible, network-like, multi-actor steering committee set-up in which the policy instruments consist not only of binding laws and conventions, but more and more also of non-binding normative 'soft law', voluntary rules, such as certification programmes, and public-private partnerships. A developmentalist variant of this concept is 'good governance', which seeks to define seemingly technical, apolitical means of running governance; and as corruption has become increasingly recognised as the number one enemy of development, anticorruption has emerged as a dominant part of good governance. Today's forest discourse is shot through at every level with 'governance' in its various guises.

At the global level, forest resources are naturally a part of existing conventions, such as that on biodiversity, and trade agreements under the World Trade Organization (WTO). In addition, there is also an International Tropical Timber Agreement (ITTA) for trade in tropical timber. However, it has proved impossible to produce a binding international convention focusing

on the forests alone. In the UNCED 'Earth Summit' in Rio in 1992, the forest issue polarized developing and developed countries. The conference failed to agree on a binding convention on the world's forests, but bequeathed the so-called Rio Forest Principles and Chapter 11 of Agenda 21 the task of leading the way. In the discussions since then within the United Nations system, the best that has been achieved is the 'Non-legally binding instrument on all types of forests', quoted at the start of this chapter. It can be seen as the diplomatic vindication of the idea of sustainable forest management. Governance is present in this document as well, emphasising that achieving sustainable forest management depends on good governance at all levels. To be sure, there are a host of more specific proposals emanating from the deliberation of such ad hoc fora as the International Panel on Forests (IPF) and the International Forum on Forests (IFF), whose work is now carried on by the United Nations Forum on Forests (UNFF). That it has required years of hard bargaining to reach even such relatively modest results speaks volumes about the values associated with the world's forests, and the controversies surrounding them.

At the national level, the main governance framework for SFM is provided, in addition to forest laws and policies, in the national forest programmes (NFPs). The somewhat elusive concept of NFPs emerged from the IPF/IFF deliberations. These programmes are defined as presenting "a viable framework for addressing forest sector issues in a holistic, comprehensive and multisectoral manner"; NFPs recognize national sovereignty and country leadership, and are drawn up and implemented in a participatory manner. They are used both for the development and implementation of forest-related policies and "as a basis for development assistance" (UNFF, 2002). According to the Code of Conduct for Finnish Forest Sector Development Cooperation, NFPs are understood as a "generic term for a process towards a comprehensive forest policy framework and programme for the achievement of sustainable forest management, integrated into wider programmes for sustainable landuse." Donors pledge that if a partner country has a "credible" national forest programme, the forest sector interventions financed by the donor will be "embedded in and be fully compatible with" the country's NFP. To assess the viability of any NFP, the IPF/IFF conclusions and recommendations as well as the further deliberations of the UNFF are to be used. However, the Code of Conduct does not set out which of these international guidelines are to be used nor how they are to be applied. (Ulkoasianministeriö, 2009:15).

World-wide, great advances have been made towards the establishment of updated forestry laws and policies, and national forestry programmes, during the last five to ten years. The great majority of countries -156 – now have a specific forest law, and almost half of them have had enacted or amended their forest legislation since 2005. Of the 143 countries that have a forest policy statement, 76 have issued or updated their policy since 2000. The number of countries that have a NFP in place is not clear, but it has been reported that close to 75 percent of the world's forests are covered by such programmes. (FAO, 2010).

Finland's development cooperation partners fare relatively well in this respect. Of the countries listed in Table 1 above, all except Zambia have fairly recent forestry laws and policy statements. In regard to national forest programmes, progress has been slower. Namibia reports it has no national forest programme, and in Mozambique the programme is "under revision". In Kenya and Zambia, the process has been "temporarily suspended." But while the legal and institutional framework seems to be fairly well in place, the situation is starkly different on the ground. It is one thing to have laws on the books and policies on the shelves of the Ministry, and quite another thing to enforce and implement them. The vague formulations of most national forest programmes leave a great deal of leeway in trying to establish the status of such a programme. In general, the progress of the NFPs seems to have stalled after an enthusiastic start, not least because the required collaboration and cooperation across the ministries and sectors have not been forthcoming (LTS, 2010:49-50).

We are dealing mostly with 'soft states' in the sense defined by Gunnar Myrdal back in the 1960s: states that are not enforcing and implementing the laws and policies they have themselves enacted and passed, due to factors which outsiders perceive as nepotism and corruption. The Corruption Perception Index created by Transparency International, with its well-known limitations, reveals that the majority of the countries we are discussing are perceived to be among the most corrupt in the world. Of the 178 countries listed in the Corruption Perception Index in 2010, Thailand is the only one of Finland's major development cooperation partners listed above the lowest third, while the Sudan is near the bottom, and the rest fall somewhere in between (Table 2). It is becoming clear that it this is not a technical question of a temporary 'weak implementation capacity', but a deeply embedded structural feature which cannot be rectified by superficial capacity building programmes. Rather, by supplying additional resources which come up for grabs, foreign aid may be part of the problem rather than the solution.

Table 2. Corruption Perception Index 2010.

Rank (1-180)	Country	Index (10-1)
4	Finland	9.2
78	Thailand	3.5
101	Zambia	3.0
116	Mozambique	2.7
116	Tanzania	2.7
116	Vietnam	2.7
127	Nicaragua	2.5
134	Honduras	2.4
146	Nepal	2.2
154	Kenya	2.1
154	Laos	2.1
172	Sudan	1.6

Source: Transparency International (for more information see: http://www.transparency.org/)

That forestry, and other sectors dealing with natural resources, have been among the more corrupt sectors in aid recipient countries has long been known by those involved. Foreign aid workers have been privately heard complaining of ubiquitous 'leakages', but the issue has only been brought into the open during the last decade or so. Among the Finnish partner countries, the discussion of corruption started in Kenya in the late 1990s, when the increasing illegal use of forest resources, the return of state forests to private use in order to secure votes from the rural poor and a general lack of political support for investigating corruption combined to drive the donors, including Finland, away from Kenyan forestry (Virtanen et al. 2002:30-31; LTS 2003, II: 82-83). Then the cat of corruption was let out of the bag in one country after another: Nepal, Tanzania, Mozambique, and Zambia. Now that attitudes have changed, corruption is an everyday topic in those countries, where relatively free discussion is possible at all (which excludes Vietnam, Laos and the Sudan). Yet, as was argued above using the example of Tanzania, and is also shown in our case studies (see especially the chapters by Ghimire Sharma, Mendoza Viadurre and Nygren, and Mustalahti in this book), corrupt practices in which officials collude with shady wood or charcoal dealers still continue, contributing to deforestation. Anti-corruption efforts have intensified in company with the disclosure of new scandals and donor demands to deal with them, but in many countries charges of corruption have regressed to something of a political weapon for tarnishing the reputation of contenders in internal political infighting.

The traditional way for donors to promote forest governance has been to assist comprehensive forestry planning, along with efforts to build up a functioning, professional, forest administration. Formerly, there were two basic approaches, both out of which were used by Finland as well: the Forest Sector Master Plan (FSMP) and the Tropical Forestry Action Plan (TFAP). FSMP was a more industrially-oriented, 'blueprint' process, which allocated considerable resources to the collection of background data by external consultants. TFAP was created in 1985, and administered by FAO with backing from the World Bank and some independent research institutions. It recognised that land use, industry, fuel wood, ecosystems protection and institutional aspects all belong to forestry, and assumed that there was no fundamental conflict between forestry development and forest conservation. Each developing country was to draft its own national action plan, giving due respect to domestic conditions and characteristics. An essential part of that process was to be the participation of local people and non-governmental or civic organisations.

Finland was a major sponsor of the FSMP concept in the 1980s, often in conjunction with the Asian Development Bank. Large contingents of Finnish consultants were running in Master Plan processes in a number of countries, including Kenya, Nepal and Thailand. In Tanzania, Finland supported a pure TFAP process handled by Tanzania's forestry department, FDB, with Finland providing backstopping in the form of technical assistance. In the peak years of development cooperation, these exercises consumed a considerable part of the Finnish forestry aid budget, but in retrospect their results have not given much reason for celebration. On a more positive note, the Master Plan processes can be seen as having established a solid data bank on forest resources, and given some sense of direction to the forest sectors concerned, consistent with emerging international obligations for sustainable management and conservation of biodiversity. The Nepal Forestry Sector Master Plan in particular continues to excite favourable comment for creating opportunities for forestry officials to confer with expatriates and civil society (Ojha et al. 2009:369); and for contributing to implementation of the Forest Act of 1993, one of whose major innovations was to transfer ownership of the products of community forestry to local user groups. But even the Nepal plan has been faulted for its lack of broad "inter-sectoral or public participation" (Punkari et al. 1999:34). The general assessment is that none of the Master Plans in any of Finland's partner countries was "fully successful." A basic flaw is seen in their poor usability: broad in scope but superficial in detail and implementation, they have remained on the shelves and "not used to the extent to justify the cost of their creation" (LTS 2010, I 47-49,40, 42).

The donor answer to the challenges of governance has been to change from FSMPs and TFAPs to national forestry programmes (NFPs), and from shoring up the forest departments to a drive to engage other non-governmental or private 'stakeholders' in forest governance, not least through the NFPs. However, as was implied above, NFPs are a vague concept. The jury is still out on NFPs, but clearly many expectations have not been met. It is clear, however, that in the process of drawing up NFPs, the role of nonstate actors has been strengthened. The experience of community forestry in Nepal and Tanzania has been discussed above. Some NGOs have become more generally influential. This is true especially of such large professional INGOs as the WWF and IUCN, which operate at both the global and national levels. NGOs have decisively influenced the global discourses and decisions on biodiversity, and were involved in the establishment of the Forest Stewardship Council, a major international certification programme (see e.g. Arts and Buizer, 2009:346). NGOs also work within countries, engaging in both policy advocacy and project operations. Ironically, in some countries donor impact on governance can be detected in that forest administrations have become firmly entrenched in their positions. Forest planning has often worked to strengthen their hold on their posts and training given to forestry administration staff has strengthened the ranks of better-educated officials (for Thailand, see LTS 2003, II:48;50, for Zanzibar, Koponen and Siitonen, 2001:27). Now, when Finns are keen to bring in the 'private sector', which in countries permeated by corruption necessarily means a largely foreign private sector, and to replace the already existing domestic private sector with foreign companies, with all that that implies, such a change is bound to create resentment and suspicion, and to provide fertile ground for all sorts of coalition building among the vested interests.

## Conclusion

So, does Finnish forestry aid matter? If we look at its manifest effects, the answer seems to be not much. Of course, we cannot know whether the condition of the forests in the countries concerned would have been even worse, and the benefits obtained from them even less, without the aid in-

puts; they very well could. Nonetheless, the evidence reviewed in this chapter corroborates much of the general criticism levelled at aid, especially aid delivered in the form of projects (see e.g. Riddell, 2007). It is surely possible, with enough money and knowledge, to launch activities that bring benefits for a number of local people, as well as for the staff running these activities. Some of these benefits can be of long-term significance, like aid extended through proper training and education, but all too often such aid creates bubbles which burst when the foreigners leave and take their resources with them. Even in cases where some long-term effects can be seen, such as in aid supporting mechanical forest industries that were not complete disasters, the costs have been out of proportion with the economic benefits, and environmentally they may have contributed to forest loss. Projects of a more technical nature have left behind studies and documentation, but not much indigenous capacity to sustain or repeat them. Planning projects did not fare any better in respect to usability. The really bad news is that the more recent sector-wide programmes and national forest programmes, which were meant to provide a better alternative, do not seem to have been any more successful. There is more promise of present and future benefits from participatory approaches (PA), an idea to which Finland has finally subscribed; but PA is no panacea either (Nepal and Tanzania provide contrasting cases), and it is too much dependent on the continuation of foreign aid.

But the lack of apparent effects does not mean the absence of actual impacts. Even interventions with no visible effects may have impacts. If these impacts, even after careful study, cannot be measured with any accuracy, and could also be attributed to discrete causal factors unrelated to aid, this does not negate their existence. As stated in the introduction, our starting assumption was that aid works only as a part of its broader environment, not on its own. To make sense of the impacts of aid, they have to be discussed together with the other processes. In our cases presented above, the remarkable change in forest policies can be largely credited to aid and interpreted as a mixture of the effect and impact of aid: partly something aimed at and intended, partly an unintended consequence of other forces and factors. Donor impact can also be contradictory, as evidenced by the way forestry aid has strengthened both forest administrations and the non-governmental and private actors that are meant to counterbalance state dominance. Aid obviously has broader systemic effects as well, the states and the forest administrations working in the way they do not least because aid brings in fresh resources to be distributed. In countries as dependent on aid as most of the Finnish partner countries are, most of what happens, not only in forestry but outside it in the public sphere, is somehow affected by aid.

The confluence of relatively weak effects and broader impacts can be seen when contrasting the experiences of Vietnam with the rest of the Finnish development cooperation countries discussed above. Vietnam's forest policies may in some respects (emphasis on reforestation projects, restricted community participation) be regarded as inferior to those of the many other countries, and the donor inputs into forest policy change may not have been particularly generous. If Vietnam has achieved its forest transition, it is not so much because of the forest policies and foreign assistance, but because of the confluence of several other processes, mostly driven from outside the forestry sector. Conversely, in other countries, if deforestation continues, it is not only or even mainly because of poor forest policies and too little or poorly informed aid, but because there are so many forces and factors sustaining it, from population growth to the low level of technology and heavy market demand for forest products. In addition, the forest administrations on their own are incapable of mobilising the forces needed to stop deforestation - in some cases these same administrations may indeed further it. In this scenario, the impact of forestry aid is very variable and uneven, depending basically on factors far beyond its own control, or even control by the forestry actors more generally.

This brings us back to the issue of the Finnish forestry model and its applicability to Third World realities through development aid. Even if the main aim in the global South were just to stop deforestation and increase the growing biomass, one has to ask what the conditions in which a Finnishstyle, privately owned but publicly planned, production forestry model would work are. The argument is not that there are no conditions in which it could work, and some of its aspects such as the smallholder orientation might be easier to put into use than others, but its efficacy cannot be taken as granted, given the vastly different biological, economic and social conditions, and all the sundry pressures on Third World forests. The same applies even more forcefully to efforts of all kinds aimed at improving human livelihoods and conserving biodiversity, both of which are so much more complicated tasks in the South than in the North. The present development rhetoric emphasises local ownership and local knowledge. A thorough knowledge of the local social and cultural realities beyond the narrow confines of the technical sector concerned, combined with an understanding of the possibilities and the limits of the Finnish experience, would be equally essential for aid to really matter.

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#### **Comments**

Vesa Kaarakka

It is useful to come up with accounts and analysis that have some historical perspective. Forestry is by nature a long-term undertaking, the results of which mature only after many years or even decades. My comments concentrate on a few selected points:

Cooperation with other sectors. Ineffective agriculture and livestock farming require additional land, and cause deforestation. Insecure land tenure prevents investment in the forest. For these reasons, a pillar of the present Forest Sector Development Policy is increased integration and interaction with others sectors and processes, such as rural development, national land allocation, and agricultural and energy policies. The forest sector also requires closer linkages with national decision-making (e.g. the National Planning Commission, and the Ministry of Finance) to improve the true or potential role of forests in GDP and revenue generation.

Forest inventory. Forest and carbon inventories constitute an important component of Finland's forest sector cooperation. Climate change adaptation strategies are based on reliable, up-to-date national information on forest and wood resources, and changes in the amount of carbon in the forest and soil. The importance of such mapping is emphasised when countries have to report their actions to control deforestation. At Nepal's request, a new forest and carbon inventory is at present being carried out there (and in several other countries) with Finnish support.

National Forest Programs. Planning and implementation of National Forest Programmes (NFPs) also require reliable information on forest resources. While the construction of NFPs may not have been described in the UN 'Non-legally binding instrument on all types of forests (NLBI, 2008)', as indicated by the author, there is ample material on the setting up and implementation of these programmes provided by bodies like FAO (1996, 2006).

Finnish Added Value. The Finnish Added Value in forestry and other sectors has not been defined and can thus be interpreted in different ways. It may relate to 'soft' values (support for human rights, equality, democracy), technical competencies (training and education, research, forest inventory, agroforestry, small-holder production forestry), ways of relating to others (by offering untied core funding, mutual learning, maintaining constructive relations with local partners) or it may be defined as performance attributes (practical approach to problem-solving, neutrality, flexibility, focus, effective-

ness and efficiency). According to the recent Forestry Sector Evaluation (LTS 2010), areas in which more Finnish value could be added include production forestry for industries, carried out by smallhold farmers; small scale value added through processing, working with privately owned woodlots of community forests; and linking biodiversity conservation with productive forests.

Long-term commitment required in forest sector cooperation. Forestry is by nature a long-term undertaking under most conditions. Because of this, programmes in forests and forestry require long-term commitment by all parties for sustained results. In the forest sector, shining examples of successful donor commitments of 15-20 years include the upgrading of university level training at Sokoine University in Tanzania, and at Wondo Genet Forestry College (part of Hawassa University) in Ethiopia. Unfortunately, from the Finnish view point, the former was supported by Norway and the latter by Sweden. In my opinion, 15-20 years should be taken by Finland as a time frame in forest sector cooperation, through projects/programmes and other aid modalities. Support for forestry in Laos is a good example. In general, it is therefore better to engage with long-term commitment in a few selected countries/partners/programs, rather than spread out the resources thinly over a larger number of isolated interventions.

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**Vesa Kaarakka** completed his PhD dissertation at University of Helsinki in 1996 focused on tropical dryland forestry and afforestation. Dr Kaarakka has worked at the University of Helsinki as a researcher (1985–88, 1991–93, 1997–99), Acting Professor (1994, 1996–97) and Lecturer (2003–08) in tropical silviculture. From 1988–1991, Dr Kaarakka led a research component in a development program on fuelwood plantations in Eastern Kenya. In Namibia, he worked as the Chief Technical Advisor in a training and institutional development program in the Directorate of Forestry from 2001–2003. In 2000, he worked for the UNDP Drylands Program, in charge of projects in Central Asia linking desertification and forests. Since 1996 he has served as an external advisor to the Ministry for Foreign Affairs of Finland on issues related to the UN Convention to Combat Desertification. At present Dr Kaarakka works as the Forestry Adviser at the Department of Development Policy of the Ministry for Foreign Affairs. in Helsinki, Finland.

# 3. FOREST CONSERVATION AND HUMAN DISPLACEMENT:

LESSONS FROM THE DEREMA CORRIDOR, TANZANIA

Salla Rantala and Heini Vihemäki

#### Introduction

Establishment of protected areas has for a long time been a core strategy in efforts to sustain the biological diversity and ecosystem functions of the world's tropical forests. This often involves different degrees of human exclusion from resource use. However, as the pendulum in the global policy agenda has swung between a focus on conservation and a greater emphasis on poverty reduction and sustainable development, exclusionary approaches to conservation have become subject to increasing criticism regarding a lack of synergy between conservation and social development goals such as poverty reduction, economic growth and social equity (Brockington et al. 2006; West and Brockington 2006, Sunderland et al. 2008). Exclusionary forest conservation is still very much on the agenda globally, perhaps more so than ever, since the increasing resources being directed to forest-based climate change mitigation efforts are raising concern about their impacts on indigenous and local communities (e.g. Angelsen 2009). In this chapter, we contribute to the discussion on the social impacts of exclusionary forest conservation, drawing on a case study of the establishment of a forest corridor in north-eastern Tanzania.

In post-independence Tanzania, the evolution of forest management policies has largely followed the trends of global conservation and development agendas (see Woodcock 2002). Tanzania is among the nations with the largest coverage of protected areas and is home to sites of high biodiversity value (Newmark 2002:67; Brockington 2005:102). Nearly 40 percent of the land area is protected at some level in Tanzania (WRI 2006). Since the 1990s, there has been a marked policy shift, supported by legal reforms, towards greater attention to and participation by local communities in forest management and conservation, while the expansion of a protected forest area network also remains a key strategy (cf. MNRT 2006). The international development aid and conservation communities have played a significant role in supporting, and undoubtedly influencing, the forest policy shifts in Tanzania (Woodcock 2002; Vihemäki 2009).

The East Usambara Mountains in north-eastern Tanzania represent a microcosm of the ecological, economic and social impacts of changing forest management objectives, policies, and donor interests. As a part of the Eastern Arc Mountains, the East Usambaras are considered one of the global biodiversity hotspots, hosting a high number of endemic species of plants and animals confined to the mountain forests (Rodgers and Homewood 1982; Burgess et al. 2007). The area is also home to people practising agriculture on the mountain slopes. A history of commercial logging and estate farming, and the expansion of smallholder agriculture, has created a mosaic of fragmented forest patches and agricultural land uses across the landscape. Expansion of farming and forest fragmentation are seen as threats to the endemic biodiversity and functioning of ecosystems (e.g. URT 2006).

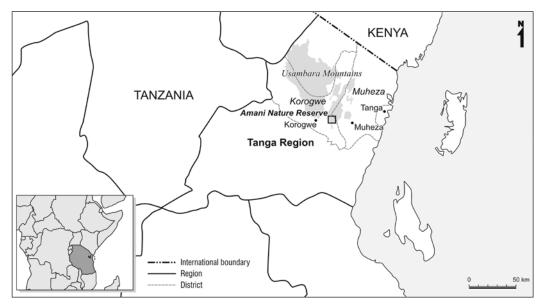
Finnish involvement in the East Usambaras began in the late 1970s in the form of assistance to the development of commercial logging and sawmilling industries. An outcry by the international conservation community ended the logging activities; and Finnish assistance in the East Usambaras was gradually geared towards biodiversity conservation (Mwalubandu et al. 1991). The East Usambara Catchment Forest Project (EUCFP) 1990-1998, and its final phase, the East Usambara Conservation Area Management Programme (EUCAMP) 1999–2002, supported forest conservation in the East Usambaras for a total of around 7.6 million Euros (EUCFP 1995; EUCAMP 2002). One of the achievements of these projects was the enforcement and expansion of a number of forest reserves and the establishment of Amani Nature Reserve. As complementary measures to the protected areas, participatory forest management and farm forestry were also promoted. To address the negative ecological effects of forest fragmentation, several conservation corridors were proposed to connect the largest forest blocks confined within the reserves (Newmark 1993; Tye 1993).

The establishment of the Derema Corridor in the southern part of the East Usambaras was initiated during the last years of EUCAMP in order to reduce forest fragmentation. The local counterpart of EUCAMP, which was also the main organisation responsible for the management of the East Usambara mountain forests, was the Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism (MNRT). After the closure of EUCAMP, the coordination of the Derema process was continued by MNRT and its World Bank funded Tanzania Forest Conservation and Management Project. The conservation approach chosen involved the displacement of hundreds of small-holder farmers from their farmland in the Corridor. Negative livelihood impacts were to be minimized through monetary compensation.

The establishment of the Derema Corridor provides many lessons learned for conservationists, donors, decision-makers and implementers contemplating similar conservation interventions. Primary among these lessons are those relating to the conditions for enhancing equity and the legitimacy of conservation decisions, processes and outcomes. In our account of the Derema conservation and displacement process, we assess the ways in which the intervention strived to legitimise the decisions and measures taken, and to involve the affected villagers. We demonstrate that the negotiations over the terms of conservation and compensation were not only conditioned by the shifting institutional framework which governed the process and the procedures adopted by the implementers, but also by other social structures and relations which affected the opportunities for effective and meaningful participation. Hence, our focus is on the agency of the affected people, meaning their actual ability to influence the process and its outcomes.

We draw here on empirical material gathered as part of two PhD research projects, one still on-going and the other recently completed. The data consists of ethnographic material (interviews, observations, discussions) collected by the researchers between October 2003 and February 2010. The most important source of data that we rely on is semi-structured and structured individual and group interviews conducted with local people in two villages adjacent to the Corridor. In addition, to a lesser degree, we draw from two household surveys, conducted in 2005 and 2008. Previous research reports from the area, official legal documents, and grey literature were also used as research material and as a means of cross-checking some of the information.

In order to tie our analysis of the Derema process to the biophysical and historical context, we first briefly address the history of natural resource use, the livelihood strategies, and the economic and policy changes that have affected natural resource management in the area. We specifically highlight the role of Finnish forestry aid in the shift in forest management objectives and practices from exploitation to conservation in the East Usambaras. We then present the relevant institutional framework, providing a backdrop for the overview on the conservation and displacement process. The strategies of the affected people to claim, contest and defend access, as well as the limitations on their agency, are then analysed in order to come to a conclusion on the factors that may affect the equity and legitimacy of compensation for displacement due to conservation.



Map 1. Amani Nature Reserve in north-eastern Tanzania.

## Access and agency in displacement processes and outcomes

By 'displacement', we refer not only to the physical relocation of people or settlements, but have adopted a broader definition to include restricted access to production resources as well. Recognition of the impoverishment risks associated with economic displacement has led to the official adoption of this broader concept in, e.g., the World Bank's Operational Policy 4.12 on Resettlement (Cernea 2005).

In our approach, the concepts of access to resources and agency are seen to be closely interwoven in the analysis of social changes triggered by displacement. We assume that the actors, including groups of people, involved in a specific intervention can strategically use different resources, both symbolic and material, to promote their interests. In this case, these interests are mainly related to access to both the natural resources from which people were excluded, and to the monetary compensation for the lost resources. In our conceptualization regarding access and how it is constituted and contested by actors, we draw on Ribot and Peluso (2003), who have developed a 'theory of access' to analyse "...who actually benefits from things [...] and through what processes they are able to do so." We suggest a more limited definition of access, confining it to the actual ability of the actors to benefit from the resources at stake, and excluding the means and processes enabling access.

Rights indicate different types of socially acknowledged claims to resources, and form a sub-category of access (Ribot and Peluso 2003). Rights authorise their holder to use, manage and benefit from resources, but only when there is a statutory or customary social mechanism that allocates duties and binds individuals to them (Bromley 1991). The legal, or institutional, framework thus conditions access through defining rights. An important observation is that claims based on national legislation on the one hand, and on customary law on the other, may often be conflicting, or socially recognised to different degrees by different actors (Colchester 2008). Differing interpretations of rights to resources and compensation entail the threat of ignoring or further marginalising individuals or groups that do not possess a 'voice' to claim or defend their rights in displacement processes.

Hence, in addition to rights, it is important to analyse the means or strategies of claiming and defending access to given resources. These include, for instance, discursive means, existing social networks, and sometimes more hidden ways of action as well, such as non-cooperation (cf. Ribot and Peluso 2003). The means to which actors resort in negotiations or struggles over access are largely determined by their existing resource base. Ribot and Peluso (2003) also recognise structural and relational mechanisms conditioning access, such as technology, capital, markets, knowledge, authority, social identities, and social relations, which can constitute power over other actors.

A central reservation in our study is that social actors participating in or deemed to 'benefit' from a given project tend to differ in the material and symbolic resources they have to do so. The outcomes for different actors in a conservation intervention are always conditioned by the structures and relations not only between rural communities and external actors, but also within the affected communities (Agrawal and Gibson 1999). Nevertheless, interventions seeking to involve local communities in conservation frequently lump together all the actors in a 'community' as a single stakeholder, overlooking the various competing interests within the communities that may be at stake (Agrawal and Gibson 1999; Ribot 2003). Those seeking 'community consent' to an intervention may also choose to only inform the official or political representatives of communities, or members that they usually or conveniently work with, begging the question of the representativeness and legitimacy of such consent (Freeman et al. 2008).

## Study area: History of resource use and livelihoods in Derema

Human-induced forest change has long historical roots in the Usambaras, dating to the pre-colonial era (e.g. Hamilton 1989; Conte 2004), although it has varied in intensity and scope. The customary land and forest tenure system of the Shambaa, the historically dominant ethnic group in the Usambara Mountains (Feierman 1974), was based on loose community tenure. It began to erode at the start of the colonial era at the end of the 19<sup>th</sup> century (Hamilton and Mwasha 1989a, Woodcock 2002). Since then, land use in the East Usambara Mountains has been characterised by intensified forest and land utilisation.

Under German colonial rule, land was divided into forest reserves, private estates, and public land for the local people (Hamilton and Mwasha 1989a). Sawmills were established in different locations in the mountains, including one located in Derema (Schabel 1990). From the late 1940s, forest clearing expanded in the East Usambara Mountains with the emergence of new profit-oriented actors. The Sikh Sawmills bought several tea estates in the East Usambaras, focusing on producing timber rather than tea (Iversen 1991:14; Conte 2004:156). Migration from other parts of Tanzania into the area was fuelled by work opportunities in the tea and sawmilling industries. This also contributed to agricultural expansion, as many migrants settled in nearby villages, partially clearing forests for cardamom cultivation under the rainforest canopy. Cardamom was first introduced to the area by the Germans and gradually adopted by small-scale farmers as a profitable cash crop (Vihemäki 2009). The Derema area was assessed as almost completely under cultivation of cardamom and subsistence crops by the 1990s (Iversen 1991:64; Johansson and Sandy 1996). At the same time, it was also considered the largest tract of unprotected forest in the East Usambaras (e.g. Newmark 1993; Newmark 2002; FBD et al. 2004).

The Derema area included land belonging to five villages: Kisiwani, IBC Msasa, Kwezitu, Kwemdimu and Kambai (URT 2006). The field work for this study was conducted in IBC Msasa and Kwezitu, where many of the appropriated farms were located. Most of our work was focused on the hamlets of Makanya and Kwekuyu in IBC Msasa, and Antakae of Kwezitu, places in which a large number of inhabitants had lost farms to the Corridor, according to local key informants.

The majority of the people in the study villages identify themselves as belonging to the Shambaa ethnic group. A relatively high proportion of migrants in the population is a general feature of the study villages nowadays. A survey conducted in 2000 estimated that approximately 44 percent of the inhabitants of the area were immigrants (Jambiya and Sosovele 2000), although many of them had come from nearby villages.



Picture 1. Village landscape in IBC Msasa village close to Derema Corridor in Tanzania.

As in other areas of the East Usambara Mountains, most of the people in IBC Msasa and Kwezitu depend on small-scale farming. Cash crops typically include cardamom and other spice crops, such as cloves and cinnamon and, increasingly, sugarcane. Subsistence crops such as yams are typically intercropped in the spice agroforestry systems; whereas

maize and beans are cultivated in more open spaces. Other main sources of livelihood include small businesses and working on the tea estates. Some people have also benefited from development and conservation activities introduced in past years, such as butterfly farming and trading of the seeds of an indigenous tree species, *Allanblackia stuhlmannii*. For many people in the study villages, the Derema Corridor was an important source of income and food. Moreover, firewood, timber, building poles and ropes, bushmeat, and medicinal plants were also obtained from the area.

### Finnish aid in the East Usambaras

The Finnish development cooperation in the East Usambaras started with technical assistance and financial support for commercial forestry in the 1970s. Finland supported the operations of the Sikh Saw Mills, by then nationalised, logging timber in the East Usambaras and processing them in the regional capital of Tanga. One of the main products of the company was crates for exporting tea (Mustonen and Räsänen 1985). A valuable indigenous tree species, *Cephalosphaera usambarensis*, was mainly used for this purpose. In addition to being highly extractive, logging led to environmental problems such as soil erosion and deterioration of roads and water sources. The forestry operations came under increasingly heavy criticism both locally and internationally, finally leading to the cessation in 1986 of Sikh Saw Mills

operations in the uplands of the East Usambaras (Mwalubandu et al. 1991; Hamilton and Mwasha 1989b).

During the 1980s, the focus of Finnish development cooperation gradually shifted from utilisation of the forests to conservation. The East Usambara Catchment Forest Project (EUCFP), Phases I (1990–1994) and II (1995–1998) were designed to assist the Tanzanian government in sustainably mana-ging and protecting the environmental and biodiversity values of the mountain forests. In its last phase in 1999-2002, EUCFP and the IUCN-led East Usambara Conservation and Agricultural Development Project (EUCADEP) merged as the East Usambara Conservation Area Management Programme (EUCAMP). EUCAMP received around 2.4 million Euros from the Finnish government, in addition to a 1.4 million Euro contribution by the EU and over 300,000 Euros from the Tanzanian government (EUCAMP 2002). EUCAMP continued the core activities of EUCFP of forest conservation in protected reserves and biological research, in addition to providing support for community participation, a concept that had started to gain importance in the 1990s, through promotion of pilot activities in community forestry and agroforestry (EUCAMP 2002; Vihemäki 2009).

The association of forest management and Finland, or FINNIDA, as the government branch of Finnish development aid was formerly called, is still strong in many villages. In the same way as the 1980s project EUCADEP is simply referred to as "IUCN", the Amani Nature Reserve and the Derema Corridor are often called "FINNIDA". This illustrates the way conservation interventions are commonly associated with the external agencies involved, despite outwardly local or government ownership. The bad name gained by FINNIDA among the local population in the 1970s for forest destruction (cf. Mwalubandu et al. 1991) was still recalled in a village meeting in April 2009 where it was asked why the villagers, now challenged to take ownership of sustainable resource management, should "clean up the mess" i.e., the forest destruction caused by external actors thirty years ago. The Finnish nationality of the authors of this study also caused some suspicion at the beginning of our research. On one of our first visits to IBC Msasa in April 2008, a local farmer remarked "so, you have come to check your property", referring to the Corridor.

## Institutional framework of conservation and displacement in Derema

At the start of the conservation process, Derema was primarily perceived as unreserved public land although much of it was under cultivation in a customary tenure system. Contradictory accounts of the status of land tenure in Derema have been presented; apparently the situation was not clear to EUCAMP at the start of the Corridor intervention (Vihemäki 2009). Despite lacking official documentation of occupancy, local farmers considered themselves owners of their farms in the planned corridor (Jambiya and Sosovele 2000). Individual parcels of land were and still are bought and sold, inherited, leased and borrowed under the concept of private ownership.

The legal framework for the establishment of the Derema Corridor was defined by the Land Act (1999) and Village Land Act (1999). This legislation was part of the Tanzanian land law reforms of the late 1990s, which aimed at improving the security of customary land access. Derema was thus classified as village land (URT 2006:14-15), a type of legal land category meaning the area managed by the village council (village government) within the village boundaries. On village land, customary land rights are protected by the law as private land rights. Nevertheless, as a colonial legacy, all land (soil) in Tanzania remains under the ownership of the Head of the State as a trustee on behalf of the citizens. Village land can be transferred for public benefit to the category of 'reserved land' upon the decision of the President (through the Minister of Lands).

The Village Land Act defines the procedures for informing, consulting with, obtaining consent from, and paying compensation to local communities in cases of transferring land out of their domain, all of which were applicable to the Derema case. The Village Council, upon receiving the notice, is to inform all villagers, giving them at least 90 days to respond, and assist all those who may be affected. The Commissioner of Lands must attend a meeting of the Village Council or a Village Assembly (a public meeting open to all villagers above 18 years of age) to explain why the land is to be transferred and to answer any questions. Holders of rights to the land to be transferred, including holders of customary rights, whether registered or not (Village Land Regulations (2001), are entitled to compensation. The Village Land Regulations (2001, 8-10) define the compensation to be paid for the land itself together with improvements, as determined by the current open market value, or an assessment of lost income, or by replacement cost. In addition, compensation must be paid not only for the property of individual

occupants, but also for communal land within the village (Regulation 8a). The terms of the compensation, i.e., type, amount and timing, need to be mutually agreed upon before the transfer can take place. The Village Assembly has the power to approve or reject removal of under 250 ha of land from the village domain. The land law thus stipulates that there is a consultation and a negotiation component in the process, and assigns the community the right to give or withhold consent to the land transfer, but strictly limits this right by making it applicable only to areas smaller than 250 ha.

In addition to land laws, the establishment of protected forest areas is also governed by forest legislation. The Tanzanian National Forest Policy of 1998 (URT 1998) paved the way for a policy shift towards scaling up participatory processes in forest management nationwide; Participatory Forest Management was written into the law in the Forest Act of 2002. The implications of customary forest rights in the establishment of forest protected areas are defined in the 2002 Forest Act. Any objections, petitions, comments and presentations made by the communities should be recorded; and all claims of customary rights investigated. If such customary rights are proven to exist, different alternatives should be considered. These include: modification of the conservation plan so that these rights can continue to be exercised; conserving the area through community-based forest management, or continuing with the strict conservation plan, considering its high national or international importance. Holders of rights to the forest areas to be conserved are entitled to "full and fair compensation" for the reallocation of their rights. The 2002 Forest Act also defines redress mechanisms (2002, Sections 23-24). Despite the elaborate consultative processes outlined, the Forest Act does not assign affected communities either the right to consent to, or conversely, the right to veto conservation plans.

Despite Finland's adherence to OECD guidelines on resettlement and compensation, the Tanzanian laws were applied by EUCAMP in Derema, instead of any international standards for compensation (URT 2006:8). At a later stage, the Government of Tanzania (GoT) sought financial assistance from the World Bank and thereafter agreed to follow the World Bank Operational Policy (OP) 4.12 on resettlement. Should any differences between the Tanzanian procedures and the OP 4.12 occur, the "stricter of the two" was to be followed (URT 2006:17).

The OP 4.12 covers impacts caused by "the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons" (World Bank OP 4.12,

Section 3(c)). It has requirements that go beyond the Tanzanian law, including informing displaced people about their options and rights pertaining to resettlement, and advising on and offering choices among resettlement alternatives. In cases of restricted access to parks and protected areas, the OP 4.12 is specific about the requirement for a plan that describes the participatory means by which the project is to be prepared and implemented, the criteria for determining eligibility of displaced persons, the measures to assist the displaced persons in their efforts to improve or at least to restore their livelihoods, and monitoring of the entire process. The OP stresses that there should be a timely information flow to and from the affected parties. and provision of prompt and effective compensation at full replacement cost for loss of assets. It calls for special attention to protect the needs of vulnerable groups among the displaced, such as women, children, and the poorest people. Furthermore, the compensation to displaced persons whose livelihoods are land-based should be land-based. The combination of productive potential, advantages of the new geographical location, and other factors describing the new land should show that the new land is at least equivalent to the land taken (World Bank OP 4.12, Section 11).

#### **Establishment of the Derema Corridor**

The Derema area was first considered for a forest reserve in 1974, but the plan was abandoned due to financial constraints. Inventories in the 1980s deemed that the area had been almost entirely "destroyed" under cultivation and was not worth preserving (Iversen 1991:64). In the early 1990s, in connection with the EUCFP a new plan was made for a 790 ha corridor in Derema to connect the Amani Nature Reserve in the southern part of the East Usambara Mountains with other reserves in the north (Tye 1993; Johansson and Sandy 1996). The process for the establishment of the Corridor was initiated as part of the work plan of EUCFP/EUCAMP 1999–2000 (EUCFP 1999). The main events in the process are summarised in Table 1.

Village meetings were planned in IBC Msasa, Kambai, Kwezitu and Kisiwani "to reach agreement on gazetting the proposed Derema forest reserve" (EUCFP 1999), but a social impact assessment (SIA) carried out in 2000 is documented as the first step taken (EUCAMP 2002: 33). The SIA was undertaken to provide data for the forest reserve planners on the potential positive and negative social impacts of the exercise (Jambiya and Sosovele 2000), but it also served to inform local people about the planned Corridor (Vihemäki 2009).

The Corridor plan initially met with opposition in the surrounding villages. A common line of thinking among the villagers was a rather open rejection of the appropriation of their land, although they were informed that they would receive monetary compensation for lost access and income (Jambiya and Sosovele 2000). Some of the farmers had previously lost farmland in the establishment of the Amani Nature Reserve, and many of them had been dissatisfied with the level of compensation received (Jambiya and Sosovele 2001; Vihemäki 2005, 2009). Resentment related to this previous experience partly explains the animosity with which the SIA team was met in some villages (Jambiya and Sosovele 2000).

Table 1. Main events in the establishment of the Derema Corridor.

Derema first considered as a Forest Reserve.	
East Usambara Catchment Forest Project starts. Derema again proposed as a Forest Reserve and later as a Wildlife Corridor.	
Gazetting of Derema Corridor included in the work plan of the last phase of EUCFP/EUCAMP (1999–2002).	
Social Impact Assessment (SIA) carried out in the five villages to be affected by the Corridor.	
Stakeholders' workshop on SIA results conducted in Muheza town.	
Boundary survey and demarcation, including slashing of crops along the boundary.	
Mid-term review of EUCAMP recommends an alternative, community-based conservation approach.	
Another stakeholders' workshop in Muheza decides to go ahead with the protected area approach; confirmed by the EUCAMP Steering Committee.	
Compensation payments for boundary crops to 172 farmers.	
Valuation of crops inside the corridor.	
EUCAMP closure. Compensation still pending.	
World Bank (WB) support sought, field mission.	
Part of remaining compensation paid to farmers.	
Derema Resettlement Action Plan (RAP) prepared for WB.	
Final compensation paid to farmers with WB funding.	
RAP implementation ends. Farmers yet to receive substitute farmland.	

Sources: Iversen 1991; Tye 1993; EUCAMP 1999, 2000; Jambiya and Sosovele 2000; Sjöholm et al. 2001; Pohjonen 2002; URT 2006; authors' field work.

Despite the resistance, the SIA reported that most people had "a clear understanding" of the ecological justification of the conservation exercise, although this might have been related to years of environmental education by the various projects in the villages rather than a concern over forest fragmentation per se. The SIA survey also suggested that about 13 percent were willing to shift their farming activities to other areas and supported conservation as "a good thing for the future generations" (Jambiya and Sosovele 2000:25). A small group did not comprehend the whole thing. A feeling of resignation was also reported to be common: "...if this is the government decision, what else can we do?" (Jambiya and Sosovele 2000:25). The contrasting responses reflect the diversity of interests and discourses among the villagers, some of whom had been more involved in the conservation and development projects and thus more likely than others to have been exposed to the 'modern' conservation discourse (cf. Vihemäki 2009).

Interestingly, in a workshop organised after the SIA was completed to share the findings with all the stakeholders and make recommendations on how best to proceed (Jambiya and Sosovele 2000:56), the villagers' position had shifted, at least in the official arena of negotiations in which their representatives participated. The SIA report of the workshop gives the impression that the villagers' representatives in the workshop were by and large positive about the conservation plan, and the general conclusion was that the Derema area must become a reserve (Jambiya and Sosovele 2000:65-66). However, only 24 villagers represented the thousands of people in the five affected villages (estimated 7878 in 2006, URT 2006). These 24 included the village and hamlet chairpersons, along with a handful of other villagers. Only one of them was a woman (Jambiya and Sosovele 2000, Appendix 4; hamlet chairperson, October 2003, Makanya). The level of consensus within the villages could have been lower than suggested by the workshop declarations. According to the results of the household survey conducted in Makanya and Antakae hamlets in 2008, 54% of the male respondents (n=46) and only 12% of the female respondents (n=42) who had lost access to land in the Derema process felt that they had participated in the decision about the Corridor. The lone female representative in the post-SIA workshop echoed the general concern of women documented in the SIA survey that specific measures would need to be taken to ensure that men alone would not collect the compensation money and use it for purposes other than the benefit of their families (Jambiya and Sosovele 2000, Appendix 4).

Regarding the conservation approach for Derema, a strictly protected government reserve appears to have been the dominant idea throughout the process. During the planning of the final phase of EUCAMP, the options suggested were either to conserve the area as a government forest reserve, or to create a series of community-managed village forest reserves. The decision was to be made after consulting the villagers (EUCAMP 1998:21).

Nevertheless, one of the EUCAMP advisors later stated that the original plan was to make the Corridor a "normal forest reserve" (pers. comm., May 2007), probably meaning a government forest reserve. Whereas the EUCAMP representatives and government officials stressed the integration of local people in the planning (Jambiya and Sosovele 2000, Appendix 2; Vihemäki 2009), the SIA was focused on the protected area approach and did not explore other alternatives (Sjöholm et al. 2001).

The mid-term review of EUCAMP in 2001 criticised the programme for sustaining an exclusionary approach to forest conservation and not considering local people's rights. The review warned about the risk of conflict. It recommended that conservation of the Derema area should be through community-based forest management instead (Sjöholm et al. 2001; Pohjonen 2002). At this point, the boundary marking of the Corridor was already underway (Sjöholm et al. 2001). A "Derema villagers' workshop on the selection of the management approach for the Corridor" was subsequently organised in Muheza town. The report on this workshop stated that the participants preferred the establishment of a government forest reserve in Derema over conservation through village forest reserves (Pohjonen 2002). The EUCAMP Steering Committee subsequently decided to continue the establishment of the Corridor as a government reserve (Pohjonen 2002). The Steering Committee reserved the option to involve the communities in forest management at a later date, through Joint Forest Management agreements (FBD et al. 2004).

A report by the GoT's Forestry and Beekeeping Division (FBD), and other organisations involved (FBD et al. 2004), suggests that conservation through village forest reserves was not accepted by the 'communities' because they believed that it would be impossible to combine cultivation with conservation. According to an FBD official who had been involved in the process (interview, Dar es Salaam, 4 January 2008), the community-based management approach was rejected because under this plan the farmers would not have received any compensation. He also cited doubts about the villagers' capacities to control illegal activities in the forest. The same risk was also mentioned by some villagers in later discussions as a reason to support the idea of making Derema a government reserve. At the same time, these villagers also maintained that only a minority of the villagers had supported the exclusionary approach, but that this minority "had given better reasons" or justified their position better in village assemblies, leading to the 'community consent' of the protected area (group interview, Makanya, May 2008).

Only farms were included in the proposed reserve plan, boundaries being designed to exclude settlements and homes to avoid costly relocation (URT 2006). The boundary demarcation in mid-2001 involved slashing the crops along a 3-metre wide, 27 km long boundary surrounding a 956 ha corridor (EUCAMP 2002; Pohjonen 2002). The slashed crops were recorded together with the farmer's photograph. An estimate of the applicable compensation was not available until months later (Pohjonen 2002).

Subsequent developments imply that the consent within the villages in regard to the Corridor establishment was not as broad as the reports prepared to complete the process suggested. At the time of the boundary survey, some farmers refused to cooperate with the demarcation, since they perceived the location of the marked boundary as different from the location that had been agreed upon (Sjöholm et al. 2001:54; authors' field data 2005, 2008). The situation became tense, the police intervened, and some people were arrested in IBC Msasa (interview with Village Environmental Committee Chairman, IBC Msasa, March 2005; group interview with women, Makanya, May 2008). The issue was later resolved at a meeting of the village leaders, EUCAMP representatives and a local Member of Parliament (Pohjonen 2002). An agreement was reached to move the boundary in two places (Sjöholm et al. 2001), and the demarcation was completed (Pohjonen 2002).

Since the early stages of the process of creating the Derema Corridor, the affected farmers had been concerned about the rates of compensation and the schedule for payments, of which they had little knowledge (Sjöholm et al. 2001, authors' data). The compensation to be paid, and the funds reserved by EUCAMP for that purpose, had first been calculated in 1998 according to the old land law. The project was advised early on to adhere to the new land law, but an important departure from both the new Village Land Regulations and the World Bank OP 4.12 was maintained until the end of the compensation process; that is, compensation was only paid for lost annual income per crop. Although in 2001 the overall cost of Derema compensation was foreseen to consist of "the boundary crop valuation, the final crop valuation, determination of the land value as well as the value of other possible land rights" (Pohjonen 2002), no compensation was paid for the lost farm land itself or for communal land. In the first document clarifying the process, which was prepared for the World Bank, compensation was stated as not being for the land itself since the area "is not gazetted as village land and hence technically belongs to the state" (Derema World Bank, ND, 3). Yet in the Derema Resettlement Action Plan (URT 2006), prepared by GoT when applying for World Bank funding in 2006, the Corridor area

was defined as village land which would therefore be dealt with within the legal framework of the Village Land Act. Despite the requirements of the OP 4.12 which were applicable to the Resettlement Action Plan, the basis for the compensation calculation remained the same until the end, compensation being paid for lost crop income but not for the land itself.

How the terms and form of compensation were negotiated between the parties has not been well documented. The law does not require, for example, the compensation to be monetary. Some interviewees stated that they had agreed to give up their land after they had been promised payment within six months (IBC Msasa, October 2003; URT 2006:20). This was probably related to the land law clause on interest to be added to the compensation upon failure of payment within six months. Even though the official reports and documents on the Derema process repeatedly refer to "consultations of the local stakeholders all along the way" (URT 2006:28) on "what alternatives [the villagers] would accept" (Derema World Bank, ND, 3), few events have been documented. Those that have been documented include the SIA, and the two workshops in which a few representatives of the villagers participated. Some meetings at village level were also held in mid-2004 in preparation for the World Bank involvement in funding the process.

A change to the compensation procedure mandated by the new legal framework that *was* implemented was using the farmers' own estimations of yields as the basis for compensation, instead of a periodically updated government crop value schedule (URT 2006). Compensation for the slashed boundary crops was paid in March 2002 at highly profitable rates per plant (Ths 28,800; approx. US \$22 in 2009), based on the farmers' estimations of cardamom yield. This was many times higher than the normal yield in similar conditions (Dr. T. Reyes, Pers. Comm., December 2007). Later seen by its implementers as a decisive complication to the process, the sum to be paid to the farmers increased 12-fold following the change in the calculation method (URT 2006). It also raised expectations among farmers about high compensation for the remaining crops.

In mid-2002, the crops within the Corridor were valued. Teams formed by a crop value consultant, Muheza district agricultural officers, forest officers and research assistants visited each farm in the Corridor, counting crops and recording their stage of maturity. People were called to their farms, photographed and requested to sign a form on which their crops were recorded. No other data concerning the people who showed up except their names were recorded (URT 2006:18-19). The farmers later described a two-step procedure in which they signed the crop form at the village office following

the farm visit, but it was not always the same person who represented the family on the two occasions. A government representative who had been supervising the process equated the signing of the crop forms to an agreement by the farmers with the valuation (informal discussion with an FBD official, Dar es Salaam, February 2010). Agreements were probably also fuelled by expectations of profitable compensation. During the valuation, the number of farms in the Corridor increased from the estimated 648 during boundary marking to 1547. Rapid new plantings and a higher number of farms were observed in the villages that were counted later (URT 2006:18-19).

In 2002, EUCAMP closed without sufficient funds to complete the compensation payments. The government of Tanzania was left to collect bits and pieces of conservation funding from various international conservation organisations and development partners to finalize the process. In the final report submitted on completion of the programme, the EUCAMP advisors pleaded for additional assistance to finalise the compensation process, stating that failure to pay compensation would "not only result in... the loss of investment, but also in conflicts within and between local communities, policy makers and the conservation institutions in the Tanga region" (EUCAMP 2002:46).

In 2004, the MNRT approached the Tanzania Forest Conservation and Management Programme, funded by the World Bank, to request financial aid in order to complete the Derema Corridor compensation (URT 2006:11). In the meantime, half of the compensation was paid to each farmer in 2005, in anticipation of the coming presidential elections (URT 2006:11). The final compensation payments were paid out with World Bank funding during the period of the authors' field work in February-May 2008.

Some of the recommendations of the SIA – if not all of its findings – were taken into account in the Resettlement Action Plan (RAP), especially regarding the planning of the WWF-mediated 'resettlement' project. In 2001, with the agreement of the District Commissioner, alternative farmland on former sisal estates in the lowlands was made available for those wishing to relocate. But even though some farmers from the affected Derema villages signed up, the land was not explicitly intended for the displaced farmers (URT 2006:24). The plans to facilitate new three-acre plots for the affected farmers on the sisal estates only became part of the 'resettlement' process during the implementation of the RAP in 2008–2009. A RAP component for creating alternative income generating activities, such as keeping dairy cattle, beekeeping, butterfly farming and cultivating fish in ponds, was also suggested to help those worst affected, i.e., those who lost land and received

very little compensation (Dr. G. Jambiya, pers. comm., January 2008). In addition, interest was added to the final compensation sums to compensate for the inflation which occurred during the delays in the process (URT 2006).

## Villagers' strategies and limits to their agency

Although contacts and the flow of information between the government and the Derema farmers regarding plans to complete the conservation intervention were irregular after the closure of EUCAMP, communication continued with the involvement of new actors. In mid-2004, representatives of the World Bank supervision mission to the Tanzania Forest Conservation and Management Programme, together with representatives of donor and conservation organisations, visited Derema and discussed with some villagers the prospects of completing the conservation and compensation process (Derema World Bank ND; interview with an FBD official, Tanga, December 2004). An official of the FBD explained the strategy used to convince the farmers to continue waiting for their compensation (interview, Tanga, December 2004): "We told them that as long you do not go there, we will be motivated to look for the money." The completion of the compensation was thus made conditional upon continued restraint from active farming in the Corridor, while at the same time there was a large degree of uncertainty about the future of the intervention.

Increasing frustration was reflected in the discourse of the people affected while the compensation process dragged on. They repeatedly requested to be either paid the compensation or be given their old farms back. Many of the people affected were concerned about the government's willingness and ability to complete the compensation payments.

There were also threats – perhaps strategic ones aimed at influencing the process through the researchers – that young farmers would go and slash regenerating vegetation on their former farms if the money was not paid soon. Several people claimed that the failure to receive compensation had impoverished them because the income from their cardamom harvests had collapsed. They were not allowed to plant new crops on the forest farms and were not actively tending crops any more, but they did not have the money to start farming elsewhere (group interviews, IBC Msasa, 2003, 2008). Such comments also imply discursive resistance to the way the conservation and compensation intervention was being conducted.

Rumours were also abundant and persistent. For instance, women from Makanya village argued in several group interviews (October 2003, May

2008) that wild animals would be brought into the Derema forest following gazetting, stirring up fear about future crop losses in surrounding areas and dangers for children on the way to school and for women collecting firewood. The speculation about wildlife being introduced had already been discussed in the post-SIA workshop (Jambiya and Sosovele 2000), where the project representative had denied such a plan. This repeated claim probably reflected the articulation of a general fear of how the intervention reduced local people's control over their surroundings, or was used as a discursive effect to underline the respondents' powerless, victimised position.

The Derema conservation intervention gradually led to the affected villagers' mobilisation as they tried to exert pressure on various agencies. By late 2003, the farmers had already sent delegations to district and regional level authorities to request information about the compensation process (e.g. Village Environmental Committee group interview, IBC Msasa, October 2003). The farmers also made several visits to the District Commissioner, the Regional Commissioner of Tanga, and the Catchment Forest Office of FBD in Tanga in the subsequent years.

By May 2005, affected people from the five villages had organised themselves into a 'follow up committee' which had sent a delegation three or four times to the office of the Regional Commissioner. The committee members considered this action not only as a means of trying to acquire information but also as a way of putting pressure on decision-makers and officials to speed up the process. Nonetheless, they only received partial information and were asked to come back later to consult other officials, which undermined their efforts. In addition, the 'locus' of authority - who had the information and the power to decide about the compensation payments - was not clear to them. The committee members contributed their time and money, their own as well as support collected from other villagers for the costs of the trips, which made follow-up costly for them. By September 2009, members of the committee who were interviewed explained the cessation of follow-up activities as being due to exhaustion and running out of financial support, although they still did not consider the process to be over.

In their efforts to access information and ultimately obtain compensation, the farmers affected not only approached those authorities who were officially involved but also others whom they thought capable of dealing with the issue, or with whom they had had previous contacts. For instance, a delegation was sent to meet with the Regional Commissioner of Dar es Salaam (meeting of the affected farmers' committee, April 2005). In their attempts to

speed up the compensation process, villagers thus tried to use their existing social networks in addition to the formal channels.

The uneven distribution of resources among the local people, including material resources and social position, was reflected in who became more involved in the follow-up. Those who participated in meetings and represented others had usually had previous contacts with government authorities, or the experience and resources to commit to the task. Many of them were older, more affluent, educated men. The members of the Village Environmental Committee and Village Council members, and other people with experience in representing others, were also among the most active local people. Perhaps reflecting their respected social position, the survey of 2008 revealed that the follow-up committee was highly trusted by most of the affected respondents, although many of them, especially women, were not fully cognisant of the committee's mission or tasks. Despite this general trust, some respondents in the 2008 survey expressed doubts about the capacity of the follow-up committee to influence the process. It was also asked whether they were accountable to the villagers or to "higher levels". This reflects the complexity of the task of the members of the committee who, as messengers and self-appointed negotiators between the affected villagers and the authorities, were often forced to return home without news of the compensation, or with only vague promises of progress.

At the same time, the representatives of the villagers were in a position to filter the information flow between the affected people and conservation officials, and to influence the negotiations according to their own interests. For instance, in the later stages of the process in 2008, a member of the follow-up committee who was also the leader of a local dairy farmers' network, encouraged affected farmers to participate in a cattle keeping training course for a fee, and to construct animal shelters, based on a vague plan by the RAP project to potentially provide cows for the poorest, most affected farmers. The latter then felt betrayed "yet again" when the plan did not materialize.

Negotiations over the conditions of compensation and the follow-up process turned out to be largely a men's affair. Nearly all women interviewed categorically considered that their voices were not heard or adequately taken into account in the displacement and compensation process. In general, women's information channels differed from those of men. According to the results of the household survey carried out in 2008, sixty percent of the male respondents (n=63) had found out about the Corridor plan at a village assembly, whereas only onethird of the female respondents (n=75)

had heard about it this way. Most women had heard the news through family, neighbours and other villagers. Women's participation in village meetings is limited by chores such as farming, taking care of children and domestic animals, cooking, and fetching water and firewood, especially in places such as Makanya hamlet, located far from the village centre, where most meetings take place. It is also not uncommon that women are directly discouraged from public participation by their husbands. Most, if not all, of the village leaders who participated in the public consultations regarding the Corridor were men, as were the follow-up committee members. Their views on, for instance, suitable forms and methods of compensation are likely to have been different from those of women, and could have influenced the way the payments were ultimately made. Pohjonen (2002) reports that 'farmers' preferred personal cheques instead of payments to family accounts in the bank.

Nevertheless, women tried to use the channels available to them to voice their concerns over the social effects of the displacement and the compensation method. They tried to make their voices heard especially through the interviews carried out at various points of the process, the SIA, the post-SIA workshop (SIA 2000, Appendix 2), and the authors' interviews and surveys in 2005 and 2008. For example, women requested that portions of the compensation for family farms should be paid separately to husband and wife (SIA 2000, Appendix 2). Despite the early documentation of these concerns, they were not effectively taken into account in the process.

Lack of access to information was thus a key constraint on the villagers' efforts to influence the process and its outcomes. At the same time, the perceived 'secrecy' and gaps in information flow left room for differing interpretations of the process, and served as a reason for continuing to contest the outcomes even after the finalization of the compensation payments. The villagers' arguments also changed as their understanding of the process grew and their perceptions of their rights changed. In 2009, a new issue, the question of why compensation had not been paid for the land itself in addition to the crops, became central to the villagers' discourse. A member of the follow-up committee had learned about the legal right to compensation for land through a radio program. The farmers thus tried to apply different discursive means to keep negotiations open and shape the outcomes of the process even after the formal decisions about final compensation had been made. At the same time, the authorities saw the last payments as closure to the lengthy and painful process. This was similar to the social dynamics of the process that started in the 1990s of establishing and negotiating the compensation levels in the case of the Amani Nature Reserve (Vihemäki 2009).

# **Equity and legitimacy of compensation**

The consequence of the limitations of the villagers influence on the displacement and compensation process – access to information, bureaucratic and delayed procedures, and the unclear locus of power and responsibility to deliver compensation – was a widespread perception that the compensation for lost land access was neither fair nor legitimate.

Discontent with the amounts of compensation had already been expressed in 2005, when parts of the pending compensation were paid. Although according to the RAP the calculations of the amounts of compensation per plant were based on data provided by farmers and buyers, farmers rejected the values assigned to their crops (URT 2006:29). Many still took the money offered. In 2008, after the final compensation payments, farmers repeatedly stated that the sums received were smaller than they had expected, based on the number and types of plants each farmer recalled having had, and the level of compensation per type of plant according to the RAP (copies of which the hamlet leaders had, and the contents of which had been discussed among the villagers). The farmers also claimed that they had not received prior information on the amounts of individual payments, so that the amount came as a surprise when the cheque was collected; or that they had not been informed about the exact way each individual payment had been calculated. In the survey of 2008, the most salient response to what were seen as the problems of the Derema process was "insufficient compensation". The dissatisfaction of the farmers affected with the final compensation is likely to have been a combination of two factors: high expectations raised by the initial boundary compensation, and incomplete knowledge and understanding of the payment calculation method, which had changed during the delays in the process.

The single measure taken to study the customary ownership of the farm plots in Derema and to identify the holders of the rights to land and eligibility for compensation was the crop valuation exercise, in which the people who turned up at the farms on valuation days were recorded as the "owners". This method was inadequate to capture the complex patterns of local land ownership vis-à-vis land dependency, and effectively blocked women from both the previously accessed farmland, and compensation for lost access. After the final compensation payments in 2008, women's worries over the compensation process appeared to have been justified. Whereas 95% of male survey respondents in 2008 had received compensation for the land they lost in the Derema corridor, 73% of the women had not. Women

were sidelined in the registration for compensation; only about 5-10% of the names on the compensation lists were female (URT 2006:19). Women also had reduced access to compensation for a jointly owned farm.

Although most men and women affected stated that the compensation money was intended for the entire household regardless of who signed up for compensation, women usually had no knowledge about the amount and timing of the payments, which in turn reduced their control over how the money was used. If the husband returned from the cheque collection trip to town with a gift such as bread or a kanga (traditional textile worn by women) and the money was nowhere to be seen, "you could just accept that" (group discussion, women, Antakae village, April 2008). They would normally be given their share for petty household daily consumption with no knowledge of the whole sum received. This was seen as a significantly worse arrangement than having access to the family farm where cardamom could be harvested and sold when financial needs arose, for example, at the time of school fee payments. But even with less knowledge of the amounts, the women concurred with the men in that the compensation was less than expected, making it difficult to be able to carry on with normal life or make investments to improve their livelihoods.

It is possible that the compensation method not only excluded some holders of land rights from compensation but also allowed other actors to access it illicitly. It had been observed that new seedlings were being planted in the Corridor as the 2002 crop valuation exercise progressed (URT 2006). In initial discussions, villagers explained that upon learning about the Corridor, young farmers had rushed to plant more seedlings in the area where they held farms but were not actively cultivating because many of them were still in school. From the conservation implementers' point of view, farmers were attracted by the prospects of a "cash bonanza" (URT 2006:9).

As the rapport of the authors with the villagers developed, more explanations were offered. It was claimed that the area had been invaded by swarms of new-comers from the Bulwa tea plantation and business people from nearby towns as the news of compensation spread. The tricks used to register for compensation included buying bush land from locals and quickly planting seedlings, or simply posing on someone else's farm so that the same farms were valued repeatedly with different 'owners' by different valuation teams. Even corruption involving the valuation officials was hinted at. Whereas it is impossible at this point to verify the type and extent of any fraud that occurred, some is likely to have taken place considering the

observed over two-fold increase in the number of farms during the valuation exercise from what had been originally estimated. Farmers later saw the lower final compensation rates as being due to the categorisation of their plants according to size and maturity, with seedlings entitling them to a very small payment, as a direct consequence of the increased number of 'farmers'. "We were told not to invite guests, but some still called their relatives. We ruined it for ourselves" (key informant, Makanya village, September 2009). Some villagers stated that they had had no means of controlling the outsiders, offering a more victimised view of their position in the whole event (group discussion, men, Makanya, October 2009).

Immediately after the final payments in 2008, many of the farmers affected were reluctant to acquire alternative farmland in the lowlands surrounding the mountains. Some openly questioned the legitimacy of the plan to distribute uniform 3-acre plots to all the farmers affected, regardless of the size of their area previously accessed in the Corridor (affected farmers' meeting, September 2008). At the time, many were still harvesting - although not maintaining - their farms in the Corridor, and living off the cash compensation. But by late 2009, the Corridor was considered officially protected, and people stated they were not entering the forest any more. Compensation money was to many but a distant memory, especially to those who had received small sums and used it on daily consumption. Receiving land in the lowlands had become the new pressing issue, although there were also complaints that there was no money left for the improvement of new farms, due to the delay in land allocation. Resentment towards the authorities, who were perceived as "having cheated again" in the land issue, was increasing. The farmers were also demanding cash compensation for the lost land itself. They were greatly concerned over the land issue not being settled before the end of the WWF-facilitated resettlement project in January 2010. The alternative income generating activities planned in the RAP for the poorest, most affected farmers had also not been facilitated yet. The despair of the RAP project coordinator over the slow progress in the bureaucratic procedures of re-allocating former sisal estate land to the Derema farmers (personal communication, September 2009) echoed the pleas for assistance by the out-going EUCAMP officers in 2002.

#### **Conclusions**

In spite of the efforts of the Corridor planners and implementers to mitigate negative social impacts and legitimise the process, many of the Derema farmers found that they had lost more than they had gained in the end. Some of the common conclusions on the negative social consequences of development related displacement found in case studies in the 1980s and 1990s (e.g. Cernea 1993) resonate with this case. Poor preparation leads to delays, increased costs and lost benefits, which negatively affect the displaced and undermine development objectives. Particularly difficult cases may lead to an unwelcome political backlash or unintentional environmental degradation (Partridge 1993, Cernea 2008).

As of a way improving the equitability and social acceptability of outcomes, Cernea (1993) has called for going beyond individual studies and formulating decisive policies to prevent the same mistakes from being repeated time and again in displacement and resettlement processes. Recommendations based on previous studies, such as the adoption of a broader concept of displacement which would include restriction of access to production resources, were incorporated into the World Bank Operational Policy 4.12 on resettlement. This World Bank Policy 4.12 was also applied in the later stages of the Derema process. Nevertheless, it appears evident that a progressive policy alone is not enough to ensure equitable and legitimate outcomes. In the Derema case, some of the departures from the World Bank policy were obviously due to its late implementation, which did not permit a revision of the conservation approach. Furthermore, the means and scope of compensation, i.e., monetary restitution of investments without adequate supportive measures, remained the same until the end. The intention to address the situation of the poorest and most affected was undermined by a limiting political environment in which the time for implementing livelihood support measures as a part of the resettlement strategy was consumed by the bureaucratic constraints of land allocation.

More focused efforts to define rights-holders to land and compensation at the beginning or at least during the formulation of RAP, could have helped to mitigate the negative social effects experienced by some groups. The displacement process accelerated social differentiation, since actors who had few initial resources or means of defending their interests, such as women, had very limited access to compensation while some outsiders allegedly benefited. Successful cases of resettlement underline the importance of thorough social research at the first stages of an intervention

involving displacement (cf. Partridge 1993). Research alone is not sufficient, however; the results must be effectively incorporated into the planning and implementation of the intervention. Why the findings of the SIA and especially the concerns of the women, which were documented as fears in 2000 and as actual facts in 2008 and 2009, were not better taken into account, remains subject to speculation.

At the same time, it should be noted that the people affected were not merely passive victims in the process, although the means and resources available to local actors to defend their interests varied across different groups. The consultations with the local people during the planning of the Derema Corridor, even though limited in scope and inclusiveness, probably served to give some of the farmers more confidence and opportunities to defend their interests, and later to actively try to work through their representatives and networks to influence the conditions and outcomes of the establishment of the Corridor. This political mobilisation was one of the unforeseen consequences of the process.

Access to information appears to have been a key factor shaping the agency and strategies of the actors involved. Most of the time, the villagers had to base their actions on very limited or incorrect information; the conservation implementers probably faced similar constraints. As the affected farmers' understanding of the process grew, and their knowledge and perceptions of their rights changed, so did their discourse and arguments. The realisation that the lost land itself had not been compensated for served as an entry point for keeping the process 'open' from their point of view, with renewed demands for additional compensation, whereas the authorities already considered the case closed. This is very illustrative of how actors often actively employ different interpretations of concepts and ideas in their attempt to influence and enact processes (cf. Freeman et al. 2008; Sikor and Lund 2009).

New conservation corridors are still being planned for the East Usambara Mountains, but since the start of the Derema process ten years ago there has been a big push towards more extensive local participation and devolved forest rights to the communities. Participatory Forest Management (PFM) is now actively promoted in all parts of the East Usambara mountains, including Finnish support for the East Usambara Forest Landscape Restoration Project (http://www.tfcg.org/eusambara.html). Extensive research on the effects of PFM on local agency and livelihoods has been carried out (e.g. Vihemäki 2009; Rantala, forthcoming). However, there is still an obvious gap in studies to determine the capability of government protected areas vs. PFM to attain ecological goals in order to draw conclusions as to the most effective,

equitable and efficient way of protecting the East Usambara forests and their multiple values. Elsewhere, research has tended to conclude that PFM is at least as effective, or even more effective, as a means of doing so compared to protected areas (e.g. Chhatre and Agrawal 2009; Nelson and Chomitz 2009). Conservation decision-makers and implementers should nevertheless be wary of relying in forest management on one 'policy panacea', such as PFM or protected areas, which may come up short when confronted with the realities of particular cases (Ostrom et al. 2007; Berkes 2007). The Derema case stands out as a staggering example of the unpredictability of the outcomes of social change processes in complex socio-ecological realities.

Conservation and development nearly always involve trade-offs, but those trade-offs should be based on informed decisions (Sunderland et al. 2008). If the establishment of protected forest areas is to remain as part of the tool box to achieve socially and ecologically optimal conservation outcomes, a few basic principles can be learned from the Derema case. Clear definitions of local rights to resources, coupled with inclusive mechanisms for participation, and backed by the sustained presence and commitment of the conservation agencies, are pre-requisites for forest conservation interventions involving compensated human displacement which aim to avoid negative social consequences for those affected.

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#### **Comments**

#### George Kajembe

The chapter by Rantala and Vihemäki discusses very pertinent contemporary issues in forest conservation in Tanzania, issues which are equally applicable in other developing countries where forest conservation through human displacement is the norm rather than an exception. The case of the Derema Corridor has important policy implications on how such situations could be handled by minimising the inherent risks and uncertainties underlying forest conservation in Tanzania.

However, I shall open the discussion by first presenting the theoretical background, with reference to the dilemma underlying planned rural development interventions in general, as argued by Van Dusseldorp (1990). The successful development interventions, in the sense that predicted outcomes have been realised within the period indicated and with the means allocated, is only possible when the following four pre-requisites are fulfilled:

- Firstly, there must be a general agreement among all actors involved on the consistency of the objectives;
- Secondly, there is knowledge of the functioning of all relevant processes and their interrelationships, as well as the ways in which they can be manipulated;
- Thirdly, there is the power and means needed to manipulate these processes; and
- Finally, there is the political will to use the power and the means available.

It is important to note that the above pre-requisites are seldom realised in forestry, because forest conservation projects and programmes are seen as "arenas" for both negotiations and struggles (Kajembe, 1994). This perspective provides us with an interesting insight into the functioning of interventions such as those in the Derema Corridor in Tanzania.

Reading through the chapter by Rantala and Vihemäki, one can easily see that it hinges on three themes, namely: an actor-oriented perspective, the social interface, and power relations. The actor-oriented perspective views an intervention as a "multiple reality" made up of differing cultural perceptions and social interests, and constituted by on-going social and political struggles that take place between and among the social actors involved. In the case of the Derema Corridor, the actors involved in this

'multiple reality' are government fficials, researchers, and farmers. The actor perspective aims at bringing out the significance of building into the analysis of a project or programme some account of 'human agency', as discussed in the chapter by Rantala and Vihemäki. This 'human agency' entails the idea of both individuals and groups developing social capabilities and creating emergent organisational forms, as exemplified by the farmers in the Corridor who organised themselves to deal with relevant government officials and followup on perceived unfair compensation. The emergent organisational forms both enabled and/or constrained the actions. Thus, the compensation exercise in the Derema Corridor became an active process, with unforeseen outcomes involving both cooperation and struggles among various actors.

The second analytical perspective which seems to underlie the discussion in the chapter is the 'social interface'. This interface is a critical point at which not only is policy applied, but at which it is transformed through acquiring social meanings that were not set out in the original policy statements. The social interface perspective emphasises the ways in which the previous experiences and biographies of the actors shape their interactions with each other, leading to differing social constructions (Long 2001). There is no need to emphasise that the perspective of the social interface served as a "focal point" in analysing the nature of interventions in the Derema Corridor. Such a perspective, though not explicitly mentioned in the chapter by Rantala and Vihemäki, seemed to underline the interventions of displacement and compensation in the Corridor as being both an interfactional and an accommodational process, linking technical and social aspects. The perspective of social interface goes beyond the simple wish to document the types of social struggles, negotiations and accommodations that took place in the Corridor between the intervening agencies on the one side and the farmers on the other. In fact, the social perspective can function as a metaphor for depicting the areas of structural discontinuity inherent in forest conservation and social life in general (Kajembe, 1994).

Power is defined as "what enables who to do what to whom" (Mbeyale, 2009) or more explicitly as a matrix of actors and their interactions. Power relations are not fixed or static, but are rather negotiated in real and metaphorical space and over time; they depend on various factors in the local context. There are three categories of power, namely: strategic; institutional and structural. In some cases, these categories are closely linked and cannot be separated from each other. These power relations seem to underlie the interventions in the Derema Corridor, although the chapter by Rantala and Vihemäki is not explicit on that.

Power is one characteristic structuring interactions of individuals and groups of people. Power is a social construct that only materialises in the interactions between people. Thus, power is relative; it characterises relationships between individuals, as well as the relations between the intervening agencies and the farmers. Strategic power refers to an ubiquitous feature of human interactions insofar as it signifies structuring the possible fields of action of others. This can take many forms, including ideological manipulation or rational argumentation, moral advice or economic exploitation. In the Derema Corridor, this type of power seems to be held by the government officials and some elites in the villages.

Structural power, also called domination power, is a power relationship that is stable, hierarchically fixed and difficult to reverse. Domination simply means those asymmetrical relationships of power in which subordinated persons have little room for manoeuvring because their margin of liberty is extremely limited. Mbeyale (2009) found that social position, age and gender are the main attributes of structural power relations. As vividly shown in Rantala and Vihemäki's chapter, this Domination Power was appropriated mainly by men, who were also in most cases the heads of households and as such the main beneficiaries of the compensation.

Institutional power, also referred to as government power, is defined as a regulated and more or less systematised mode of power relationship. Basically this means exercising power through administrative practices or regulations. In the Derema Corridor this type of power relationship was essentially vested in the intervening agencies, as Rantala and Vihemäki seem to suggest, though not explicitly.

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# 4. THE IMPACTS OF FORESTRY ASSISTANCE IN NEPAL: INTENDED AND UNINTENDED CHANGES

Sujan Ghimire Sharma

#### Introduction

Foreign aid in Nepal has been an integral part of the country's development and a significant link to the outside world. This link was first established when Nepal signed the Agreement for Technical Cooperation under President Harry Truman's Point Four Programme in 1951, a gesture that heralded the arrival of the aid regime. The aid regime is believed to have initiated a new era in the understanding and managing of world affairs, particularly those concerning the less economically 'developed' countries (Escobar 1995).

One of the sectors which has received foreign aid since the early years of the 1950s has been forestry. Initially the sector received technical assistance from a few selected bilateral and multilateral donors, such as the Food and Agriculture Organization (FAO), the United States Agency for International Development (USAID), India and the UK; these donors concentrated on the Tarai. From the 1970s onwards, the number of donors gradually increased to include Australia, Switzerland, Japan, China, Germany, The Netherlands, the European Commission, the International Fund for Agricultural Development (IFAD), the International Development Agency (IDA), the World Bank (WB) and numerous other international and national non-governmental organisations, all of which implemented projects and programmes related to forest management.

Finland has a unique place in the Nepali forestry aid arena. Forestry, as stated in the Finnish official documents, was a key sector for Finland and, accordingly, eight forestry projects were carried out between 1982–1999. Finland also supported the Master Plan for the Forestry Sector (MPFS), which is regarded as a milestone in the history of forestry development in Nepal. The MPFS has prioritised community forestry programmes. Finnish support for development in Nepal sought to meet the livelihood needs of the people (albeit indirectly), endeavoured to generate revenue for the Nepali state, and tried to implement a pilot project for commercially managing the Tarai forests. However, after a controversy regarding the modality of this pilot project, the Finnish assistance to the Nepali forestry sector suddenly stopped. This chapter discusses the case of Finnish forestry assistance

to Nepal in order to obtain insights into aid policies, practices and long-term impacts at both macro and micro levels.

Given that the Nepali forestry sector has been receiving foreign aid from many donors from the 1950s onwards, it is pertinent to examine what the impacts of foreign aid in forestry are, especially the long-term ones. Hence, this chapter also endeavours to discover how the forestry assistance coming into the country has had impacts on national-macro structures such as the forestry acts, forestry policies, and project types implemented in the country.

Impacts often deal exclusively with a project's (programme's/intervention's) objectives or the intended impacts. In aid literature, the intended consequences are the effects, which take time to materialise and can only be seen at the end of the intervention (project or programme). But impact is seen "... as something that happens from the first day a particular intervention is conceived and unfolds over time ..." (Martinussen and Pedersen 2005:234). This includes changes that only emerge in the longer run, namely, things that are officially unplanned yet are triggered off by interventions. These can be evidenced at various levels from the macro-national to the local micro levels. Sometimes the mere intention to implement a project can set off a chain of events resulting in changes which are the unintended impacts.

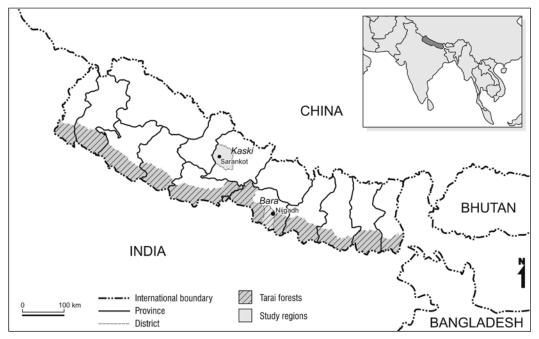
Research on impacts generally tends to be of three types: classical effect evaluations, participatory impact evaluations, and broader impact studies. The classical evaluations of effect and the studies of participatory impact are based on an instrumental approach, and conceive linear sequences between the interventions and the outcomes, evaluating aid in terms of the success or failure of the projects and programmes in achieving their stated goals. In addition, these types of studies assess aid by examining the intended changes or effects at the macro level, e.g. as effects on economic growth, poverty reduction, public expenditure and services such as schools and hospitals.

However, assessing aid only in terms of relations to the goals set by the donor for assisted projects and programmes has little meaning. Because interventions are not implemented in a void, but impinge on other interventions and on societal processes in an arena where these processes interact, they consequently stimulate or reinforce certain types of development and counteract others (Martinussen and Pedersen 2005). The broader impact studies on the other hand are context-specific and take the unintended consequences into consideration (Folke and Nielsen 2006). To understand impacts, an examination of how interventions trigger processes of social change should also be made. In other words, aid impacts should be examined in their societal context to study how these trigger processes of

social change which ultimately are the unintended outcomes. Nonetheless, this does not mean that the intended outcomes should be overlooked. The intended outcomes of aid are of importance too, because these reveal the immediate and the planned effects.

The studies of impacts are not only limited to an examination of questions of performance and effectiveness of aid; they are also significant in providing insights into development, as they reveal how assisted projects influence social processes, institutions and practices. It does not therefore come as a surprise that "aid impact is becoming a question of development impact" (Martinussen and Pedersen 2005: 265). This discussion in this chapter tries not only to assess forestry aid in general and Finnish aid in particular, taking into account both intended and unintended outcomes, but also attempts to illustrate how development influences social change.

The findings presented here are based on research conducted in Nepal in various phases between December 2004 and December 2007. Two research areas, one in Tarai and the other in the hills, were selected to study the local level impacts of Finnish aid.



Map 1. Location of two research areas, Sarankot in the hills and Nijgadh in Tarai, Nepal.

Both qualitative and quantitative data were collected from primary and secondary sources, using methods ranging from textual study to informal interviews and participant observations. Before the findings are presented, the section below first discusses the theoretical framework on which this study is built.

# Theoretical framework and concepts: Development as discourse

This discussion uses a theoretical framework from sociology and the anthropology of modernity, in which development is comprehended as a discourse. Discourse, as used here, is based upon Michael Foucault's interpretation of the term, as "a group of statements which provide a language for talking about – a way of representing the knowledge about – a particular topic at a particular historical moment" (Foucault 1972 and 1980, cf. S. Hall 1992). In other words, discourse simultaneously includes and excludes. It includes certain forms of knowledge while blocking alternative ways of thinking, and in doing so constitutes a form of power.

Escobar (1995) and Ferguson (1994) are the pioneering theorists with whom post-development writing is usually associated. They view development as an apparatus, and question the conceptual and institutional construction of this apparatus. Escobar (1995) writes that to understand development, it should be studied as a historically singular experience along three trajectories: "... the forms of knowledge that refer to it and through which it comes into being and is elaborated into objects, concepts, theories, and the like; the system of power that regulates its practice; and the forms of subjectivity fostered by this discourse..." (Escobar 1995:10). He further states that aid discourse has resulted in the formation of new organisations, new institutions, and technocratic administration, leading to the 'professionalisation' and 'institutionalisation' of development.

Ferguson (1994) conceives of development as an apparatus, a strange sort of machine, and explores how it works and why. He takes the case of Lesotho, where innumerable aid agencies have been present, and shows how the unintended consequences of development have been depoliticising political issues, and expanding bureaucracy and bureaucratic state power.

Pigg (1993) expounds a historically grounded analysis of development, demonstrating that development interventions have to be seen in their historical context. For Nepali people, the meaning of development (bikas) is firmly rooted in social experience, that is, in what bikas has been and has

done in Nepali society. This is the reason "... bikas for the most part means things: especially commodities that come from elsewhere" (Pigg 1993:48). She elucidates how it is the non-local things such as electricity, pipes, trucks, fertilizers, cement, etc., that are termed bikas in every day parlance in Nepal. Echoing Escobar (1995), she states that development has constructed the space in which human behaviour has been regularised. Nepali people place themselves and others into different categories as either modern, represented as bikas, or traditional, represented as underdeveloped, a categorisation which then becomes the guiding principle for social interactions and activities.

Fujikura (1996) takes the example of the US assisted Village Development Project to show how the discourses of development have created a space in which only certain things are said or can be imagined. Continuing this line of thought further, Fujikura (2001) reconstructs the discourses of 'awareness', explaining that development normalises human acts and behaviour through controlled knowledge.

While most of the aforementioned works on development discourse do not have as their point of reference a specific program or project, Sharma (2001) embarks upon a social analysis of development by taking the case of a Finnish-aided rural water supply project in Nepal. Sharma (2001) uses this project to illustrate that development provides a social space in which different relations are sustained and different actors are manoeuvred within a set of restricted possibilities. This process of contestations and negotiations among different actors, and the various relationships among actors which result, all point toward seeing development as a social form, as a resource to which different stakeholders have different levels of access. Sharma (2001) scrutinises power relations in development to find out what actors do and how aid works. At local levels, the global discourses on water lead to a specific configuration of ideas and associated practices, thus highlighting some (practices) and negating others. The intended impact of the provision of water by the state is to improve the conditions of life of the people. The unintended consequence of the Finnish project have been the opening up of a social space which provides opportunities for people to move into positions of leadership through the Water Users Committee formed for purposes of providing a supply of drinking water.

This chapter draws many theoretical inferences from the works mentioned above. Following the definitions of Escobar (1995) and Ferguson (1994), the discussion understands forestry assistance here as a discourse, and then examines the unintended outcomes of aid at the macro-national

level. Similar to Pigg (1993) and Fujikura (2001), our analysis also takes an historically grounded view of development at the local level, and attempts to discover how aid has influenced the social imagination of the people. Using Sharma's (2001) ideas of power relations in development, the chapter then examines the social processes triggered off by aid to illustrate the unintended impact of development at the local micro level.

What follows below is the deconstruction of Finnish aid policies and practices in an attempt to comprehend the knowledge, power and agency of actors. The concepts of actor and agency used here are based upon Norman Long's actor-oriented approach (Long 1992). An 'actor', according to Long (1992) is that social entity which has 'agency', or the ability to act. This perception sees a development aid intervention not only as a plan of action, but also as an ongoing, socially constructed, negotiated process in which the actors' interests are vested and struggles take place. Because of the contestations, negotiations and consensus of the actors involved regarding a particular development aid project or programme, and the presence of other aid interventions in the area, there can be unanticipated outcomes.

Methodologically, this chapter is a context specific study based on a generative view of aid. Contrary to the instrumentalists' perception that posits a linear (cause and effect) sequence between the policies and the practices, the position taken here is that practices are determined not only by the policies, but also by the agency of various actors. To understand the unintended consequences, as mentioned above, this chapter examines the social processes set in motion by Finnish aid. At the beginning, the impacts at the national macro level are described, followed by the local micro changes seen as having been initiated by the Finnish forestry assistance.

#### Global discourses and national trends

Beginning in the 1950s, along with foreign aid to Nepal, global forestry concerns have made their way into the national discourse of forestry assistance. The dominant international thinking during the 1950s and 1960s prioritised a strong interventionist State acting as the agency of development; in this mindset, forests were significant for industrial development. The forestry acts, plans, and policies of the Nepali State, and the types of projects implemented in Nepal during this period reflect this perspective. The Nationalization Act of 1957 had viewed forests as the State's property and a source of income for the State, and forest land was put under the control of the State Forest Department. The Forest Act of 1961 ranked forest protection as more

important than providing people with access to forests and forest products. Similarly, the Forest Preservation Act of 1967 strengthened the role of the Forest Department and its officials (Gilmour and Fisher 1991). In 1967, the Tarai forests and the hardwood timber there were thus regarded as important for industrial growth, whereas forests were previously important as sources of revenue for the country.

With social and environmental concerns dominating the discourses from the 1970s and the 1980s onwards, the focus of the Nepali State and the donors has shifted from the Tarai to the hills. There has been a corresponding major shift in forest management away from industrial activities towards environmental protection and meeting livelihood needs. The State, along with the donors, gradually included the local people in planning and management in the forestry domain whom they had excluded until then. The enactment of legislation in the period clearly reflects this shift. In 1976, the national Forestry Plan was formulated. This plan considered the importance of forests to the rural people and highlighted the protection, production and utilisation of forest products. In 1977, the first amendment to the Forest Act categorised six different types of forests and sought the participation of the people in community forests. New Forestry Acts formulated in the 1980s and 1990s also emphasised the community forestry programs. In 1987, the Master Plan for the Forestry Sector was prepared. The general objective of this Plan was to guide forestry development activities and facilitate community forestry programs in the country. A new Forest Act 1993 was promulgated after the political changes of 1990. The 1993 Act, in line with the 1987 Master Plan for the Forestry Sector, also accorded the highest priority to community forestry programmes. The 1993 Forest Act classified forests into national forests and private forests. The national forests consisted of government managed forests, protected forests, leasehold forests, religious (sacred) forests, and community forests.

Starting in the early decades of the 1980s, forests began to be regarded as important for meeting the peoples' needs and for protecting the global environment. Approaches emphasising the environment, community participation, and natural resource conservation influenced forestry management and promoted the implementation of community forestry programmes. Since then, forests have become vital for meeting the fuel, fodder, timber and non-timber needs of the people. However, economic concerns regarding the State's needs for generating revenue have been sidelined.

Nepal in the 1980s increasingly became an aid-dependent state in which there were many bilateral and multilateral actors with their grants and loan projects. These donors directed the overall forestry related activities. With the entry of more bilateral and multilateral actors, aid to forestry has increased in Nepal. The greening of the mid-hills has been the most important impact of the incoming forestry assistance. It is estimated that in the 1980s only 29 per cent of the country was covered by forests (in 1963, forests had accounted for 45 per cent) while the figure at present is 39 per cent (including shrubland and grassland). Of this, 20 percent is in community forests, about 35 per cent of the total population having access to these community forests (Ojha et al. 2008). Community forests in Nepal are labelled as one of the achievements in participatory forestry, in which the local people have taken control of an important aspect of their lives. However, there have been other impacts, too.

With greater inflow of aid, the Forestry Department and its development expenditure budget have become bloated; but revenue from forests has declined in relative terms. While in 1956-61 (the first five-year plan period of the country) the revenue from forests was 14.6 per cent of the total State revenue, by the end of the 1975-80 five-year period, it had declined to 3.6 per cent (Griffen et al. 1988 cf. Gilmour and Fisher 1991). Moreover, regular expenses for forests are becoming larger than the development income from donors. During the decade of the 1980s, the development aid for forestry totalled USD 12 million annually and the regular expenses were USD 0.3 million. During the 1990s, in spite of the presence of more actors, the annual development aid totalled USD 9.8 million, and the regular budget increased to nearly USD 5 million USD. The presence of more actors in forestry has expanded the definition of what forests and forestry development include, but it has limited the agency of the State in managing its own forests. The Nepali State has been less and less able to prioritise the sectors which it believes should receive priority. The preference given to the Tarai forests in the 1950s and the 60s, and to the hill forests after the 1970s, along with the importance given to national parks and wildlife conservation areas, show that the domestic course is increasingly being directed by global aid trends rather than the social-economic reality of the country. Thus forestry aid has simultaneously highlighted and sidelined different types of knowledge about the forests at different periods.

Though the agency of the Nepali State in managing its forests has declined, the incoming aid has nonetheless fulfilled the intentions of the State in regard to financing forestry development. With the growing popularity of environmental concerns, the State has represented itself as drifting help-lessly into environmental and socio-economic chaos in the process of at-

tracting more aid to the country (Ives 2004). The donors' interests have also been fulfilled, insofar as they have represented their primary interests as providing aid to the country and the sector that most needs assistance. It is not only the global discourse, but also the interests of the actors that have influenced an increase in development aid aimed at forest management. To a large extent, it is the consensus of the Nepali State and the donors that has helped in problematising the forestry sector and in allocating support to specific areas and programmes. The next section examines the impacts of aid at the local level by focusing on the Finnish funded forestry projects. The re-reading of the Finnish forestry aid policies further illustrates the agency of the actors in aid processes and its impacts. The following section examines the Finnish forestry assistance, revealing that the interests and agency of Finnish development aid have been significant factors in constructing their aid policies. The analysis also illustrates that aid is not only the concessional grants and loans provided by the economically well-off countries to the less well-off for social and economic transformations, but that aid can also be seen as a 'resource'.

# Finnish interests and agency in the forestry sector

Forests have been have always been significant for Finns, and were central in the industrialisation of the country. The importance of forests and know-how concerning forest management and utilisation must have been among the reasons that the first Finnish bilateral aid was in the forest sector. Finnish aid in forestry began in a modest way in the 1960s, and grew larger in the 1980s and early 1990s. Funds for forestry and forest industry projects peaked in 1991, after which there has been a decline over the years. The Finns have passed through many phases and made many changes in their forestry assistance disbursements during these years (Sharma and Koponen 2004).

Since aid is a resource involving different actors with different interests, the Finnish aid administration has emphasised different motives when dealing with the various actors. For example, Siitonen (2005) shows that there are humanitarian reasons underlying the general public, economic and political purposes of aid, as stated by the Finnish State administration and aid officials, as well as underlying the economic rationale of the Parliament in securing resources for aid. However, Siitonen (2005) argues that besides the economic and political interests, "domestic traditions and conceptualisations of development within Finland" have also affected Finnish aid policies.

A perusal of Finnish aid documents shows that the policy frameworks of

Finnish development cooperation guide the overall goals and strategies of projects and programmes supported by Finnish aid. It is clearly stated in the policies that Finnish forestry aid will have both technical and environmental aspects. This is important to note, as it sheds light on why the Finns in Nepal were advocating different themes than those of other donors of the same period. Nonetheless, Finnish aid practices are influenced not only by the policies, but also by the agency of the actors, which subsequently directs the outcomes. The termination in the 1990s of the Finnish supported Bara Management Plan (BMP), before it could be implemented as a pilot project in the Tarai, reveals the importance of agency in aid processes. The BMP was based on economic concerns, and was to have generated revenue for the Nepali State. It was to have been carried out through a joint venture formed by Enso Forest Development LTD of Finland and some Nepali business companies The project area covered 32,000 hectares of forest, and harvesting operations were proposed for an area of 26,000 hectares (81% of the total project area). The protected area totalled 3000 hectares, and community forests comprised another 3000 hectares. Enso proposed that if 300,000 of the total 546,000 hectares could be used for logging operations, about USD 300 million could be generated annually. The project planned to utilise timber and pay timber royalties to the State.

The economic basis of the Bara Management Plan (BMP) was sound, but there were certain shortcomings. Some of the glaring shortcomings of BMP were that the plan was going to export sal (Shorea Robusta) logs to India, and the Nepali law explicitly forbids this; it also demanded tax holidays and other benefits that are given to bodies engaged in official aid or charitable social service ventures. Another objection to BMP was that it was designed in a top-down manner. It is alleged that the Nepali forestry officials involved were not adequately consulted or informed. At the local level, the users' participation had not been sought (Gyawali and Koponen 2004:146).

The BMP ran contrary to what most of the donors were doing at the time. As already mentioned above, most of the donors assisting the forestry sector had been focusing on environmental issues since the 1980s, both in the hills and in the Tarai. One of the unintended outcomes of development is that only knowledge and information which accords with current global discourses gets recognized; consequently this plan with its focus on economic concerns was marginalised.

In designing the BMP, the Finns ignored the presence of other actors operating in the forestry sector in Nepal at the time. There were many actors with their own interests regarding the Bara forests. There was a contestation

between the supporters of the BMP and those who opposed it. Those stake-holders who had been neglected by the Finns formed an alliance with the Federation of Community Forestry Users of Nepal (FECOFUN) to contest the BMP. As the result the BMP was terminated.

The manner in which the BMP was first sidelined and then terminated, leading to the Finns' withdrawal from the Nepali forestry sector, emphasises that impacts are influenced not only by the stated objectives and resources of the projects, but also by the unstated ones, and by the agency of the actors involved. Since aid is a 'game' consisting of different actors and their interests, there are inevitably consensus and contestations in this 'game'.

Though the BMP was not implemented, it could be argued that it none-theless had some impacts, which are its unanticipated outcomes. The section below examines a certain area, Bagdeo, which is in Bara district (where the plan was to be implemented) and reveals that, even though unimplemented, the BMP has had outcomes.

# The unanticipated outcomes of the Bara Management Plan

Bagdeo is a village in Nijgadh Village Development Committee (VDC) in Bara district. People readily associate three factors with the important changes that took place here: improved education facilities, the political changes of the 1990s, and the community forestry group. The first of these is education, which has provided space for social and economic mobility and has also influenced the values of the people. The educated person has more chance of getting a better salaried job. The people believe that education makes a person knowledgeable and aware. An aware person is a well-informed person who not only knows about the village, but also about the country, as well as being aware of what is happening outside the country. The educated person, besides being literate, also has communication skills and is sought after to serve on the executive committees of various community organisations.

After the political changes of the 1990s, values too began changing. The major political change that took place in 1990 led to the restoration of multiparty democracy. The Nepali Congress (NC) and the United Marxist-Leninists (UML) were the two major political parties to emerge after the first parliamentary elections of 1991. A new constitution, The Constitution of the Kingdom of Nepal, was formulated in 1990. The new Constitution guaranteed that the sovereignty of the Nepali people is vested in the Nepali people. Other important achievements of the 1990s were press and publication

rights, rights regarding criminal justice, rights against police detention, and the right to information. After the political changes, the people do not feel frightened to speak up against injustices, whether it is exploitation by the moneylenders at the local level, or the forestry officials at the district and national levels.

The Janajagriti Community Forest (JCF) is another important landmark in the lives of the people of Bagdeo and other local communities. The JCF covers about 837 hectares of government-managed forest that was handed over to the communities in 1998. A community forestry group was set up to manage the JCF, provide forest products to local users, and sell timber from the JCF to carry out various development activities in the area. The JCF Community Forest Group (CFG) has for example assisted in constructing school-rooms and irrigation canals, maintained some roads, carried out income generation programmes for the forest users, and assisted some of the local CBOs. By participating in the forestry activities, the people have come to know that they have to protect their community forests, not only for the present use, but also to 'safeguard the earth's environment'. In other words, the CFG has provided the space through which the people have come to participate in the global environmental discourses.

At first glance the relation between the JCF community forestry group and the BMP seems unclear; however, the JCF has its roots in the Finnish plan. The unanticipated impact of the BMP is that the opposition to the plan at grassroots level, mainly by the FECOFUN, led to a growing awareness among the people of the need to protect forests. The opposition to BMP, and the advocacy of the users' rights regarding forests, have led directly to the formation of the Janajagriti CFG, and indirectly to the handover to the local community of other forests in Bara district. In fact, from 1995–2000, altogether nine forests were handed over to the local communities to be managed as community forests in the district.

By participating in the various activities of the FECOFUN, the people came to know that they had rights to the forests, and that they should protect forests not only for themselves but also for future generations. A person who is aware of scientific knowledge regarding the relationship between the local forests and the global environment is regarded as being an aware and modern person. Such people are held in high esteem. Through participating in the executive committees of the community forestry groups, people also have a better chance of upward economic mobility.

The Finns put the implementation of the BMP as a precondition for the continuation of their aid to the forestry sector. When the BMP was not im-

plemented, the Finns stopped assisting the forestry sector in Nepal. This was an unfortunate and abrupt exit of an important donor to Nepali forestry, a donor who had up until then implemented eight forestry projects in the country.

Another unintended outcome of the BMP can also be seen in the collaborative forestry model that is being implemented in the Tarai districts. The BMP had restricted the definition of stakeholder to mean that locals were not identified as stakeholders. However, the collaborative forestry model has expanded the sphere of 'stakeholder' to include various entities at different levels, including the local level.

The above illustrates that there can be unintended outcomes even when a project is planned but not implemented, and has also revealed how these unintended outcomes are related to local people becoming more modern. The next section examines the impact of a Finnish supported project that was implemented in the mid-hills, and will try to link the impacts of this project, especially the unintended ones, with the process of social change which occurred at the local level in the project area.

## Impacts in Sarangkot: Interplay of intervention and context

Sarangkot here will refer to ward number three of the Sarangkot Village Development Committee (VDC). Sarangkot was one of the areas where the Integrated Watershed Management Project (IWMP) was implemented. The Finnish supported IWMP was a continuation of the United Nations Development Programme (UNDP) and the FAO supported Phewa Watershed Management Project (PWMP) in Pokhara; there were many similarities between these two projects although they were carried out under different names.

A key reason for the Finns' interest in selecting this particular project may have been because the PWMP was regarded as a successful project. It had become a prime example of cooperation between the donors and the Nepali government, and was extensively used by the UNDO, WB and FAO as a case study for illustrating their action plans for the forests of the developing world.

An unstated but equally important reason might have been the prime location of the IWMP project sites, because Pokhara and Sarangkot are tourist centres. The IWMP documents reveal that many Finnish dignitaries visited the site. In fact, the many visits by public figures, both national and foreign, are interpreted as indicative of the 'success' of the project.

The IWMP was a joint effort of the His Majesty's Government of Nepal (HMGoN, currently Government of Nepal, GoN, since the monarchy was

abolished in 2007) and the government of Finland (GoF), implemented by the Department of Soil Conservation and Watershed Management (DSCWM) in the Nepali Ministry of Forests and Soil Conservation. A consortium led by a Finnish consulting company, FINNEP, was given the contract to implement the project for Finland. The project was financed through three separate sources: HMGoN State Budget, the Finnish Department for Development Cooperation (FINNIDA) direct fund, and the FINNIDA Fertilizer counterpart fund. More than 90 per cent of the project was funded by Finland, and the rest by Nepal. The project was designed in a way that gave a great deal of autonomy to the Finns in the implementation of the project.

The stated objectives of the IWMP were to sustain long term on site soil productivity and reduce downstream damage, advocate better utilisation of resources within the watershed, and involve and motivate community participation.

In Sarangkot, there have been many observable benefits of the IWMP. The physical structures that were constructed by the IWMP have helped a great deal in checking soil erosion and controlling landslides, thus minimising downstream damage. The locals recall that there has not been any loss of life or property due to landslides in the last forty years. The changes in land use carried out by the IWMP, such as terracing, have helped in increasing the agricultural production of the farmers. Walking trails that were constructed and rehabilitated have facilitated travel to a large extent. In addition, there are now two ponds in Sarangkot, and the households located near the ponds have utilised the waters to irrigate their khet (irrigated land) and have started growing paddy. Ponds are also used for bathing the buffaloes. Furthermore, fetching firewood and fodder has been easier, since the people have regular access to forest products through the community forestry groups. The Dopahare Community Forestry Group was formed in the 1990s, that is, during the time of the IWMP. There are trees even in the areas adjoining the houses, so fodder is easily available. There are more buffaloes in the area than cows; and these are stall-fed, a practice that is traced to the period of the IWMP. The buffaloes give more milk than the cows; and some households sell milk in the bazaar and in Pokhara city as well. Two farmers who had received fruit-tree seedlings from the IWMP are now growing some seasonal fruits for household consumption, but due to hailstorms they find it difficult to cultivate fruit for sale.

In addition to the targeted local beneficiaries, there have also been benefits for the Finns as well. During the period from 1987 to 1994, there were 7 Finnish expatriates who were involved in IWMP. The budget allocation

of the IWMP (1993) also illustrates that a major portion of the budget, that is, 59.8 per cent, was allocated for management and administration, out of which 42 per cent went to the Finnish expatriates' Technical Assistance (TA).

Another actor in IWMP was the Nepali government. Nepali forests had attracted global attention due to discourses of deforestation, land degradation, and environmental concerns. By implementing this project, the Nepali government could fulfil its commitments of working towards environmental protection and, because the project was located close to Pokhara, a tourist city, the changes could easily be seen and verified by foreigners as well as the local people. In addition, for the Nepali officials of the forestry departments and the ministry, the training they received represented an important resource. These officials participated in many training sessions, courses and workshops, and especially appreciated those organised abroad.

The local people who were involved in the project saw it as an important source of income. The present socio-economic context of Sarangkot shows that there are only a few people who have jobs in government or in NGOs. Job opportunities must have been even scarcer 15 years back. The people working in the project had access to wealth, authority and knowledge, and were in a position to have more access to resources, and to training to develop their skills and knowledge, than others who were not involved. Those who were involved in the project moved up economically and socially. And as Pigg (1993) notes, development "fosters an ideological representation of society through an implicit scale of social progress." The IWMP, through its different activities, has further intensified social differences in the area.

The people of Sarangkot identify three milestones that have affected their social institutions and structures: access to education, forestry related changes, and the coming of the tourists. As mentioned earlier, Sarangkot is a small tourist spot, and tourism has influenced the various socio-economic structures in diverse ways. It has inflated the price of land, so those with land in the centre of town have become richer. Tourism has led to the expansion of service-oriented facilities, and those who have been involved in this sphere have become richer. In other words, tourism has become an important source for economic mobility. Even social institutions such as marriage, the family, and education have been affected by the incoming of the tourists. Tourism, along with education, has provided space for social and economic mobility, and forestry related activities have also been similar in respect to providing such space for upward mobility.

The UNDP-assisted forestry PWMP was the initial state-led development project in the area, and this project has also affected the social and econom-

ic institutions, and the mindsets of people in the area. When the Finns came to Sarangkot, the communities had already been working with other actors such as FAO and UNDP, who acquainted the local people with the scientific forestry discourses that said they should plant trees not just cut them down, and that deforestation causes landslides and floods. The people responded to this knowledge, and set aside their traditional views about the forests because it was more beneficial for them to be included in the project than to be excluded. The opportunities provided by the forestry projects might have prompted the locals to be represented as 'ignorant' people who did not plant and protect trees. However, studies carried out in Nepal have shown that the farmers are not as ignorant as portrayed in development projects and have often already been utilising the land in proper ways.

The UNDP supported PWMP project made local people aware of scientific 'beliefs'. In fact people, especially those involved in forestry development activities, are vocal about the needs to 'grow and conserve plants for not only the present use but also for the future generation'. A person who has this information is regarded as an aware person who knows scientific things, and those who do not are the unaware ones (lacking awareness of science). The aware person is also an educated one, who knows more about the outside world, and about science and technology. These types of people are capable of being the executives of the various user groups. The unaware persons are the uneducated people, those who have not seen the world outside their village and are ignorant about technology.

Impacts at the local micro level cannot be attributed to a single agent, because all of the changes that take place are intricately interwoven with each other. In the case of Sarangkot, it is impossible to differentiate the micro level changes of the PWM and the IWMP. As the IWMP followed the PWM, and both had similar objectives, the impacts, especially the unintended impacts, of these two projects cannot be separated, because both have in the long run changed the social structures and institutions in the local area and both opened up space for the local people to become more developed and modern.

# **Development and modernity**

An interesting impact of the forestry assistance in Nepal is how one of the community forests, called Dopahare ban, the first community forest of the area, has been conceptualised and referred to as *bikas* or 'development'. It is common to hear phrases such as 'going to *bikas*' (going to the development), which means going to the community (*Dopahare*) forest.

The people in Nepal had access to national forests through certain fixed rules and procedures even before there was community forestry. However, they had to walk further than they do now. Since forestry development projects have been implemented, a new meaning has been added to the concept of 'forest'. Pigg (1993) has shown that in Nepal development (*bikas*) is used to mean the non-local things. But it is argued here that activities carried out with support from development aid can give new meanings to a local thing such as the forest.

The historical analysis of forestry development carried out in Dopahare illustrates how this can come about. Dopahare was an open, common grazing ground. When the UNDP development workers came here, they started their first forestry activities in this open ground. They fenced Dopahare, created plantations, made fire lines, and prohibited the entry of cattle and villagers into the forest. Consequently, the degraded ground slowly became greener, and after a certain period the people had easy access to forest products such as firewood and timber. Hence Dopahare forest is associated with easy access, facility, and ultimately happiness. Since development, according to the people of Sarangkot ultimately means an easier life and happiness, Dopahare, which has made life easier and people happier, is development. After the advent of aid in the area, the local people have constructed a certain meaning for the forest, adding the concept of 'development' to the concept of 'forest'. It was through participating in forestry activities that the people came into contact 'for the first time' with scientific thinking about forestry. By participating in the global discourses of forests, the people of Sarangkot came to participate in the global preferences, and were exposed to different ways of seeing and dealing with things from those they had known before.

Forests and the forestry related user groups have become symbols of modernity in Sarangkot and Bagdeo, because the activities in forestry have brought the local people into contact with global discourses. Those who are assisting on the executive committees of the community forestry groups are generally educated persons who become very knowledgeable people. In addition, those involved in the forestry projects have moved up economically and socially. The people try to gain new forms of power, knowledge and wealth through participating in the users committee, and thereby become modern, too. In Sarangkot, since the local people desire development and believe that community forestry has led them towards development and modernity, gaining access to new sources of power is related to becoming developed and modern.

The historical analysis of forestry activities in Bagdeo and Sarangkot shows how development is both an idea for becoming modern as well as an institutional practice. It is not only the development activities themselves, but also other major agents of social change (as mentioned above in connection with Sarangkot and Bagdeo) such as education, party politics, tourism, and foreign aid remittances, that are pushing people to become modern. In Nepal, the three primary characteristics of modernity are seen as the primacy of scientific knowledge, rationality, and a belief in progress. Although the post-modernists argue that the age of modernity that began in the 18th century has ended, the forestry practices and social imagination of the people in the areas studied have shown that they aspire to become 'developed and modern' by participating in the global (scientific) discourses on forests. The local people in the areas studied adhere to 'modern' scientific notions because it is more beneficial to them to adhere to this knowledge than to be excluded from development projects because they do not accept modern science.

#### Conclusion

This chapter is based on a broad interpretation of impact, and presents a methodology and a theoretical framework for studying aid impact. Impact studies in general have tended to be evaluative studies of projects and programmes, which posit a linear sequence between project inputs and outputs. These evaluative studies perceive 'impact' as the intended (observable and usually quantifiable) changes that are seen in an area after the completion of a project or programme. Based on the observed changes, the projects or programmes are described as either successes or failures. Such an evaluation presents only a partial view of aid and its impact. This chapter has used the case of the proposed Finnish BMP to illuminate how an unimplemented project can nonetheless have impact at various levels. Similarly, in Sarangkot there have been many changes that cannot be directly related to the objectives of the IWMP, achieved or not, but are changes which nonetheless have occurred because of the implementation of IWMP in the area. This chapter emphasises that an important method for understanding both the intended and the unintended impacts of aid can is to examine the social processes triggered by aid.

Theoretically, development has generally been perceived as the intended changes brought about through various projects and programmes. However, by studying forestry aid as a discourse, this chapter has illuminated how in these activities, knowledge and information about forestry has been both highlighted and sidelined at the same time. The chapter has also illustrated the influences of the interests and agency of the various actors involved, which have effects on the planning, implementation, and outcomes of aid. This highlights the finding that changes are brought about as a result which are both unintended and unanticipated.

The foreign aid coming into Nepal has affected both the national and local structures and the social imaginations of the people in unanticipated ways in the long run. With more aid to the country, revenue from forests has dwindled, and the Nepali State has been less and less able to prioritise the sectors for assistance. By offering economic gains, knowledge and authority for the people who take part in their activities, development aid projects and programmes have provided a space at local levels for people to move up economically and socially. As a result, aid has eventually ensured that there will be social and economic differences. By participating directly and indirectly in the space opened up by the forestry projects, local people have internalised the scientific conceptions of forests and their management. Those who have this knowledge are regarded by others as aware, knowledgeable and modern persons. People thus aspire to become modern by gaining access to aid. Aid has ultimately influenced and regularised the mindsets of the people, helping them to become developed and ultimately modern.

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#### **Comments**

#### **Bharat Pokharel**

In general, I liked the substance of the chapter. Particularly, I found the structure, introductory section, the use of theoretical framework, methods, and style of presentation agreeable. The weakest part of the paper is the lack of the literature on indigenous knowledge of Nepali farmers about trees on farms. The author writes that the project made villagers aware of the need to grow and conserve plants. This is a very simplistic statement. Nepali farmers have been practising agro-forestry for centuries and have a rich local knowledge system. What Finns have done is to support Nepali institutions to bring both local and formal knowledge system together, so that people in the scientific community, such as foresters, can learn from the villagers and vice versa. Agro-forestry practices that uneducated Nepali villagers have used for centuries are much more scientific than any the foresters and natural scientists could possibly plan and implement "scientifically". So villagers' knowledge is not 'unscientific'. It would be better if the author could go through some of the literature on the local forestry knowledge of Nepali farmers, and the contribution that Nepali farmers have made to educate and inform the socalled 'scientific community'.

Although the author has indicated that the chapter will examine the intended and unintended changes of Finish aid in Nepal's forestry sector, only two cases are presented to show the intended and unanticipated outcomes, namely, the Bara Management Plan and the Integrated Watershed Management Project in Sarangkot. However, the author has mentioned that Finns have supported eight forestry projects in the county. Furthermore, the Finns contributed in the preparation of the 22 Years Forestry Sector Master Plan (1988-2010), the intended impacts of which have been achieved for the most part. The most visible impacts of the Plan are the changes which resulted in a new role for Nepal's Forest Service, great improvements in the landscape of Nepal's mid hills, and especially changes which improved the lives of rural people who are dependent on forests.

In addition, the chapter does not mention the contribution that Finns have made to Nepal's national forest inventory. In future the author might like to analyse the contributions of the National Forest Inventory Project in 1996 and the current Forest Resources Inventory, and the intended and unintended consequences that they have had and might have in future. These inventories are important projects that Finns have supported in Nepal: the

effects of these inventories will continue throughout the long term, especially as they provide the reliable forest resource data required in the current context of climate change, and the initiative on Reducing Emissions from Deforestation and Forest Degradation (REDD).

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# 5. POVERTY REDUCTION THROUGH FORESTRY IN VIETNAM:

IMPACTS OF THE VIETNAM-FINLAND FORESTRY SECTOR CO-OPERATION PROGRAMME

Bui Thi Minh Tam

#### Introduction

This chapter reviews the impacts of the Vietnam-Finland Forestry Sector Cooperation Programme (VinFinFor), particularly impacts on poverty reduction in Bac Kan province in the north of Vietnam. The two districts, Cho Don and Ba Be where the VinFinFor Programme was implemented, are one of the poorest in Vietnam and has been the focus of a wide range of poverty reduction efforts. The main aim of the present study is to contribute to the debate about the linkage between poverty and forestry, and how aid can improve the contribution of forests and the forestry sector to help reduce poverty. Forestry development and poverty reduction have been studied extensively, but generally separately, in Vietnam (e.g. Sunderlin and Huynh, 2005). The scope of this study was narrowed to focus mainly on impacts on household economic poverty, food security and access to credit. The aim was to answer questions such as: Has the VinFinFor Programme brought about a direct effect on poverty reduction? What is the difference in impact for poor compared to non-poor households? Is there any difference in the impact of the Programme with respect to gender? By answering these questions, the study presented in this chapter aims to provide evidence highlighting various policy implications for poverty reduction and community forest management in Vietnam.

This chapter is structured as follows. It first reviews background information relating to poverty reduction and forestry development in Vietnam, and then provides an overview of the VinFinFor Programme. The chapter then outlines a theoretical framework for studying forestry, poverty and aid, and presents the main methodological challenges for impact evaluations. The results of the impact evaluation done using the PSM technique are then presented and discussed in terms of overall impact, and the differences between impacts are shown according to level of poverty and gender. The chapter concludes by highlighting key findings from the impact study, as well as the implications for programme development and policy.



Map 1. Location of Cho Don and Ba Be districts in Bac Kan province, Vietnam.

## Poverty reduction and forestry in Vietnam

Two decades of economic reform ("Doi Moi") have sustained the spectacular transformation of Vietnam from a poor country with an agrarian economy to a globally integrated player with a market-based economy. The country's achievement in poverty reduction is one of the most successful stories in its economic development. Poverty data based on per capita household expenditure from the first Vietnam Living Standards Survey (VLSS) in 1993 reported 58% of the population living in poverty. Later surveys revealed that the poverty rate had been reduced to 37% in 1998, 29% in 2002 and 19.5% in 2004 (VASS, 2006) and 14.5% in 2008 (UNDP 2010). This means that over a single decade (1993–2004), there was a drop of around 33% in the poverty rate and three-quarters over 15 years. The food poverty rate has also been reduced by more than two-thirds, from 24.9% in 1993 to 6.9% in 2008 (UNDP 2010). This is exceptional, given the target of the United Nations' Millennium

Development Goal of halving extreme poverty over the longer period from 1990 to 2015.

However, these aggregate numbers mask significant variation in poverty reduction across different segments of society. There are considerable differences in poverty between rural and urban populations, with poverty becoming largely a rural phenomenon. The various dimensions of poverty further complicate the situation. There are also considerable disparities in poverty and poverty reduction across the regions. The northern mountains, the north central coast, and the central highlands all have a high poverty incidence of over 30%; and these three regions together account for nearly 57% of the poor households in Vietnam. Of greatest concern is the relatively limited progress in poverty reduction being made among ethnic minorities, who do not seem to adequately participate in and benefit from the growth process (VASS, 2006).

Factors explaining past achievements in poverty reduction are thought to have changed over time. In the early years, it was the allocation of agricultural land to rural households that promoted agricultural production and poverty reduction. In more recent years, the driving force behind poverty reduction has been the creation of employment in the private sector, and the increasing integration of the agriculture sector into the market economy (VDR, 2003). In general, the rapid and pro-poor growth is explained by a series of far-reaching market reforms undertaken in the 1990s and the early 2000s. In addition, the relatively pro-poor pattern of public investment and budget transfers, including national level poverty targeting programmes, has led to improved access by the poor to education, health care and infrastructure. Similarly, development aid has also contributed to the country's economic development and to the process of poverty reduction in particular. The amount of aid that donors pledged for Vietnam has increased every year, reaching USD 5.4 billion in 2008 and over USD 8 billion in 2010, with actual aid disbursement every year being around 3 to 4% of GDP (MPI, 2008). It is therefore important to better understand the extent of and mechanisms through which foreign aid has contributed to the great success achieved in reducing poverty in Vietnam.

Earlier, the link between poverty reduction strategies and the forestry sector was not given sufficient attention in policy formulation (Oksanen et al., 2003). The recent development of forestry policies in Vietnam has been influenced by a much greater recognition of the important role which forests play in reducing poverty, as well as an increased awareness of the adverse impact of poverty on forest sustainability. According to the authorities

from the Department of Forestry and the Ministry of Agriculture and Rural Development (VNA, 2006), "The livelihoods of many people are still heavily dependent on the forests as they encroach on forest land for cropping and collecting non-timber forest products. Widespread poverty and famine around designated forest areas was among the major reasons for deforestation and environmental degradation." While in the past the government had not involved local people in forest protection, in recent years the role of forests in poverty reduction has been better understood, and forest areas have been allocated to local communities for management. It is clear that forested areas coincide closely with areas of deep and persistent poverty (Dinh, 2005).

The forestry sector in Vietnam has implemented various policy changes and programmes in order to improve the country's forests. Starting with the "Re-greening Program 327" initiated in 1992, serious efforts were made to address the environmental and socio-economic situations in remote areas. Re-greening of bare hills was conceived as an integrated rural development activity, but support was later directed towards subsidised tree planting, forest protection, and protection of natural forests in watershed areas (Dinh, 2005). Each household in the project area was provided with a defined area of land for reforestation, protection, enrichment and regeneration. Where possible, some land was also provided for grazing and production of food crops or cash crops. A large part of the funding for Program 327 was channelled through State-owned Forestry Enterprises (SFE). Farmers were allowed to use products from the thinning of forests, but the final assets were for the benefit of the enterprises. The dominant method of allocation in this programme was through contract agreements between SFEs and households. Most of the production forests were controlled by the SFEs, while households have received a large proportion of the degraded forestlands. As much as two-thirds of the high quality forest areas were allocated to SFEs, while only 10% of the total forest area was allocated to households (Sunderlin and Huynh, 2005).

In 1998, Program 327 was replaced by Program 661, which is also called the "5 Million ha Reforestation Program" (5 MHRP). The programme designations 327 and 661 follow the number of the related government decree setting out forestry regulations. The regulations in these decrees aimed to increase the forest area in the country to 14.3 million hectares by the year 2010. In the related programmes, the development of sustainable forest management and corresponding planning for this management at village and household level constituted a clear element of the programme implementation.

This development of local level management and planning included several socio-economic, environmental, institutional and cultural objectives. A later phase of Program 661 focussed on concerns over environmental sustainability and biodiversity conservation, together with the development of land use planning, land allocation and support for agricultural extension. The top-down approach of previous programmes was replaced by a decentralised participatory approach in this programme.

Neither of the two programmes however seriously considered poverty reduction. There are many reports from different parts of the country indicating that the strong implementation of protection policies has undermined the opportunity for local people to survive and prosper (Dinh, 2005). The main benefits that people received were payments for environmental services, such as cash incentives (50,000 VND per hectare per year) for signing forest protection contracts (FPCs) to replant trees and to protect existing forests. People received few benefits in terms of forest products, although they were allowed to collect NTFPs and other forest products, with some restrictions. In principle, the government encourages the poorest segments of forest-dependent communities to participate in forest protection. FPCs were one of the most common forms of such involvement, covering about 1.6 million hectares and involving 270,000 households (MARD, 2001).

Changes to the Land Law, passed by the National Assembly in October 2003, allow the allocation of land (including forest land) to communities, not just to households. This legal change, along with a new regulation on benefit sharing, has established the legal basis for community forestry in Vietnam. Similarly, amendments to the 2004 Forest Protection and Development Law also encouraged all sectors to take part in the forestry socialisation programme to protect the forests, and provide financial and technical assistance to local people. The most recent National Forestry Strategy 2006–2020 has given favourable conditions to people living near forests by allowing them to exploit the forests, farm, and provided community and co-operative forest management models with preference given to the poor and ethnic minorities (VNA, 2006).

## **Background to the VinFinFor Programme**

Vietnam is one of Finland's long-term partners in bilateral development cooperation. This cooperation has focussed on poverty programmes, rural development, water supply, and the forest sector. Finland's support for forestry in Vietnam is relatively recent, and the approach has changed from

programme/project support to a more sector-wide approach. The VinFinFor Programme was designed with two phases: Phase I (March 1996-March 1999) and Phase II (July 1999-June 2003). More recently, during the period 2003 to 2007, Finland's direct support in the forest sector has been channelled through the Coordination Office of the Forest Sector Support Programme and Partnership, for a total amount of over EUR 1.1 million. In addition to this, Finland has allocated more than EUR 6 million via the Trust Fund for Forests in Vietnam during 2005–2010 (MFA, 2009).

The geographical coverage of the VinFinFor Programme was centered on the mountainous region of Bac Kan province, where forestry is seen as a key potential activity in contributing to social and economic development. The Programme covered 9 communes in two districts: Cho Don (7 communes in both phase I and II) and Ba Be (2 communes in phase II). The local population, mainly from different ethnic minorities, did not have sufficient incomegenerating opportunities. At the same time, the mountainous regions in the province were facing severe deforestation and forest degradation, due to mismanagement and non-optimal use of resources (VinFinFor, 1998 and VinFinFor, 2003).

The target groups were rural households, ethnic minority groups, professional personnel at provincial, district and commune levels, and the national forestry administration. The primary beneficiaries were the farmers, rural poor and ethnic minorities, all of whom worked in partnership with the Programme in developing their allocated forestlands. This number is approximately 20,000 people in 76 villages in the two districts. The programme also worked with local level forestry and agricultural extension staff who worked in the management of natural forests.

The development objective of the VinFinFor Programme at the beginning was to contribute to the reduction of deforestation and forest degradation in Vietnam, especially in the mountainous regions, through the promotion of social forestry. This was amended later to read: "...to contribute to sustainable rural development in the mountainous regions of Vietnam, through the integration of forestry activities in the rural land-use and economy. Within 15 years, and through interventions in the forestry and agricultural sectors, reach a state of sustainable forest management, environmental protection, and sufficient income generation among poor and hungry households in Bac Kan Province" (VinFinFor, 1998).

The Programme purpose in Phase II was revised to have a greater focus on poverty reduction: "...by the end of the Phase II, poor and hungry households of Programme communes have access to financing, trainings, forestland,

markets and sustained extension support, and are able to generate income with available production factors" (VinFinFor, 1999).

The core problems set out as objectives of the Programme changed from Phase I to Phase II. During Phase I, the Programme focussed on the unsustainable management of forest lands and forest resources and associated rural poverty (VinFinFor, 1998). In Phase II, VinFinFor aimed to address the core problem of rural poverty, which was seen to contribute to the unsustainable management of forest lands and forest resources. The Programme aimed to reduce poverty as a mean of contributing to long-term improvement of rural livelihoods and sustainable forest management. The dissemination of sustainable forest management and other farm-forestry practices were viewed as viable alternatives to shifting cultivation and other forms of unsustainable land use (VinFinFor, 2001).

In Phase I, the Programme included four components focusing on community development, capacity building, dissemination of information, and monitoring and evaluation. In Phase II, six components, corresponding to the Programme purposes, were defined: (1) Land use planning and land allocation; (2) Village extension and PRA; (3) Capacity building; (4) Credit scheme; (5) Marketing and processing; (6) Policy development (VinFinFor, 1999). This present study intends to highlight the effectiveness of components (1), (2) and (4), since these components have strongly and directly influenced the livelihoods of the primary beneficiaries, the local farmers.

During the implementation of Phase II of the Programme, in addition to the changes in forest laws and regulations at the national level which were mentioned above, Bac Kan province also approved its Forestry Master Plan for forestry development (1998–2010), created as the result of the government's Program 661. The Forestry Master Plan established the framework for the implementation in Bac Kan of the first component of Program 661, which was considered to be a prerequisite and the basis for the whole Vin-FinFor Programme (VinFinFor, 2003).

While there is a substantial amount of literature on research into poverty and forestry in Vietnam, there appears to be little research on the relationships between the two. Sunderlin and Huynh (2005) provide an excellent review of the existing literature in these two fields in regard to Vietnam, also proposing several basic research questions to guide further research on the linkages between poverty and forestry. This chapter, which presents an analysis of the poverty reduction impact of the VinFinFor Programme, is among the attempts to bridge this knowledge gap through an empirical study.

# A theoretical framework for forestry, poverty and aid

It is nowadays widely understood that poverty is a multi-faceted issue. The phrase that we often hear referring to a poor person, "earning less than one dollar a day", is in fact a simplistic definition of poverty, indicating only the economic welfare which is just one part of a full understanding of poverty. The OECD-DAC Guidelines on Poverty Reduction, from their Development Assistance Committee, define poverty as a star with five points, including: human welfare, social and cultural acceptance, political rights, and security and risk management, as well as economic welfare (OECD, 2001). The definition of poverty in recent decades has been broadened to include non-material aspects of human well-being. The sustainable livelihoods approaches developed by Carney (1998) define a livelihood as comprising all of the capabilities, assets and activities required in order to make a living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base. Carney (2002) specified five forms of capital required for a sustainable livelihood, which are: natural capital (land, forest, water, wildlife and pasture), physical capital (privately owned assets and public economic infrastructure), financial capital, human capital and social capital (social networks and relationships).

The literature indicates that forests and the forestry sector can address various dimensions of poverty although the link is still controversial (Townson, 1995; FAO, 1995; Arnold, 2001; Jumbe and Angelsen 2006; Yemiru et al., 2010). Firstly, a large number of rural households in developing countries are still subsistence users of forest products. In addition to providing daily subsistence needs, forests and trees play important roles in reducing the vulnerability of poor rural households to external shocks, and in diversifying their livelihood base. Forests can thus form an important safety net for the poor in the "hungry seasons" between crops, or in other difficult times. Secondly, forests provide opportunities for income generation. Products derived from forests and trees provide an important source of cash income and employment for the rural poor. Forests help in diversifying the farm household economy through provision of wood and non-wood products. Many of these products are characterised by easy and open access to the resource and the low capital and/or skill required. Certain commercial forest products provide the basis for full-time and high return activities which are usually associated with high skill and capital entry thresholds in micro enterprises. Thirdly, forests are important for agriculture and rural development, as they provide a starting-point for rotational agriculture and protection of the land and water resources. Inputs from forestry to agriculture are especially important for poor farmers, since most of them have no access to other types of agricultural inputs. The World Bank (2002) estimated that about 60 million people (mainly indigenous and tribal groups) are almost wholly dependent on forests, and that some 350 million people who live within or adjacent to dense forests depend on them to a high degree for subsistence and income. In developing countries, about 1.2 billion people rely on open woodlands, or agro-forestry farming systems that help to sustain agricultural productivity and generate income. About one billion people worldwide depend on drugs derived from forest plants for their medicinal needs. Millions of people depend upon forest resources for their survival. Forest resources directly contribute to the livelihoods of some 90% of the 1.2 billion people living in extreme poverty (World Bank, 2002).

However, the link between poverty and forestry is still controversial. Forests have both potential and limitations for poverty reduction, with possible roles as safety nets, poverty traps, and providing pathways out of poverty. Angelsen and Wunder (2003) categorise the benefits from forestry into three groups: non-timber forest products (NTFPs), forest products, and environmental services. Angelsen and Wunder (2003) argue that most of NTFPs are labour intensive and require low capital and skills, and are therefore openly accessible to the poor. The economic returns and prospects for market growth are however poor, and so the potential for increasing NTFP income is low. Meanwhile, it is mostly the rich who capture the higher value benefits from tropical timber products, with specific production and market characteristics (high capital, skill intensity and a more specific market). However, over time, the pro-rich benefits trickle down to the poor through indirect channels such as employment, profit reinvestment, and multiplier effects. This does not mean that the poor do not benefit at all from timber products.

In a more comprehensive theoretical framework, FAO (2003) set out the forest-based poverty alleviation (FBPA) model, identifying six modes of forest resource use that can potentially assist the process of poverty alleviation. These are: (1) Conversion of forests to agriculture; (2) Timber, (3) Nontimber forest products (NTFPs); (4) Environmental services; (5) Employment and (6) Indirect benefits, including local multiplier effects and trickle-down effects.

Given an extensive discussion in the literature on the role of forests in poverty alleviation, however, the link between poverty reduction strategies and the forestry sector has not been given sufficient attention in policy formulation. For example, Oksanen et al., (2003) reviews the Poverty Reduction Strategy Papers (PRSP) coordinated by the World Bank (WB) in Sub-Saharan African countries, finding that the forestry policy and forestry planning process in these countries are generally weak. Angelsen and Wunder (2003) critically point out that a striking gap exists in many economic development and poverty reduction strategies, which currently neglect forests and forestry. The WB also confessed that its operational policy in forestry in 1993 resulted in many missed opportunities for the Bank to harness the potential of well-managed forests, open woodlands, and on-farm trees to make a very significant contribution to poverty reduction and the protection of environmental services. As a result, the new WB forestry strategy in 2002 is built on three equally important and interdependent pillars: (1) harnessing the potential of forests to reduce poverty; (2) integrating forests into sustainable economic development and; (3) protecting vital local and global environmental services and values (World Bank, 2002).

Given this linkage, an important question for the international community is how aid can help to improve the contribution of forests and the forestry sector to poverty reduction. Arnold (2001) specifies three areas where aid to forestry can have a direct or indirect impact on poverty reduction. First, forestry aid increases participation by local users in forest management in order to make management more responsive to their needs and to increase the benefits flowing to them. Second, aid programmes can provide support for tree-growing on farms. Third, aid can exploit non-farm income generating opportunities from production and trade in forest products. Arnold (2001) suggests two main ways in which forestry aid might become more effective in mobilising the potential of forestry to contribute to poverty alleviation. One is to link forestry more closely with what is happening in other sectors, particularly rural development, and thus to recognise the possible impacts of macro shifts and structural adjustment on rural development. The second is to improve the focus and effectiveness of poverty-related intervention at all levels within the forestry sector.

It is obvious that the second way must be based on a better understanding of what forestry can actually do and what it cannot do to alleviate poverty. Priorities and strategies within forestry assistance may then need to be adjusted; adjustments may need to be made in, for example: (1) the balance between poverty alleviation and conservation; (2) the extension of forestry assistance to the rural poor located outside forests and; (3) the shares of the state and the rural poor in forest benefits. In a similar vein, Oksanen et al. (2003) identifies two main areas where assistance from the international

community is urgently needed. One is to help recipient countries to prepare their forest sector policies, and the second is to ensure that these policies are implemented with a greater focus on poverty. Assistance for this should be channelled through the national forest programme processes, and should focus, among other things, on (1) improving the involvement of the private sector and increasing productive investment in forestry; (2) empowering the rural poor, local communities and civil society in general; (3) resolving trade-related issues at domestic, regional and international levels and; (4) improving the use of forest-related financing mechanisms and targeting these to benefit the poor.

## Methodological challenges in impact evaluation

Governments of recipient countries, aid donors, and the development community at large are increasingly asking for hard evidence on the impacts of public programmes claiming to reduce poverty: "Do we know if such interventions really work and how much impact do they have?" (Ravillion, 2008). Impact evaluation, in general, involves an analysis of cause and effect in order to identify whether a programme had the desired effects. According to Ezemenari et al. (1999), the basic principle for any good evaluation of an intervention is rather to ask such questions as what would the welfare of particular communities, groups, households and individuals have been without the intervention. These are the questions of counterfactual analysis: defining a comparable group correctly is a key to identifying what would have occurred in the absence of the intervention, which is called the counterfactual outcome and thus answering the basic question of an evaluation of impacts. Baker (2002) also considers that the determination of a counterfactual outcome should be at the core of an evaluation, and is needed to ensure methodological rigour. Similarly, Ravillion (2008) indicates that the essential problem in impact evaluation is a problem of missing data, since we do not observe the outcomes for participants if they had not participated. This counterfactual dilemma is the biggest methodological challenge for an impact evaluation.

The literature has classified two main techniques for carrying out this counterfactual analysis: experimental design (randomisation) and quasi-experimental design (non-random) with various methods to reduce the bias in a naïve estimate. When it is not possible to carry out a randomisation assessment of a programme intervention, control groups are used for comparison in experimental design. The techniques (econometric methods) that can be

used to generate control groups that resemble the treatment (participant) group, at least in observed characteristics, include: matching, double difference (or difference in difference), instrumental variables methods, and reflexive comparison (Ravillion, 2001).

Problem of selection bias: A naïve estimate of a programme's impact is to compare the relevant outcome indicators for participants and non-participants. This estimate will be biased if there is some underlying difference between these two groups (existing even before the programme was implemented), which would have affected the outcomes with or without the intervention. This is a common pitfall in many impact evaluations. This problem of bias may lead to under or over-estimating actual programme impacts, finding negative impacts when actual programme impacts are positive, and finding statistically insignificant impacts when actual programme impacts are significant (or vice versa). In other words, the programme may appear to be successful but actually is not, because the people participating in it may be "better" than average because of self-selection, or because of selection by the project management, or conversely the programme may appear to have failed when it has actually succeeded.

Selection bias arises when participation in the programme by individuals is related to unmeasured characteristics that are themselves related to the outcome of the programme being studied (e.g. poverty characteristics). Selection bias can be broken down into two sources of bias: bias due to differences in observable characteristics, and bias due to differences in unobservables (Ravillion, 2001). In quasi-experimental designs, various statistical models such as matching, double differences, and instrumental variables are used to control for selection bias, but it is very difficult in practice to completely remove them. This remains a major challenge for researchers in the field of impact analysis (Baker, 2000).

# Methodology of the study

The methodology for the impact study presented in this chapter had a strong quantitative focus. However, there has been growing acceptance of the need for integrating the quantitative and qualitative approaches (Baker, 2000 and Shaffer, 2004) in order to meet the information needs in impact assessment. Qualitative methods can be used to inform the key impact evaluation questions, design the questionnaire, or formulate the stratification of the quantitative sample; in particular, they can be used to analyse the social, economic and political context in which the program takes place. Quantitative

methods can be used to inform qualitative data/information collection strategies. Statistical analysis, for instance, can be used to control for household characteristics and the socioeconomic conditions of different study areas. Therefore, this study also pursues an integrated approach, particularly Q-Squared (Q2) developed by Shaffer (2004), combining qualitative and quantitative approaches in poverty analysis. This is in fact the best choice for the present study, given the condition of the data availability. The four main components of the methodology are summarised as follows: a) a review of programme documents and available reports; b) interviews and group discussions with programme staff, relevant stakeholders and local beneficiaries; c) a household survey to obtain primary quantitative data and; d) propensity score matching (PSM) to create a counterfactual outcome for use in estimating causal effects.

Qualitative tools used in the present study included both in-depth interviews with former programme staff, extension workers and village heads, and focus-group discussions with beneficiaries as well as with groups of farmers in non-participating communes. These were conducted in order to obtain information on how the programme communes/households were selected, the actual processes implemented in the programme, and farmers' perceptions of poverty and causes of poverty.

Commune data was collected from the district statistical office, and household data from the household survey carried out in the present study. The household survey covered a wide range of variables, from household characteristics to land ownership, agricultural production, household expenditure, and participation in the VinFinFor. The sampling design consisted of three levels: commune, village and household, using poverty incidence and forest coverage as the key selection criteria. Based on poverty data available by the end of 2006, Ngoc Phai (20.48%), Quang Bach (47.59%) and Tan Lap (70.07%) were chosen as the programme communes to be surveyed, and three non-programme communes were selected using corresponding poverty rates together with considerable rates of forest coverage (DSO, 2007). Stratified random sampling was applied in the survey design based on the sampling method by Sekaran 2003. The sample of 105 programme households and 300 non-programme households was stratified within the selected communes. The household questionnaire was designed on the basis of qualitative inputs and then pilot tested. Adjustments were made according to the findings from the pilot test.

#### Construction of the counterfactual outcome

As much discussed in the literature, determining the counterfactual outcome is a key concern in any impact assessment study, especially in a case for which baseline data for the beginning of the programme intervention is not available. To find the effects caused by factors other than the programme, it is necessary to find comparison groups from a sample of non-participating households. Selection for the comparison groups is based on observable variables. For this purpose, a *propensity score matching* (PSM) technique needs to be applied. The performance of the PSM technique depends on how well we can predict the probability of participation in the programme by households. A good predictive model helps justify the key conditional independence assumption in the PSM (Van de Walle and Cratty, 2004).

Usually, logit or probit regression is estimated for computing the propensity score. Sample households whose propensities do not match between the groups will be taken out of the sample. A non-participating household whose propensity score is closest to a participating household is considered to be a matched control. Outcome indicators of participating groups (treatment) are compared to the same indicators of the matched non-participating group (matched control). This process can reduce bias, and any difference in outcome indicators between the two groups can now be attributed exclusively to the intervention of the programme. The underlying idea of this process follows the conditional independence assumption, by which selection bias disappears given the same observed characteristics of the two groups (Angrist and Pischke, 2009).

The basic features of sample households as calculated from the survey data, as well as information from qualitative analyses, have been taken into account in explaining the probability of participation in the Programme through a logit specification. Table 1 reports the estimated result, with a number of factors significantly determining the status of programme participation of households. Sampling weight is also included in the logit regression. The dependent variables take a value of 1 for participants and 0 for non-participants. This is to control for all possible factors that could affect their participation but are independent of the Programme.

Table 1. Logit regression of household participation in the VinFinFor Programme.

Dependent binary variable: participation in the programme (Yes=1; No=0) Household size  O.15833  Number of children (below 14 years old)  Dependency ratio  O.39575  Women's Union membership  Household head sex (male=1; female=0)  Household head age  O.01315  Household head is self-employed  Household head's main occupation in agriculture  Dependency ratio  O.39575  O.39	3	0.44 0.63
Household labour  Number of children (below 14 years old)  Dependency ratio  O.39575  Women's Union membership  Household head sex (male=1; female=0)  Household head age  O.01319  Household head years of schooling  Household head is self-employed  Household head's main occupation in agriculture  Household head's main occupation in forestry  Household head's main occupation in industry  Household head's main occupation in services  Number of wage earners in households  Tay ethnic minority  O.33497  O.33497  O.33497  O.33497  O.901319  O.901319  O.901319  O.901319  O.901319  O.901319  O.901319	3	0.63
Number of children (below 14 years old)  Dependency ratio  O.39575  Women's Union membership  Household head sex (male=1; female=0)  Household head age  O.01319  Household head years of schooling  Household head is self-employed  O.59326  Household head's main occupation in agriculture  Household head's main occupation in forestry  Household head's main occupation in industry  Household head's main occupation in services  Number of wage earners in households  O.66356  Tay ethnic minority  O.90131	3	
Dependency ratio -0.39575  Women's Union membership -1.46040 Household head sex (male=1; female=0) 0.33497 Household head age -0.01315 Household head years of schooling -0.09166 Household head is self-employed 0.59326 Household head's main occupation in agriculture -2.41517 Household head's main occupation in forestry 1.07601 Household head's main occupation in industry 1.24968 Household head's main occupation in services -1.32482 Number of wage earners in households -0.66355 Tay ethnic minority 0.90131		
Women's Union membership -1.46040 Household head sex (male=1; female=0) 0.33497 Household head age -0.01319 Household head years of schooling -0.09166 Household head is self-employed 0.59326 Household head's main occupation in agriculture -2.41517 Household head's main occupation in forestry 1.07601 Household head's main occupation in industry 1.24968 Household head's main occupation in services -1.32482 Number of wage earners in households -0.66359 Tay ethnic minority 0.90131	;	-0.79
Household head sex (male=1; female=0)  Household head age  -0.01319  Household head years of schooling  Household head is self-employed  Household head's main occupation in agriculture  Household head's main occupation in forestry  Household head's main occupation in industry  Household head's main occupation in industry  Household head's main occupation in services  Household head's main occupation in services  -1.32482  Number of wage earners in households  -0.66359  Tay ethnic minority  0.90131	<u> </u>	-1.33
Household head age -0.01319 Household head years of schooling -0.09166 Household head is self-employed 0.59326 Household head's main occupation in agriculture -2.41517 Household head's main occupation in forestry 1.07601 Household head's main occupation in industry 1.24968 Household head's main occupation in services -1.32482 Number of wage earners in households -0.66359 Tay ethnic minority 0.90131	****	-3.2
Household head years of schooling -0.09166 Household head is self-employed 0.59326 Household head's main occupation in agriculture -2.41517 Household head's main occupation in forestry 1.07601 Household head's main occupation in industry 1.24968 Household head's main occupation in services -1.32482 Number of wage earners in households -0.66358 Tay ethnic minority 0.90131	7	0.63
Household head is self-employed  Household head's main occupation in agriculture  -2.41517  Household head's main occupation in forestry  1.07601  Household head's main occupation in industry  1.24968  Household head's main occupation in services  -1.32482  Number of wage earners in households  -0.66358  Tay ethnic minority  0.90131	)	-0.65
Household head's main occupation in agriculture -2.41517 Household head's main occupation in forestry 1.07601 Household head's main occupation in industry 1.24968 Household head's main occupation in services -1.32482 Number of wage earners in households -0.66358 Tay ethnic minority 0.90131	5	-1.32
Household head's main occupation in forestry  Household head's main occupation in industry  1.24968 Household head's main occupation in services  -1.32482 Number of wage earners in households  Tay ethnic minority  1.07601  -0.66358  -0.66358	5	0.44
Household head's main occupation in industry  Household head's main occupation in services -1.32482  Number of wage earners in households -0.66358  Tay ethnic minority -1.24968 -0.66358	*	-1.46
Household head's main occupation in services -1.32482 Number of wage earners in households -0.66359 Tay ethnic minority 0.90131		0.52
Number of wage earners in households -0.66359 Tay ethnic minority 0.90131	3	0.6
Tay ethnic minority 0.90131	)	-0.74
	) **	-1.8
Dao ethnic minority 6.27770		0.47
	****	2.82
Main source of household income from agriculture -1.40296	6	-1.01
Main source of household income from forestry -4.47755	****	-2.68
Main source of household income from industry/services -1.75706	6	-1.34
Being a poor household in 2000 0.00871		0.02
Area of agriculture land holding for annual crops (m²) -0.00035	***	-2.26
Area of land holding for perennial crops (m <sup>2</sup> ) -0.00033	****	-2.79
Area of forest/garden land holding (m <sup>2</sup> ) 0.00000	****	-1.47
Area of protection forest holding (m²) 0.00003	****	3.14
Area holding for aquaculture (m <sup>2</sup> ) 0.00046	6	1.35
Have land use certificate (RED BOOK) 0.35097	,	0.53
Area of rice cultivated in summer-autumn season -0.00020	)	-1.22
Area of rice cultivated in winter-spring season 0.00042	****	2.76
Area of rice cultivated in other season -0.00018	3	-1.06
Area of maize cultivated 0.00017	,	0.8
Area of potato cultivated 0.00162	)	0.96
Area of cassava cultivated -0.00070	)	-1.05
Constant 1.67185		0.54
Number of observations 366		
Log-likelihood -86.98	3	
Pseudo R2 0.3765		
Wald chi2 (32) 89.03		
Prob > chi2 = (		

<sup>\*\*\*\*, \*\*\*, \*</sup> Significant at 1%, 5%. 10%, 15% levels respectively

The estimate shows that demographic characteristics of households, with the exception of ethnicity, do not seem to have a statistically significant influence on a household's participation status. Conversely, the main source of household income and the main occupation of the household head show strong correlations with the decision to participate in the Programme, especially when the main occupation was in agriculture or forestry. The number of wage earners in a household has a negative effect on their choice of joining the Programme. This is reasonable, because programme activities are mostly concerned with the agriculture and forestry sectors, which wage earners are less likely to participate in. Membership of the Women's Union was also found to strongly influence the participating decision, but with a negative effect. This seems to be in conflict with the official rules of the programme credit scheme which requires Women's Union membership, but it can be understandable in cases of households participating in programme activities other than the credit scheme.

Regarding land assets, it was learnt from group discussions that one of the key criteria for participating in an agro-forestry intervention (e.g. growing bamboo, cinnamon or fruit trees) was availability of household land and labour. We therefore looked at the area of land owned by households, which had be classified into four categories: agriculture land, land for perennial crops, garden or forest garden land, and protection forest. As shown in Table 1, several variables relating to land assets statistically determined a households' participation in the Programme. This included the area owned by the household and the type of land use.

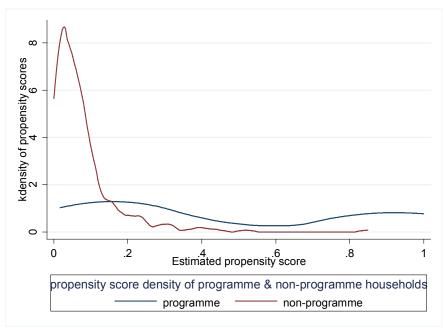
Note should be taken of the difference between forest gardens (officially called production forest) and protection forest. Protection forest refers to the natural forest allocated to community households through a contract for their regular maintenance and protection of a forest over the period of 50 years; permission for any exploitation of these forests must be granted by the Forest Protection section of the district and province administration. Households with allocated protection forest often receive a forest land use certificate, informally called a "Green Book", whereas households who own their garden forest can plant on their lands and collect and harvest products as they wish. Perennial crops are mostly cultivated on their garden/forest lands (Castella et al., 2002). Garden forest together with agricultural land and residential land are grouped in one land use rights certificate, which is often called a "Red Book". The proportion of households which have received their "Red Rook" was almost the same (around 94%) across all the sub-samples in our study at the time of our survey.

However, informant interviews and discussions with local farmers revealed that households in the Programme communes had received their land certificates several years before households in non-programme communes. Similarly, all households (100%) in the Programme areas had received the "Green Books" for their forest land, whereas the proportion in non-Programme areas was 93%. We also noted that the percentage of landless households in the non-Programme areas was higher than in Programme area by around 2%.

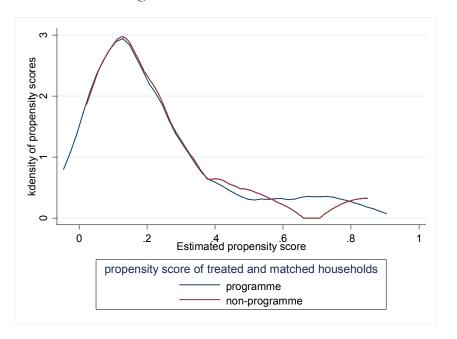
We then limited our sample by defining a "common support" for propensity score (p-score). The reason for doing this is because, according to Heckman et al, (1997), bias to due unobservables is seen to be significantly reduced by restricting the sample to the common support. Non-participants with a score lower than any participant are excluded. The imposition of the common support condition in propensity score matching removed the 58 observations from the control groups whose propensity score was lower than the lowest treatment group's p-scores. This specification satisfies the balancing property at the 1% significance level with 6 optimal blocks, implying that the estimated propensity score is balanced for treated (participating) and control (non-participating) groups in each block with respect to the above covariates within the common support. Figure 1b depicts the propensity score of the two groups after matching. The distributions of the propensity scores of the treated and control groups now closely overlap, showing that the bias has been greatly mitigated.

Figure 1. Density of propensity scores before and after matching.

### (1a) Before matching



## (1b) After matching



# Key findings and discussion

The group discussions and individual interviews with farmers and relevant village officers provided a qualitative assessment by the local people on the effects of the VinFinFor Programme on their production and livelihoods. People generally made positive assessments, reporting improvement in their agricultural production and livelihoods following their participation in the Programme. They appreciated the provision of production knowledge, the introduction of agro-forestry models made by the Programme, and especially the financial support from the Programme-supported credit scheme. Participants in group discussions were both men and women, but women more often than men showed their strong appreciation of the financial support through the credit scheme.

Therefore, the key hypothesis of the study to be tested by quantitative analysis was: The VinFinFor Programme has had a significantly positive impact on local people's livelihoods by increasing agricultural production, access to credit, and forest plantation. thereby improving food security, increasing household expenditure and ultimately reducing poverty.

Table 2 shows the average of several outcome indicators for participating and non-participating sample households, as well as the difference between the two groups, which is seen as showing the net impact of the Programme.

Table 2. Impact of the Programme on household well-being, credit access, and forest.

Dependent variable/Impact indicator	Programme	Non-Pro- gramme	Difference		t-stat
Poverty rate in 2000 (%)	47.7%	50.8%	-3.1%		-0.29
Poverty rate in 2007 (%)	36.9%	41.5%	-4.6%		-0.45
Reduction in poverty rate (percentage points)	-10.8%	-9.2%	-1.5%		-0.13
Poverty rate by asset owned in 2008	46.2%	64.6%	-18.5%	**	-1.81
Per capita expenditure (in logarithm)	15.766	15.627	0.138	**	1.8
Per capita food expenditure (in logarithm)	15.228	15.098	0.13	*	1.41
Rice yield (tons/hectare)	4.031	3.608	0.423	*	1.31
Number of loans	2.22	0.78	1.44	****	8.8
Amount of credit (VND million)	9.723	9.631	0.092		0.04
Ratio of forest garden planted /forest owned	1.049	0.98	0.069		0.36
Observations	65 treated	212 matched controls			
Common support: Yes					

<sup>\*\*\*\*, \*\*\*, \*</sup> Significant at 1%, 5%. 10%, 15% levels respectively

## Impact of the VinFinFor Programme on the poverty rate

The first outcome indicator investigated was the poverty rate or poverty incidence, defined as the percentage of households which are classified as poor according to the national poverty line criteria. Data for this indicator was collected for 2007, and for 2000, which was the year implementation of Phase II of the VinFinFor Programme began. This information is considered to be reliable since households are carefully assessed and provided with a certificate verifying their poverty status, often called a "poor household book".

The first three rows of the above table show the poverty rates and the reduction in poverty for households that participated or did not participate (matched households only) in the VinFinFor Programme. It can be seen that the incidence of poverty fell by 10.8% percentage points (from 47.7 to 36.9%) for households which participated in the Programme, whereas poverty fell by 9.2 percentage points (from 50.8% to 41.5%) for households in non-programme areas. Since these are matched or comparable groups of households, it can be assumed that the fall in poverty incidence of 9.2 percentage points for non-programme households would also have happened in the Programme area even if the Programme had not been implemented. It follows therefore that the Programme was responsible (causally) for the additional 1.5 percentage points (the second difference) reduction in the poverty incidence observed in the Programme area. This result is positive, but not statistically significant. One may conclude that there was no observed effect of the programme on poverty incidence at an aggregate level.

People's perception of poverty was also explored to complement the official poverty classification. Group discussions with poor farmers and with the non-poor group suggested that being poor or non-poor can be observed from their asset ownership. In the local context of Cho Don district and the study site in particular, non-poor households should have at least a semi-stable house, a television, a motorbike and either a buffalo or a tractor. Thus households who do not have one of these items can be considered being poor or "un-wealthy".

According to this assessment of poverty, the Programme areas seems to be wealthier than surrounding areas, with a proportion of poor households of 46%, around 18.5 percentage points less than in the non-Programme areas in 2008 when the survey was conducted. The difference was found to be highly significant and appears to show a strong positive impact on people's wealth. Non-participants households, on average, are more likely to be "un-wealthy" by almost 18.5 percentage points.

To understand these two seemingly contrary results one needs to be aware that as of 2008 the asset criterion seems to represent a higher poverty line than the official national benchmark which had been applied from 2006 of VND 200,000 per person per month. This low threshold, therefore, distilled a group of the poorest among the poor in the communities. With environmentally and socio-economically similar conditions among communes in Cho Don District, it is understandable that the ratio of poorest households might not be very different between areas. However, when the assessment criterion is raised, in this case the asset criteria, for example, more variations among communes can be seen. Discussion with village leaders and households in non-programme areas also reveals that beside poor households classified by the national poverty line, the number of "near-poor" households (as often called by local people) whose income is just above the official poverty line was still quite large.

In the next section, a disaggregate analysis separating the poor and non-poor (more precisely "not-so-poor") groups of households will further look at differences in the programme impact. The section, therefore, can provide clearer explanations for results at the aggregate level.

# Impact on household expenditure and food security

An important part of the household survey was dedicated to the assessment of household expenditure within the previous 12 months. Basically, the expenditure covered two categories of regular (daily, weekly, monthly) expenditure and irregular (annually or by case) expenditure. Food spending was an essential part of regular expenditure, including the value of self-subsidised rice and other daily food.

The 'nearest-neighbour' causal effect of the VinFinFor Programme on household per capita expenditure of 0.14 is highly significant. This effect is calculated as the average difference between per capita expenditure of similar pairs of households with different participation status. Since per capita expenditure is expressed in logarithmic form, one can say that on average the per capita expenditure of participating households is about 14% higher than the expenditure of non-participating households.

The impact of the VinFinFor Programme on food security is also significantly positive. Food expenditure, which accounted for about 60% of household expenditure on average, and included self-sufficiency inputs, was c. 13% higher among participants than non-participants. This conclusion is consistent with the positive effect of the Programme on rice productivity.

Rice (paddy) is regarded as the most important crop for agricultural production in Cho Don District. On average, the programme area was found to be more productive than the non-programme area in terms of rice yield and rice output. The rice yield of households in programme communes is higher than that of households in non-programme communes by approximately 0.4 tons per hectare.

## Impact on household access to credit

As suggested in the microfinance literature, credit schemes can increase the local people's access to credit and thereby improve production and rural livelihoods. All over Cho Don District, there are official credit channels operated by the Vietnam Bank for Agriculture Development, and the Social Policy Bank, in addition to the non-official or semi-official channels provided by NGOs and civil society organisations (CSOs). Access to credit is measured in this context by the total amount of credit that households have borrowed over the last five years and the number of loans they obtained.

If this access is measured as the number of loans obtained by households over the last five years, participating households have accessed more loans than non-participating households by around 1.5. This result was found to be highly significant at the 1% level. However, in terms of the absolute amount of credit that households received, the data does not show a significant difference between participants and non-participants. The average credit amount per household over the last five years was about VND 9.7 mil per household for both groups of households. This result is explained by the fact that the programme credit scheme was a micro-finance scheme, which provided small loans (less than VND 5 million) with a maturity of less than three years. The aim was to rotate the fund quickly among local households. The programme-supported credit scheme was small in comparison with other official credit schemes in the region, such as those of the Social Policy Bank or the Vietnam Bank for Agriculture and Rural Development. This might suggest that the programme credit scheme now being operated by the district's Women Union has an important role to play. Box 1 further describes the activities and achievement of this credit scheme.

#### Box 1. The Credit Scheme operated by the district Women's Union in Cho Don.

During the period of VinFinFor Programme implementation, the Credit Scheme was operated through two channels, namely the Vietnam Bank for the Poor (VBP) which was later renamed as the Vietnam Social Policy Bank (VSPB) in 2003, and the district Women's Union. As the Programme phased out, the fund was handed over to the People's Committee of Bac Kan province and agreement was made for the continued operation of the Credit Scheme, but under the Women's Union channel only. In Cho Don District, the total amount of the fund transferred to the district was VND 4,065 million. Since then, the Scheme has been operated under the regulations on management and utilisation of credit fund resources approved by the People's Committee of Bac Kan. Currently there are two types of loan. The first is a VND 1 million-loan for livestock and husbandry or agricultural inputs (fertiliser) with a 1-year term. The second is for a longer term (2-3 years) with the amount of VND 2-5 million for cultivation of perennial crops, fruit trees, tea, farm development, or fish farming.

The Credit Scheme has been organised based on the district Women's Union network which operates on the commune, village and group levels. Women's Union members in their neighbourhood play an active role among themselves in selecting, reviewing and supervising the loans. According to the Credit Scheme Report for the second half of 2007, the outstanding loan amount was VND 3,801 million in 1,173 households in 7 communes of Cho Don district. Within the last six months of 2007, loans were disbursed to 222 households, to a total of VND 1,012 million. Among those, 54 households (24%) were poor with a total credit amount of VND 231 million, and 57 households were ethnic minorities with an average loan amount of VND 5 million.

The Women's Union often cooperates with the Agriculture and Forestry Office of the district to organise training on cultivation and husbandry techniques. Such training was attended by 476 borrowers in 17 sessions. Other training on credit and finance has been provided to credit officers at village level and to the Commune Credit Committee.

Source: Women's Union (2007), Credit Scheme Biannual Report.

## Impact on household forestry

One of the main purposes of the VinFinFor Programme was to promote the sustainable use of forest resources and contribute to the reduction of deforestation and forest degradation. Discussions in farmer groups revealed that people felt more secure with certification of forest land ownership and were prepared to make more investments in their forest land. It would be ideal if one could quantify the amount of such investments, but such investments can also be in kind or in the form of people's own labour and efforts. Therefore, the household survey could only ask about the changes in people's investments in their forest land, both in cash and kind, and the area of forest land left with no investment or protection. Since forest plantation is a long-term investment and people do not earn income from forestry production every year, it was not considered realistic to ask about the income from forestry in the household survey.

The study therefore attempted to investigate the Programme's impact on this aspect of forestry by looking at the ratio of planted forest to the area owned by households. The survey results (after matching) showed a positive impact in the sense that, on average, participating households used the whole area available, with some households renting additional land for plantation, making the average ratio larger than one. Meanwhile, non-participating households on average used only 98% of their available forest land area. However, the difference is not statistically significant.

The descriptive analysis of data from the household survey reinforced these findings. Large differences were found between the participating and non-participating households in the areas of perennial crops owned and cultivated. The average area of garden forest land owned by non-participating households was found to be around three times the average for participating households. However, the actual planting area in programme communes is larger by 67% than that of average planting areas in non-programme communes. These facts may suggest that households in programme areas are probably more active in planting on their allocated garden forest land, while non-programme households do not fully utilise their land resources.

The survey concluded that the positive impact of the Programme on forest plantation resulted from a combination of various programme activities, including extension services, demonstration models, and credit and grant financing for forest cultivation, including free seedlings and other inputs to local farmers during the operation of the Programme. The speed-up land and forest land allocation within Programme communes also played a role, as people felt more secure cultivating their own land, and were able to use their land use certificate as collateral to obtain further credit from banks. The household survey also indicated that protection forest seemed to have been allocated more rigorously in the programme area, since 40% of households in this region had protection forest compared to 24% in the non-programme region. The average area of protection forest per household was about three times higher among programme households than non-programme households. Around 78% of surveyed respondents participating in the Programme acknowledged the benefits of training and extension services, and over 27% of them had made additional investment in their forest lands.

Interviews with village leaders and the heads of farmers' unions in non-programme communes revealed that, although they also had received their land use certificates some years later, they did not have training or guidance on how to effectively cultivate their lands. The awareness of local people of the economic and environmental benefits of forest plantation had been

improved. However, people are mostly learning from successful households, not from organised training, and there is an increasing demand for such production knowledge.

## Differences in impact for poor and non-poor households

One of the questions in this study is whether the programme impact was different for the poor compared to the non-poor households classified by their poverty status in 2000 at an early stage of the programme phase II. Our random sample indicates that among 179 poor households in 2000, 82% are ethnic majority Kinh and 16% are Tay and Dao minorities. In another way, out of 45 ethnic minority households in the sample, 64.4% were poor in 2000 and this rate has been reduced to 46.7% in 2008, in a new poverty line. Household heads in poor families are less educated than heads of the non-poor (7.8 years versus 8.9 years of schooling, on average). Labour and land, which are the main input of agricultural and forestry production, also seem to be more limited among poor households. We do not have these data in 2000, but at the time of the survey in 2008, non-poor households have more of about 550m² of agricultural land (or 1.5 sao in the local measurement), 8.5 ha of forest land, and 0.2 labour unit person than poor households on average. The differences even are larger when we categorise households by the 2007 poverty status.

Table 3 reports the estimated causal impact of the programme on household well-being and credit amount separately for two groups of households. The result is a mix of positive and negative effects for the poor and non-poor groups. The first line of table 3 indicates an impact of 27% in the poor group, implying that for sample households which were poor in 2000 (which was composed of roughly 65% participating households and 35% non-participating households), the chance for non-participants to remain in poverty in 2007 is 26.7% higher than that of participants. This result is statistically significant at the 10% level. It suggests that on average, poor households in programme areas are more likely to move out of poverty than the poor outside the programme. Meanwhile, the programme has no impact in changing the poverty status of the non-poor households. Since the share of not-so-poor (poverty line year 2000) households in the sample outweighs those of the poor (55% versus 45%), the causal effects on such better-off households dominate those in poor households, resulting in an unobserved impact on poverty of the whole sample. This analysis clarifies the effects reported in table 2 where a positive but insignificant impact of the programme is recorded on the aggregate poverty rates.

Table 3. Net im	pact of the Programm	e on groups of	poor and non-	poor households.

Dependent variable	Poor households in 2000		Non-poor households in 2000	
Household poverty in 2007 (%)	-0.267		0.000	
	(-1.93)	**	(-0.0)	
Poverty by assets owned (%)	-0.200		-0.125	
	(-1.34)	*	(-0.89)	
Per capita expenditure (in logarithm)	-0.037		0.160	
	(-0.32)		(1.61)	*
Per capita food expenditure (in logarithm)	-0.1655		0.279	
	(-1.26)		(2.51)	***
Rice yield (tons/hectare)	0.57		0.43	
	(1.22)		(1.06)	
Amount of credit (VND million)	4.820		-5.370	
	(1.52)	*	(-1.79)	**
Observations	86 controls		114 controls	
	30 treated		32 treated	
Common support	Yes		Yes	

<sup>\*\*\*\*, \*\*\*, \*</sup> Significant at 1%, 5%, 10%, and 15% levels respectively

Similarly, if asset criteria are used as an outcome indicator, the probability of a poor household in 2000 having poor asset ownership in 2008 is larger by 20% if that household did not take part in the Programme compared to a similarly poor household that joined the Programme. This result is also statistically significant, reconfirming the poverty reduction impact among the poorest group of the community as shown above. This is because even with a higher assessment benchmark (assets), a higher portion of the poorest households in the programme area can move out of poverty compared to those in non-programme areas.

Positive causal effects are recorded in rice productivity for both the poor and non-poor households; the size of the impact is larger in the poor group. On average, the Programme has contributed to a difference in rice yields of 0.57 tons per hectare in the poor group, and a smaller difference of 0.43 tons per hectare for the non-poor.

The Programme as a whole, and the credit scheme in particular, have made more funds available to poor households. It can be noted that a positive impact was shown for the poor group, for a total of VND 4.8mil, while a negative impact of VND 5.3mil can be observed in the non-poor group. This

result is understandable, given that the VinFinFor Programme Credit Scheme targeted poor households. In fact, these two effects, one positive and one negative, cancel each other out in the overall analyses, resulting in an insignificant impact by the Programme on the total credit amount available when poor and non-poor households are pooled in the impact analysis shown in Table 2.

In contrast, among the poor group, the survey found no positive impact on household expenditure as a whole and on food expenditure in particular. This result seems to conflict with the impact on poverty incidence reported in the first two poverty indicators of Table 3. Several explanations are possible. First, poverty incidence was based on the official poverty line and qualitative assessment on household assets which measure household income and wealth, but changes in household income/wealth and expenditure do not necessarily move in the same direction. People might keep a larger share of their income for savings (wealth) or investment in production, for example, rather than for consumption. The expenditure covered in our survey certainly does not incorporate spending for production.

Second, the Programme provided poor households with agro-forestry knowledge, inputs and credit to promote their production activities, and in this way have increased the income of poor households and helped them to get out of poverty with a very low possibility of falling back. Farmers' commitment to the Programme's agro-forestry models was monitored closely in the past, and the usage of credit money has been closely watched by credit groups at the village level to make sure that funds were used for production rather than consumption, and to avoid other types of credit fungibility. This was supported by information obtained from beneficiaries and credit staff during interviews. A third possible reason which emerged from the group discussions is that the people engaged in the credit scheme were trained in how to manage and make the best use of their money. They became better at estimating and managing the financial side of production and also better at saving. This view was widely shared in many group discussions, especially among women who have been involved in the credit scheme.

Among the not-so-poor group, however, significant causal effects of the programme can be observed on both household expenditure and food expenditure. On average, non-poor households participating in the programme spend 16% more on general consumption and 28% on food consumption than non-poor households outside the programme. This strong impact suggests that living standards and welfare of non-poor households above the poverty line in targeted communes have been improved quite a lot more than those of the similar group in other communes. Again, this dominant

effect among the non-poor makes the overall per capita expenditure and food expenditure of programme beneficiaries as a whole larger than their counterparts in unintervened communes, as indicated by the positive impacts in Table 2.

## Differences in impact by gender

Another important question for the study was how well the VinFinFor Programme was able to have an impact on the female headed households as well as the male-headed households. Although the data can identify these two groups, the limited number of observations does not allow estimation of the average treatment effect on the programme participants for each gender group separately. A similar difficulty also applies to the analysis by ethnic group, since the proportion of Dao ethnic group households is very small compared to those of the Tay ethnic group. Therefore for the main outcome indicators, it was only possible to make simple comparisons of averages between the different groups. It was not possible to make conclusions about causal effects.

The upper half of Table 4, showing the Programme household group, indicates that the proportion of poor households among male-headed and female-headed groups was very similar at 54% and 55% respectively in 2000. The incidence of poverty by 2007 was however reduced by 12 percentage points for male-headed households, while there had been almost no change in poverty incidence for female-headed households during this period. Female-headed households in the programme area had nevertheless fared better than the female-headed households in non-programme areas, whose poverty incidence increased by 5 percentage points over the same period. These descriptive data suggest that more improvement can be seen in the livelihoods of male-headed households than female-headed households. Meanwhile, poverty seems to be more persistent in female-headed households, which show little change or even more impoverishment. It appears however that the Programme has somehow cushioned this negative change.

A comparison of poverty status as defined by the subjective criteria of 'assets owned' further raises the incidence of poverty among female-headed households in both programme and non-programme communes. In this analysis, the poverty rates rose to highs of 91% for programme and 80% for non-programme female-headed households. Meanwhile, the incidence of poverty for male-headed households with programme participation was found to be much less at 41%. This implies that male-headed households

which participated in the programme activities may possess more production advantages, leading to greater life improvement and asset accumulation than the female-headed households or all non-participating households. However, since poverty assessment based on assets owned is quite subjective, the comparison is not completely convincing.

Interesting results regarding comparisons of household expenditure and food expenditure were also found. On average, the male-headed households in programme areas spent more than the female-headed households in the same area, by approximately 12%. In non-programme communes however the situation was reversed, with the female-headed households spending more than the male-headed households.

Table 4. Comparison of selected outcomes between male and female headed households.

Dependent variable	Female-headed household	Male-headed household	Difference %
Programme Households			
Share of the sample	11%	88%	-77%
Households living in poverty 2000	54%	55%	-1%
Household living in poverty 2007	55%	43%	12%
Poverty reduction (2000–2007)	0%	-12%	12%
Poverty by assets owned	91%	41%	50%
Per capita expenditure (VND mil)	6.3	7	-11%
Per capita food expenditure (VND mil)	3.7	4.2	-14%
Rice yield (tons/hectare)	3.9	3.9	0
Number of loans	2.6	2.3	0.33
Amount of credit (VND mil)	6.3	11.3	-78%
Non-programme Households			
Share of the sample	16%	84%	-67%
Households living in poverty 2000	40%	44%	-4%
Households living in poverty 2007	45%	39%	6%
Poverty reduction (2000–2007)	5%	-5%	10%
Poverty by assets owned	80%	65%	15%
Per capita expenditure (VND mil)	7.8	6.8	12.2%
Per capita food expenditure (VND mil)	4.6	4.1	10.2%
Rice yield (tons/hectare)	3.8	3.6	5%
Number of loans	0.8	0.9	-0.08
Amount of credit (VND mil)	8.1	8.9	-9.7%

Rice productivity was found to be about the same for male and femaleheaded households in the programme areas, and higher for both groups than in the non-programme area. Access to credit, evaluated in terms of the number of loans, seems to be more favourable for women-headed households, probably because the Programme Credit Scheme was intended primarily to provide poor women with small loans. This emphasis on small loans for women was verified by the larger credit amount that male-headed households obtained regardless of their participation status. The difference in credit amount between programme and non-programme households is positive within male-headed households but negative within female-headed households. As noted, these comparisons do not support inference of direct causal effects of the Programme, but tend to show that the male-headed households benefited more from the Programme and have done better in improving their lives as well as in reducing poverty than female-headed households. This suggests that a main finding of our study was that the Programme was of less benefit to female-headed households and that extra effort is thus needed to reach them.

#### **Conclusions**

The evaluation in the present study found that the VinFinFor Programme was largely successful in contributing to a reduction in poverty and supporting a range of improvements in people's lives. It seems to be obvious, but it is necessary to confirm that the poverty reduction effort of the programme was well-targeted in two respects. One, it helped the poorest to get out of poverty and, second, it contributed by improving the living standard of the other not-so-poor, although the overall impact may disguise these two separate important pieces of evidence. Over the period from 2000 (start of Phase II) to 2007 (4 years after the Programme ended), the overall incidence of poverty in participating households was reduced by 10.8 percentage points, with the Programme contributing around 1.5 percentage points. The Programme also resulted in an increase of around 14% in per capita expenditure of households per year on average, in comparison with similar households which did not participate in the programme intervention. A similar positive effect of 13% in per capita food expenditure was also found. Together with the significant improvement in rice yields of 0.4 tons per hectare compared to yields for non-participating households, the findings here illustrate the positive impact of the Programme on food security. In addition, credit access has been improved, with greater numbers of loans granted to households participating in the Programme for the same total amount of credit as that received by non-participating households. The Programme also achieved its key purpose of promoting forestation in the area of influence.

Targeting the poor and near-poor households was an important part of the programme strategy; the desegregation analysis found this objective to have been important and largely successful in programme implementation. Poor households were found to be constrained by access to resources, lack of knowledge of appropriate productions systems, and reduced motivation. Land and labour were the main resource constraints. Knowledge of livestock raising, cultivation, and forestry would enable poor households to make better use of their limited resources to improve agricultural production, food security and well-being. The qualitative evidence in our study showed that poor households needed a better understanding of their potential in order to motivate them to participate more in programme activities. The conclusion is that pro-poor targeting is necessary to ensure that the poorest can also realise benefits from the Programme. Additional support (e.g. grant financing) could be made to the poorest of the poor to facilitate their initial participation in programme-supported activities and subsequently benefit from further participation. It should be noted that the 'poor' defined in our analysis were defined as those living below the official poverty line: it should be remembered that the near poor (a little above the poverty line) are still poor and vulnerable, and should therefore also be included when targeting the 'poor'.

The distribution of benefits by gender, however, raised important questions since female-headed households benefitted less from the Programme than male-headed households. This implies that future programmes should include additional interventions to specifically target female-headed house holds in order to address their more serious constraints and ensure that they participate in and derive sufficient benefit from the Programme.

Land allocation and certification were found to be important for reducing poverty through improving access to land for the poorer households. Land allocation and certification must be based on a government policy framework, and a programme can only support and speed up the process. At the time of Phase II (1999–2003) of the VinFinFor Programme, this framework was provided by the Government of Vietnam (GoV) 5MHRP at the national level and the Bac Kan Forestry Master Plan at the provincial level. The Programme was able to support and speed up the implementation of the GoV legislation through specific technical guidance, plans and support for implementation of sustainable forest management plans at commune, village and household levels (VinFinFor, 2003).



Picture 1. Land certificate called Red Book and it's legal holder in Vietnam.

The allocation and certification of land use rights has encouraged local households to invest more in their forest land and agricultural production, since the security and stability of their ownership of the land are guaranteed. According to the data in our study, the intervention of the VinFinFor Programme in supporting and facilitating GoV institutions in this process has had a significant impact on reforestation and the sustainable use of forests in Bac Kan.

Extension services providing technical knowledge and support for poor households were also found to be important for poor households in order for them to be able to improve the productivity of their plantations and cultivation. The VinFinFor Programme supported hundreds of additional contracted extension workers at commune and village levels to work in cooperation with the government extension staff (VinFinFor, 2003). The extension services were thus made accessible to all the Programme villages and were greatly appreciated by local farmers. The question of the sustainability of this externally provided network was raised by the mid-term review (VinFinFor, 2001) and still remains an issue. Given the importance of a wider and better informed network of extension workers for improving productivity and reducing poverty, a sustainable solution for the provision of extension services needs to be found.

Our evaluation of the VinFinFor Programme Credit Scheme concluded that small credit schemes with favourable interest rates, targeted at poor and near-poor households, were important for helping them to build their livelihoods. The credit training and supervision provided were found to be particularly important in helping the poor to use their credit productively. Although in this case the Women Union's is not a microfinance institution and thus cannot fund in a professional manner, their grassroots network (at village and group levels) greatly supported supervision of the funds provided through microloans. Strict discipline in the use of microcredit is important in order to avoid increasing the indebtedness of poor households. In addition, given the small size of the fund in the Programme Credit Scheme and the offer of low interest rates, it is difficult to raise the loan size and increase the maturity for borrowers who wish to finance their forest plantation investment. This means other solutions need to be found, but that discussion is beyond the scope of this study.

This research has shown that support for forestry development carried out by poor and near-poor households has the potential to bring important benefits for improved livelihoods and poverty reduction. Various policy reforms have been implemented in the forestry sector in Vietnam over the

years, but their impact at household and community levels has not been systematically assessed and documented. Such systematic assessments should be made, since the relationship between forestry and poverty is fairly complex, and policy and programmes supporting forestry development by poor households need to be based on a sound understanding of the relationship between forestry and poverty.

Improvement in rural livelihoods through different types of forestry development depends to a great deal on the extent to which local people are involved in forest management. Interventions are needed which specifically target the needs of poor and near-poor households in order to address their constraints and ensure their motivation and participation. A special effort is needed to include female-headed households to ensure their participation in and maximise their benefits from the development programmes.

The present case study aimed to generate empirical evidence on how the VinFinFor Programme has had an impact on poverty at the household level by making explicit reference to the causal relationship between participation in the Programme and changes in household well-being. Further research is needed to build understanding of the relationship between forestry development and poverty reduction, so as to further improve the development of sound forestry development policy and programmes. If the intention is to obtain specific, detailed understanding of the impacts of the implementation of a programme or policy, then there is a need to design the necessary research from the start. Having both baseline data and follow-up surveys in the design and methodology of a programme would be ideal for understanding causal effects. Using Propensity Score Matching is a second-best solution in the absence of baseline data, but even this method requires a relatively large and reliable dataset. These considerations should be specifically addressed when developing a programme's monitoring and evaluation framework if it is important to properly measure the impact of the programme.

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#### **Comments**

#### Pertti Haaparanta

The methodology of project evaluation has made significant progress over the past 20 years in economics. Development economists have been in the forefront of this progress. Now we are at a stage where all development projects can and should be evaluated. In fact, all projects should be planned in such a way that they can be evaluated. This is an integral part of changing the process of giving development aid from focusing on inputs to focusing on results.

The large majority of existing projects have not been planned with an eye to evaluation using methods that are proper from an economics point of view. This is also true of the programme studied here by Bui Thi Minh Tam. The ideal design of a study of such a programme would be a randomised experiment, where the units (households, villages) would be randomly selected from among the group of units for which a treatment is planned. Similarly, the control group, the group of non-treated from whom data is also collected, would be randomly selected. Data on these two groups would be collected both before the project starts and right after it ends. The impact of the project could then be easily be evaluated using just elementary statistical methods. This ideal cannot be easily obtained in many cases, often for ethical reasons, but there are usually ways of overcoming the problems.

A more easily achievable arrangement is to take a random sample of people from villages that have been treated in the project, and a random sample of people from villages that have not been treated, even if the villages themselves have not been chosen randomly. The non-randomisation of villages need not be problematic if all the villages considered are treated sequentially. This is the case in a research project I am involved in in Mozambique. There the main interventions are being implemented both at the village level, including group meetings, and at the individual household level, including introduction of new varieties of plants. Random selection of households before the project even started provides a reliable basis for statistical inference.

In the Vietnam case, even this option was not available. Instead the author has in a way to create the treatment and control groups ex post facto. The methodology then available is propensity score matching: Bui Thi Minh Tam creates groups in both the treatment villages and control villages for which data is available by matching households with similar characteristics,

and then compares them with each other. The idea is to find characteristics that can "predict" well why a household participated in the programme in the programme villages ("propensity" to participate). The comparison households in the control villages with similar characteristics are then matched with the households in treatment villages, and the results of the project can be read as the "average difference" in outcomes relevant for the project (outcomes such as poverty reduction). Bui Thi Minh Tam has applied the method skilfully.

**Pertti Haaparanta** received his Ph.D. from Yale University in 1986. He was introduced to the challenges of development cooperation while taking international trade courses at Yale, and was able to work on these challenges while at the World Institute for Development Economics Research (WIDER) in 1986. He obtained the position of Professor of International Economics at the Helsinki School of Economics, now the Aalto University School of Economics, in 1990. His focus has turned more and more toward development issues since the early 2000s, through Academy of Finland funded projects focusing on Russia, microfinance in Uganda, institutions and development, and the impact of Finnish development aid. In addition, he has also taught courses in development economics at various levels. Haaparanta has also participated actively in public discussions on development aid.

# 6. DEVELOPMENT, GOVERNANCE AND CONTESTED POWER RELATIONS:

THE CASE OF CENTRAL AMERICAN FORESTRY PROGRAMMES

René Mendoza Vidaurre and Anja Nygren

### Introduction

Within the last three decades, dozens of programmes devoted to community forest management, participatory forestry, and decentralised forest governance have been implemented in different parts of the global South. Following the frustration with the capability of governmental-driven, top-down development models to promote sustainable forestry and enhance local livelihoods, many of the international aid agencies and multilateral development institutions have fostered community-based development projects with an emphasis on democratic forest governance, participatory forestry, increased aid efficiency, and the appropriation of the projects by the targeted local beneficiaries (Lemos and Agrawal 2006, Platteau and Gaspart 2003, Smoke 2003, Ribot 2003).

In theory, participatory forest management can increase democratisation of forest governance by allowing local populations to make decisions on the control and use of forest resources. With participatory forest management, local people may also feel a greater sense of ownership of the rules for resource use, and be more engaged in their implementation, monitoring and enforcement. Participatory forest management may also contribute to the more equitable distribution of benefits, and provide mechanisms for marginalised groups to have an influence on forest management. On the other hand, participatory projects may be subject to political pressure and bribery; or may be captured by political elites who promote hierarchical relations instead of democratic participation and political accountability (Blaikie 2006, Nygren 2005, Pacheco 2004, Ribot 2009, Zulu 2008).

Achievingthegoals of participatory forest management is, in fact, a complicated and organisationally challenging task. Successful participatory forestry requires reconciliation of the diverse and often contradictory interests of multiple actors and multiple institutions operating at different social scales (Blaikie 2006, Cleaver 2002, Nygren 2005, Nygren and Myatt-Hirvonen 2009, Wilshusen 2009). In this chapter, we analyse the opportunities and constraints faced by the Finnish Forest Development Programme in Central America

(PROCAFOR), which aimed to promote good governance and improve local livelihood through participatory forest management approaches in Central America in 1992–2003. Our analysis will focus on Nicaragua and Honduras, the two major partner countries within the Finnish-funded PROCAFOR programme. These two countries have the largest productive forest resources in Central America, and some of the highest rates of poverty and income inequality in Latin America (CEPAL 2004).

In our analysis, we will discuss the impacts of a development programme in terms of Long's (1992: 35) conceptualisation of any development intervention as "an ongoing, socially constructed and negotiated process, not simple the execution of an already-specified plan of action with expected outcomes." Based on this definition, we became interested not only in the mission aims and the direct effects of the PROCAFOR Programme, but also in the broader socio-economic processes and political power relations which form the context of its implementation. This context had a significant impact on all the Programme's consequences, including the intended and unintended, the anticipated and unforeseen consequences (Lewis et al. 2003, Mosse 2006). By examining the implementation of the PROCAFOR Programme from the perspective of multiple actors and multiple interests, we aim to show that involving different resource-users and different institutions in socially responsible forest management is a much more complicated task than is generally thought. Special attention in our analysis will also be paid to the networks of power through which the strategic "gatekeepers" – sometimes also called "brokers" - were able to capture many of the critical resources targeted for community development.

Bastiaensen et al. (2005: 983) identify gatekeepers as actors who are "able to manipulate and exploit outside intervention as well as local expectations on their own behalf." More broadly, Olivier de Sardan (2005: 137–138) defines development interventions as multifaceted arenas of struggle where diverse actors, with their differing interests, logic of decision-making and degrees of political power, interact and confront each other. Taking these approaches as our starting-point, we conceptualise gatekeepers as occupiers of crucial "nodes" between different economic activities and political relationships in various arenas of control and power (Bebbington et al. 2008, Wilshusen 2009).

The dilemma of why just a part of the development resources targeted for local populations tend to reach their final destination is a pivotal question in all the studies related to the impacts of development aid and the distribution of the targeted benefits. As shown in Figure 1a, the gatekeepers, with their

expanded social ties and institutional networks, often aim to utilise a part of the resources targeted for community development for their own purposes (Bastiaensen et al. 2005, Platteau 2004). As illustrated in Figure 1b, there may be a "hole" in the networks among the donors, governmental authorities, buyers of the local products, and the local inhabitants. This can be a hole through which a considerable part of the actual resources targeted for the local population, or of the value of the products supplied by local producers for markets, is captured by the gatekeepers. As further demonstrated in Figure 1c, at worst the hole allows capture by the gatekeepers to become the dominant method of distribution of the benefits, and allowing benefits to reach the local people is a deviation from this.

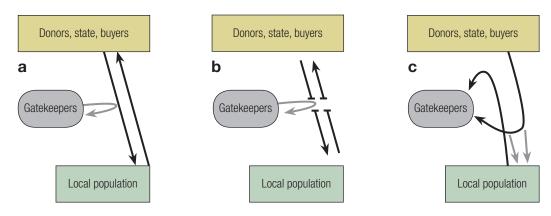
In such a situation, different kinds of resources, such as money, equipment, contacts, and information, flow through the gatekeepers, who control the "gates" in many different directions, manipulating the relations between donors, governmental authorities, non-state and private-sector actors, and the targeted local populations to their own advantage. As will be shown during our analysis, it was these mechanisms of gatekeeping especially and their links to different forest and agricultural-oriented value chains (Mendoza 2000, Mendoza and Bastiaensen 2003) which PROCAFOR did not take sufficiently into account during the implementation of its participatory forest projects.

Figure 1. The typical forms of operation by gatekeepers.

Figure 1a: Gatekeepers aim to get access to resources.

Figure 1b: Gatekeepers are able to capture some resources.

Figure 1c: Gatekeepers are the dominant distributors of resources.



The next section of this chapter explains the general context of the PROCAFOR Programme and the methods used in the study presented here. The third section analyses the intended and unintended processes that shaped the impacts of the PROCAFOR Programme in the case study areas, paying special attention to local livelihood, participatory processes, mechanisms of gatekeeping, and forest value chains. The final section presents the main conclusions of the study, along with some policy implications relevant within the context of participatory forest development programmes in the global South.

#### Context

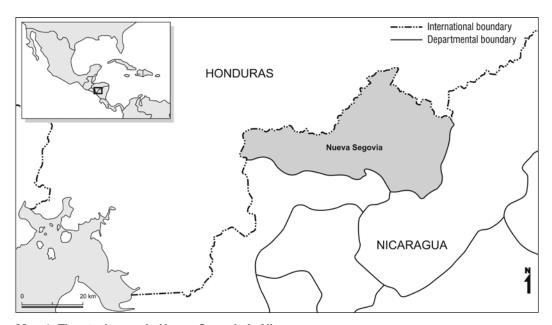
Central American countries have about 23 million hectares of productive forests, which represent 44% of the total Central American forest area (FAO, 2005). Honduras and Nicaragua have the largest forest resources in Central America. In Honduras, the 4.6 million hectares of forest represent about 42% of the country's land area, and in Nicaragua, the 5.2 million hectares of forest represent about 43% of total land area. About 88% of the land in Honduras, and 79% of the land in Nicaragua, is considered appropriate for forestry (FAO 2005, Nygren et al. 2006).

Pine (coniferous) forests are the most important resources from the forest-economic point of view in both countries. In Nicaragua, coniferous forests form around 18% of the total forest area (Romero 2008: 15), while in Honduras, conifers account for about 49% of the total forest area (FAO 2005, Vallejo 2003). In Nicaragua, about 35% of the exported forest products are pine-coniferous, while in Honduras, about 97% of all the commercial wood production is pine-coniferous (Nygren 2005). The main markets for forest-based products in both countries are other Central American countries, the Caribbean region, and the USA. Together, Nicaragua and Honduras represent 48% of the forest products exported from Central America. However, in both countries the forest industry's contribution to GDP is only about 4% (Guevara 2004, Vallejo 2003).

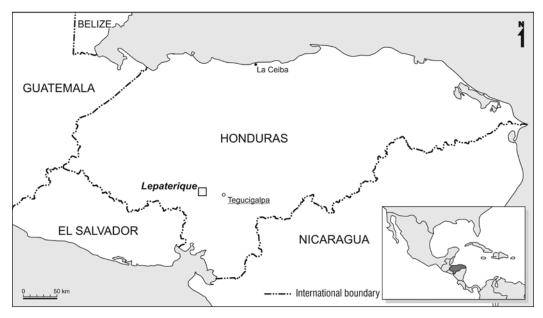
This study covers Dipilto, Jalapa, Mozonte and San Fernando municipalities in the Department of Nueva Segovia in Nicaragua (Map 1), and Lepaterique municipality in the Department of Francisco Morazán in Honduras (Map 2). The dominant timber tree species in both study sites is pine. All the study areas have a complicated system of land and forest tenure, with pluralistic forms of land ownership and customary resource rights. Concerning forest resources, there are municipal (ejidal), communal and individual land titles,

combined with state-owned forests, customary resource rights, private concessions for timber production and non-timber forest product extraction, as well as areas designated for strict protection.

This diversity of land and forest tenure arrangements is further complicated by the diversity of actors and institutions involved in the governance of access and control over forest resources. In Lepaterique, local inhabitants have traditional usufruct rights to individual parcels under their management on the ejidal lands, legally owned by the municipality (Nygren 2005, Roquas 2002). All the above-mentioned property systems are found in Nueva Segovia; in addition, the indigenous authorities are making increasing claims for revised recognition of the indigenous customary rights to communal lands. The population in both study sites is ethnically diverse, consisting of Lenca Indians and mestizo-ladinos in Lepaterique, and groups of Indians, such as Cujes, Yaras, Guaques, and Nahualts, with heterogeneous sectors of mestizo-ladinos in Nueva Segovia.



Map 1. The study area in Nueva Segovia in Nicaragua.



Map 2. The study area in Lepaterique in Honduras.

Both countries have a complicated history of forest exploitation. In the Nicaraguan Segovia, pine forests were heavily exploited by Spanish rulers before Central American independence, since Spain needed tar and wood for ship-building. Large-scale timber exploitation by transnational forest companies was common, especially between the 1950s and 1970s; logging was organised through forest concessions granted by governmental authorities, and the timber was mainly sold to US markets. Since the 1990s, the forestry business has been largely carried out by Salvadorian, Honduran, and US forest companies, who are particularly dominant in the exportation, wholesaling, and retailing of wood (Mendoza 2002). In the 1990s, some of the local cooperatives began to participate in upgraded forest business with processed timber products of higher value, supported by international development cooperation, including PROCAFOR. Because of the difficulties in upgrading their technical capacities for more efficient wood processing, these cooperatives, however, often returned to supplying unprocessed round-wood. Some indigenous groups participating in the commercial forest business have also received considerable criticism from their own indigenous authorities who, under the influence of the international environmental NGOs supporting them, considered indigenous people as "intrinsic forest stewards" who should be protecting, not utilising, forests (Mendoza 2004).

In Honduras, large timber companies dominated the forestry sector until the 1970s, carrying out extensive cut-and-run logging operations through concessions granted by the government (Suazo et al. 1997). In Lepaterique, three sawmill operators who dominated the national timber markets divided the concession rights to the area's forest resources among themselves. These companies organised virtually all aspects of forestry, from logging to commercialisation, and although the municipality received some timber revenues, it was reduced to a subordinate role in the forestry sector. These arrangements also undermined the local residents' resource rights and minimised their role in forest management (Nygren 2005). In the 1970s, all the forest resources were declared the property of the State, and the Honduran Corporation for Forestry Development (COHDEFOR) was set up to take care of their management. However, since 1992 the municipal government of Lepaterique has taken care of the responsibilities of forest management on municipally owned lands (Vallejo 2003).

The Finnish-funded forestry programme, PROCAFOR, began operating in 1992. According to the PROCAFOR mission statement, there was great potential in Central America for forest development with the active participation of small forest owners and resource-users. One of the key issues in PROCAFOR was the Simplified Forest Management Plan based on Finnish forestry experiences that was planned to be implemented in the Central American coniferous forests under the management of small forest owners and community forestry operators. PROCAFOR's aim was to improve the ability of local forest communities and municipal forest authorities to manage forest resources in an environmentally sustainable, economically viable, and socially just way by engaging local communities as active partners in the planning and implementation of forest management. The Programme proposed to integrate the goals of environmental conservation and poverty alleviation in a sustainable way through projects with decentralised forest governance and community forest development (PROCAFOR 2001a, 2001b).

The study presented in this chapter is based on multiple methods, including qualitative and quantitative data collection from both primary and secondary data over the period of 2003–2009. Thematic interviews, based on semi-structured and open-ended questions, were carried out with local inhabitants, community representatives, and community-based organisations (CBOs) in both study sites. Dozens of interviews were also carried out with PROCAFOR's staff, PROCAFOR project leaders, municipal and state forest authorities, non-governmental organisations (NGOs), and the relevant research institutions. These data were complemented and crosschecked by

participant observations at municipal meetings, people's daily production activities, and informal social gatherings. Focus group discussions and thematic workshops were held with different subgroups of local inhabitants, representatives of central and municipal governments, local cooperatives, and regional producer associations. Informal conversations with forest authorities and forest experts at both study sites were valuable for crosschecking the data. In addition, PROCAFOR's development documents, monitoring reports and evaluation documents were subjected to a qualitative content analysis.

## Impacts on local environments and local livelihoods

An analysis of the livelihood strategies in Nueva Segovia and in Lepaterique revealed a complex picture of multifaceted strategies, with complicated links to heterogeneous economic portfolios and related value chains. In Nueva Segovia, extensive cattle raising is practised on the lowlands at 200–500 metres above sea level, mainly by large landowners who contract smallholders for field preparation and animal care through traditional sharecropping systems. At higher altitudes, peasant smallholders and middle and large-sized landowners produce coffee for global markets. Many smallholders also practise food cropping, mixed gardening, and small animal husbandry, combined with forest activities such as timber harvesting, charcoal production, and handicrafts made of pine needles. Large landowners are usually situated closer to roads and markets, while smallholders live in more remote areas (Ruiz and Marin 2005).

The same diversity of livelihood strategies holds true in Lepaterique, where most of the households earn their livelihood through a variety of sporadic economic activities, including food cropping, mixed gardening, coffee cultivation, small-scale animal husbandry, resin tapping, firewood and charcoal production, and timber harvesting. A group of women also produce handicrafts made of pine needles for sale in the capital city of Tegucigalpa. Resin tapping and firewood production has been practised in Lepaterique for decades. In this respect, PROCAFOR's main aim was to enhance the resin tappers' and firewood producers' technical and organisational capacities for creating and maintaining environmentally sound, economically efficient and socially inclusive production systems. Concerning the timber harvesting, PROCAFOR had a crucial role in encouraging local inhabitants to establish community-based forest enterprises for commercial logging (Nygren 2005).

At the end of the PROCAFOR Programme, forestry constituted one of the cornerstones of Lepaterique livelihoods, particularly in the communities with

organised forestry groups. In 2003, Lepaterique was responsible for 30% of the pine resin, 8% of the firewood and 55% of the charcoal produced in Honduras (AFE-COHDEFOR 2003). The PROCAFOR-promoted timber harvesting, in particular, considerably improved the standard of living of those households engaged in logging. According to a socio-economic survey carried out in Lepaterique, forest activities contributed 20-30% of the total income of local households in 1992. By 1997, the income of those households participating in logging had doubled, and the proportion of income they received from forest activities had increased to 50-60% of their total income. In 2003, the salary of a logger was twice the daily salary of an agricultural worker (Nygren et al. 2006). In each interview, local loggers emphasised that whenever they get logging permits, their economic situation improves. This optimism was also reflected in the names people had given to their community-based forest enterprises, including Unión y Esfuerzo (Union and Effort), Nuevos Horizontes (New Horizons), Nuevo Amanecer (New Dawn), and Buena Suerte (Good Luck). At the municipal level, the revenues from the forestry sector have increased steadily since the early 1990s and in 2003 represented about 66% of the municipal budget. Increased forest revenues provided the municipal government with the wherewithal to participate in socially beneficial development projects, such as improvement of public water, building and staffing of schools, and provision of health care services.

As most of the households in Nueva Segovia and Lepaterique had usufruct rights to less than ten hectares of land, most of them were obliged to supplement their agricultural and forestry incomes by engaging in various non-farm activities, such as casual wage labour, informal trading, and migration work. In the early 2000s, about 49% of the total income received by rural households in Nicaragua came from the non-agricultural sector, the share of the non-agricultural income being the highest among the small-holders (Bastiaensen et al. 2005, Deininger et al. 2003). People were also increasingly migrating to urban areas and abroad to find temporary wage labour. In the mid-2000s, about 30% of the migrants to Costa Rica came from the interior of Nicaragua, including Nueva Segovia (Baumeister et al. 2008). A similar situation held true in Honduras, where the remittances sent from the Honduran migrant workers in the USA represented 21% of the country's GDP in 2005 (Nygren and Myatt-Hirvonen 2009).

One of the weaknesses in the PROCAFOR Programme was the scarce attention paid to the diversity and interconnectivity of people's livelihood strategies. In PROCAFOR's official vision, small forest operators were supposed to rely exclusively on forestry for their livelihoods, with limited recog-

nition that most of the households both in Nueva Segovia and Lepaterique depended on an array of sporadic but mutually interdependent economic activities. Instead of trying to increase the benefits from forestry seen as a single livelihood activity, a framework that had considered the role of forestry within a wider framework of people's economic activities better could have provided a more appropriate approach for economically, socially and environmentally sustainable community forestry in countries such as Nicaragua and Honduras.

From the environmental point of view, the forests of Nueva Segovia and Lepaterique were better managed during the PROCAFOR Programme than during the period of the timber companies' cut-and-run logging operations. In both regions, PROCAFOR carried out intensive training courses and workshops on environmentally improved methods of timber and non-timber forest extraction. The tasks of forest conservation and improvement of local livelihood were, however, difficult to combine in areas such as Nueva Segovia and Lepaterique, where forest areas were fragmented and there were not enough forest resources left to enable a major part of the population to participate actively in commercial forestry. In both regions, it was especially the uncertainty of resource rights that decreased the forest extractors' motivation to invest in the labour-intensive activities of forest conservation. Most of the low-income smallholders in Nueva Segovia and Lepaterique made their economic decisions according to what would provide them with a livelihood at the moment, instead of what might yield higher profits in the long-term. This also affected their decisions on whether to invest in time-demanding forest conservation practices.

Another weakness within the PROCAFOR Programme was the conventional view of local communities as units of homogeneous households with common goals and shared norms of resource use. Although PROCAFOR improved the local people's participation in forest management, relatively little attention was in fact paid to the competing claims of different actors to forest resources. In recent years, an increasing number of studies of rural livelihoods have emphasised the heterogeneity of local communities and their diverse ways of perceiving and using natural resources (e.g. Bebbington et al. 2008, Kay 2006, Nygren 2005, Paulson and Gezon 2005, Sunderlin et al. 2005). When mapping the everyday politics of resource access and control in Nueva Segovia and Lepaterique, a complex picture emerged of multiple actors with diverse and often conflicting resource-use priorities. The residents in study sites were socially differentiated in terms of access to land, size and quality of resources under their management, degree of participa-

tion in different income-generating activities, age, gender, ethnicity, social position, and political power. These differences also influenced their access to forest resources and their views of forest management. In Lepaterique, for example, when resin tappers saw a forest as an ideal place for non-timber forest extraction, loggers were interested in timber cutting, while farmers were attracted to forest clearing for agriculture, considering a standing forest as a wasteland to be "improved" through land clearing.



Picture 1. A forestry group carrying out a logging operation in Lepaterique, Honduras.

These differences also provoked a variety of resource conflicts. While resin tappers were highly motivated to protect the forests against fires in order to secure their living, firewood and charcoal producers occasionally started forest fires to obtain a permit to produce firewood or charcoal. Correspondingly, when loggers argued that resin tapping provided only survival income while people could considerably improve their living standard by participating in logging, resin tappers countered that while resin tapping had offered a supplemental income for most of the Lepaterique households

for decades, the social distribution of the benefits of logging had often been unequal. Conflicting views of forests were also common along gender lines. Women had limited access to forestry in Lepaterique because most of the usufruct rights were registered in the name of the husband, and the commercialisation of firewood, charcoal and timber was considered a male task. Because of this, women argued for increased participation in resin tapping and the intensification of tree cultivation as part of home gardening.

A similar mixture of actors and institutions with competing claims to forest resources also appeared in Nueva Segovia. Leaders of local indigenous organisations, encouraged by international nature conservation organisations, supported forest protection projects in Nueva Segovia financed by development aid. Forest companies, instead, championed intensive timber exploitation, backed by many of the governmental forest officials. A forest was seen as an industrial raw material and a source of capital by forest companies, as biodiversity by international nature conservation organisations, as a life-sphere by indigenous people, and as a way to complement sporadic income through occasional timber sales by non-indigenous smallholders. Some of the local landholders also dreamed of converting their forest parcels into coffee fields. When local timber producers tried to scale up their logging activities toward first-degree processing, the governmental support for such community-based wood processing initiatives was low. Taking into account all this heterogeneity, it would have been important for PROCAFOR to formulate a more diversified framework for forest development, in which the multiplicity of actors and their conflicting interests had been better considered in order to promote more transparent forest management and more equal distribution of forest-related benefits.

## Impacts in participatory processes

One of the key ideas in the PROCAFOR Programme was to promote forest conservation and poverty alleviation through community-based forest management approaches based on participatory methods. This mission, however, changed over time according to the transformations of global discourses and policies related to community forest management. During the first phase (1992–1996), PROCAFOR emphasised the idea that, if peasants had access to appropriate technology, self-managed rotation funds, and governmental support for community forestry, they could significantly improve their economic life conditions through active involvement in commercial forestry. During the second (1996–1998) and third phases (1999–2003),

PROCAFOR began to support more enterprise-oriented forest cooperatives, more formal mechanisms of microfinance, and more institutionalised forest development projects, in all of which community-based forest cooperatives would be closely linked to private forest businesses and national producer associations (Benitez and Leppänen 1997, PROCAFOR 2001a).

Correspondingly, the facilitating role of PROCAFOR was originally based on the idea that southern partners should be the owners of their development projects. Over time, PROCAFOR leaders, however, began to take on a much more proactive role than initially envisioned. Most of the regional PROCAFOR project coordinators and their staff members came from governmental or NGO sectors; and they typically interpreted their role as administrative and operational. If the international advisers ordered something to be done, the regional director-administers interpreted that task from an executive point of view, whereas the local technicians further reinterpreted these ideas from their own loyalty-gratitude perspective. Within this context, local people as "final beneficiaries" were easily placed in the role of "active participants"; however, they were without significant opportunities to define the terms of their participation.

Compared to the period of concession logging by outside timber companies, when local people had no access to commercial timber production and little voice in decision-making related to forestry, the participatory forest management promoted by PROCAFOR meant a big step forward in Nueva Segovia and Lepaterique. Participatory approaches enhanced the organisational capabilities of local institutions to manage forest resources, and the decisions concerning forest governance were brought closer to local resource-users. Training in participatory approaches also encouraged local people to challenge hierarchical forms of authority and to more openly address the problems of unequal access to resources. In stakeholder meetings and participatory workshops organised by PROCAFOR, local residents actively pressured the municipal authorities and community representatives to defend local resource rights and to improve local control over expanded economic opportunities related to forestry. The conflicts over forest resources were made more transparent, and the previously invisible local actors, such as women and the landless poor, were given better opportunities to voice their resource claims.

The general management and the regulation of forest governance, such as approval of forest management plans and monitoring of their implementation were nevertheless under the control of the central government even during the PROCAFOR Programme. Despite all the rhetoric of community

forestry and participatory approaches, the political commitment of governmental institutions to community forest management remained low both in Nicaragua and Honduras. As the governmental posts were highly politicised and changed every four years, forest regulations were exceedingly volatile. Although PROCAFOR promoted a significant reform by establishing new schemes under the Simplified Forest Management Plan for community forestry operations, the approval of forest management plans took a long time in general, and the monitoring of forest management was characterised by excessive numbers of regulations, many of which were not easily adaptable to the conditions of community forestry.

Concerning local-level participation, the question of who represents local people and who is allowed to make decisions over the use of local resources was scarcely asked within the participatory model utilised by PROCAFOR. In common with many other development projects in Nicaragua and Honduras, PROCAFOR utilised community leaders as "authentic" sources of authority to reach the local population and to influence public opinion. The issue of whether these leaders were legitimate representatives of local people was rarely discussed. Some of these leaders were highly responsible and acted in accordance with the needs of local residents, while others were authoritarian and unscrupulously engaged in political intriguing (Nygren 2005). A common problem both in Nueva Segovia and Lepaterique was that the local representatives were often selected from a small circle of selfappointed candidates who lacked broad support and credibility among the local inhabitants. In Lepaterique, for example, the strongest opponents of the establishment of a local charcoal association were some community leaders who themselves acted as charcoal intermediaries and who thus counteracted the efforts of charcoal producers to organise themselves. As Ribot (2009) has pertinently pointed out, the significance of any act of local empowerment largely depends on what is being devolved, to whom, and under what conditions.

Officially, there were hundreds of beneficiaries within the PROCAFOR Programme, both in Nicaragua and Honduras, ranging from local forest users and forest-dependent communities to governmental institutions, NGOs, indigenous associations, forest cooperatives, private forest enterprises, and forestry-related colleges and training centres. In a situation where peasant economies were largely considered as separate from commercial forestry, PROCAFOR made a remarkable effort to officially recognise the capabilities of small peasants and indigenous groups for sustainable forest development. At the institutional level, PROCAFOR emphasised the importance of estab-

lishing community-based forest cooperatives to engage not only in timber and non-timber forest extraction, but also in the processing of value-added forest products such as furniture. In regard to gender issues, PROCAFOR played a crucial role in the promotion of organised women groups engaged in forest-based handicraft production and marketing. Many of these PROCAFOR-promoted community forest groups and cooperatives were able to establish strategic networks and webs of cooperation with relevant actors in the governmental, non-governmental and private sectors; such networking was critical for the improvement of their livelihood.

At the same time certain questions can be raised concerning the mechanisms through which the local community forestry operators were encouraged to adopt northern organisational models and industrial business strategies within the PROCAFOR Programme. Although the idea of producing for markets was not unfamiliar to Nueva Segovia and Lepaterique smallholders, the ways in which these small forest producers were pressured to intensify their market connections required a complex interplay of logic and forms of decision-making that were different from the local ways of thinking and acting, and which did not automatically correspond to each other. Commercial timber production for global markets requires long-term investments and business strategies, whereas low-income community forestry operators often make their production decisions according to what they can afford at the moment and what works according to the local social norms and cultural practices (Nygren and Myatt-Hirvonen 2009). In the traditional forest operations in Nueva Segovia and Lepaterique, economic activities were usually pursued through informal channels in which considerable attention was paid to personalised networks, social norms, and political relations of trust. In this respect, more sensitivity would have been needed in PROCAFOR to make sure that these southern community forestry operators were not urged to utilise production systems and business models that required an exceedingly different type of logic and different strategies of doing business from those characteristic of local cultural practices and prevailing sociopolitical conditions.

## Impacts on political power relations and gatekeeping mechanisms

A fundamental problem hindering the long-term democratisation of forest governance in Nueva Segovia and Lepaterique concerned the issue of municipal authorities and community representatives who often began to engage in political intriguing soon after being elected to their positions. They disengaged themselves from the local residents and began to negotiate trade-offs with higher-level authorities, prosperous timber merchants, and prominent political bosses. Such trade-offs often included arrangements through which part of the development resources targeted for community development was captured by economic and political gatekeepers, who often also acted as intermediaries who manipulated the local people's access to commercial markets. Despite widespread objections by local residents, municipal authorities in Nueva Segovia and Lepaterique found it difficult to deny the requests of these powerful gatekeepers, whom they often needed to advance their own political agendas. Some of these gatekeepers were scheming political bosses who issued commands from the shadows and manipulated affairs through dummy agents and invisible ties to power. An official who did not comply with the demands of such a boss faced a serious risk of being ousted from his post or otherwise intimidated (Nygren 2005).

The practices of illegal logging were closely interwoven with such gatekeeping procedures. According to Richards et al. (2003), about 40-45% of timber from Nicaraguan pine forests and 30-50% of timber from Honduran pine forests was extracted illegally in the late 1990s. A whole array of extralegal mechanisms thus shaped the realities of forest management in both countries. Some authorities who were responsible for controlling illegal logging were actually part of the illegal business, which diminished the credibility of the patrols and made the rules hypocritical in the eyes of the public. Persons within the authorities' inner circles – relatives, political allies and economic bosses – used networks of friendship and patronage to get permits to extract forest products in quantities in excess of the quotas or in areas in which such extraction was not allowed by the forest management plan. From the perspective of the more marginal sectors of the population, the strict restrictions on forest extraction represented an unjust way of controlling forest use in a situation where powerful forest operators avoided prosecution for violations of the law by engaging in political manipulation and bribery. In a certain sense, illegal logging formed an institutionalised political-economic system, forged from governmental authority and moulded around everyday power relations. Although everybody knew who was extracting illegally and where, illegal operators were rarely prosecuted because an official denouncement of an illegal operator placed the informant at a high risk of retaliation.

Especially in Nueva Segovia, the most powerful gatekeepers were active in several businesses related to wood, livestock and coffee production,

as well as in urban-based activities such as the operation of supermarkets, hardware stores and gas stations. Concerning the forestry business, these gatekeepers had "invisible" ties to community-level leaders and political bosses, local timber intermediaries, governmental forest officials, urban sawmill operators, and even to global furniture retailers. Through these networks, they were able to manipulate the local people's relationships to forest markets. Some of the gatekeepers were also engaged in the business of mixing legally logged timber with illegal timber, although these double practices were strategically concealed beyond the discourse of "community forest management". When an international development aid agency wanted to promote forest conservation, the gatekeepers were ready to agree with this agenda; when other agencies wanted to improve forest exploitation, they were ready to take on this business; when international evaluators wanted to verify what was actually happening in the field, they had a web of assistants to convince the inspectors that everything was being carried out in an accountable way. Over time, even a microcredit institution through which several development cooperation programmes, including PROCAFOR, channelled their micro-credits for local residents in Nueva Segovia came under the control of some gatekeepers. This despite the fact that the credit institution officially kept the status of a "non-profit" civic organisation.

In the area of Mozonte in Nueva Segovia, an especially strong web of gatekeepers consolidated itself during the PROCAFOR Programme. In practice, three gatekeeper families invisibly governed the municipality: One of them controlled the local church institution, another controlled the municipal government, and the third controlled the indigenous organisation. Despite the accusations they sometimes levelled at each other on some occasions, there was a strong "social corridor" among these three families. Various international development programmes, including PROCAFOR, supported the Mozonte indigenous organisation in the 1990s and early 2000s, considering such support an excellent way to enhance indigenous capacity-building. In June-July 2000, it was suddenly revealed that the family controlling the indigenous organisation had captured a significant portion of the development aid targeted for community development, while at the same time practising illegal logging from local community forests. Due to limited external control, a significant portion of the funds targeted for the organisational strengthening of the indigenous association had ended up supporting this single gatekeeper family. The global environment-development discourse's popular metaphors of nature conservation, indigenous rights and local participation were strategically repeated by all three of the gatekeeper families to conceal the existing gatekeeping strategies.

In Lepaterique, the PROCAFOR-promoted participatory forestry activities created considerable changes in the conventional hierarchies of political authority, especially during the first and second phases of the Programme. Although local political bosses and outside timber merchants did not lose their privileges, they were nevertheless under increasing pressure to acknowledge the need to negotiate with local resource-users over resource access. In view of the local residents' growing criticism of corruption and the illegal timber trade, the forest authorities could no longer take the systems of political patronage and favouritism they had worked with in the past for granted. Instead, the authorities had to carefully weigh the advantages of receiving economic and political favours from influential economic and political bosses against the social and political costs of increasing opposition led by local people. This situation changed drastically during the final phase of the PROCAFOR Programme, when the municipal authorities began - contrary to the agreement with PROCAFOR - to grant logging permits to individual timber contractors instead of community forestry groups. In 2004, most of the logging operations were being carried out by nine individual contractors who were the local political-economic bosses. These contractors also negotiated a clandestine deal with the biggest sawmill operator in Honduras, under the terms of which the sawmill operator advanced money to the contractors, and the contractors were, in turn, then obliged to sell their timber to this sawmill.

One of the major deficiencies in the PROCAFOR Programme was precisely that relatively little attention was paid to the existing power structures and the embedded gatekeeping strategies. In numerous interviews and discussions with different PROCAFOR project leaders, it became evident that most of the PROCAFOR advisers were well-informed of the existing gatekeeping practices and political intriguing. However, most of them had limited opportunities, fortitude or willingness to try to significantly transform these politically delicate and highly influential power structures, which had long roots in Nicaraguan and Honduran social and political history.

## Global value chains

Another big challenge faced by the PROCAFOR Programme was the access local producers had to wider forest markets. In Nueva Segovia, most of the indigenous groups sold their trees to intermediaries without even harvesting them. This was partly because many of the indigenous leaders,

encouraged by international conservation organisations, supported conservation approaches that easily categorised indigenous people as forest conservationists per se. This agenda was further strengthened by large timber companies who claimed that "indigenous people don't have the capacity for forest business." As a result, most of the local indigenous people focussed on small-scale firewood production as the main strategy for getting cash, carrying firewood by mule for sale in the nearby town. The peasant forest cooperatives in Nueva Segovia were actively engaged in logging instead. However, their attempts to upgrade their logging activities toward wood processing, with the help of PROCAFOR, resulted in limited success. Most of them failed because of the limited infrastructure of the cooperatives for high-quality processing, combined with the gatekeeping practices.

Corresponding problems emerged in Lepaterique. In Honduras, an oligopolistic market structure, dominated by three resin companies that purchased the raw resin at a fixed price, limited the earnings of resin extractors in Lepaterique, as well as in other resin-producing areas. In addition, Honduran resin processors faced stiff competition in increasingly globalising markets, especially from China, the world's largest producer of resin (FECHAFOR 2003). In the case of timber, a local sawmill company, Industria Maderera Lepaterique S.A. (INDUMALSA), was established in Lepaterique with the support of PROCAFOR in 1997. The purpose of this limited company, with 450 local shareholders, was to add economic value to local products by processing roundwood into boards, planks, and posts. Owing to bad administration and a rapid decline in wood prices, the company had to cease its operations in 2001 with a debt of 2 million lempiras. The PROCAFORpromoted furniture workshop met the same fate. The failure of these efforts generated much resentment among the local residents, especially because the investment in the shares of INDUMALSA had been marketed by some business consultants as an investment in "green gold".

Analysing the position of the Nueva Segovia and Lepaterique producers within the wider forest value chains reveals a relatively skewed picture of the distribution of benefits. The prevalent timber and non-timber forest value chains were based on hierarchical power relationships and subject to great inequalities in income and profit distribution. Local loggers, and firewood and charcoal producers reaped only a small portion of the benefits, while more substantial profits accrued to wood intermediaries, urban saw-mill operators, and furniture processors. In Lepaterique, for example, a charcoal intermediary earned 6.1 times as much as a charcoal producer, and a firewood intermediary earned 16.2 times as much as a firewood producer

per working day in 2004. In addition, the work input of a charcoal intermediary was 30% less than that of a charcoal producer, and that of a firewood intermediary 80% less than that of a firewood producer (Nygren et al. 2006). Even taking the financial risks borne in unpredictable markets into account, the profit margin gained by intermediaries was inequitably high. Concerning the timber production, even the most influential local timber contractors had to rely on urban sawmill operators as a source of advance payments, which gave the latter considerable leverage in setting the terms of trade.

In respect to global value chains, the timber produced in Nueva Segovia and Lepaterique was largely sold to large sawmill operators who dominated the national wood markets and also exported some wood abroad. However, it was difficult for the Nueva Segovia and Lepaterique timber producers to gain entrance to vertically integrated forest value chains, because these chains required economies of scale, standards of quality, and reliability of delivery far above the capacities of these small, low-intensity producers (Kaplinsky et al. 2002, Taylor 2005). These forest value chains were largely driven by large multinational retailers who sourced from hundreds of suppliers throughout the world, while some of the more specific local value chains which specialised in high-quality, value-added forest products were governed by medium-sized buyers (Figure 2).

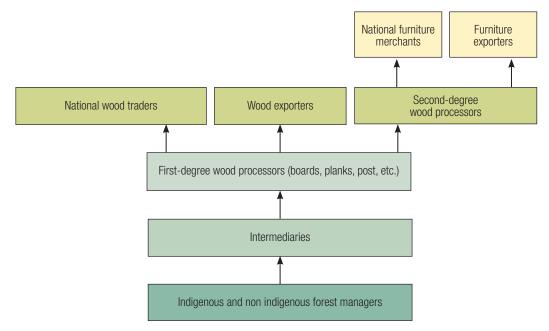


Figure 2. The dominant wood-furniture chain in Nueva Segovia and Lepaterique.

Nicaraguan and Honduran wood and furniture processors, who were mainly supplying commodity-grade pine wood and pine furniture to conventional wood markets in El Salvador, the Dominican Republic, Cuba, Barbados, and other Caribbean islands, were subject to unstable price formations. Some more specific companies were exporting small amounts of furniture to certain niche markets in the USA and Costa Rica. Even in these cases, the design and the value-adding phases of processing, and marketing – aspects that form the virtues of the global value chains – were largely controlled by US and El Salvadorian enterprises (Romero 2008).

The issues described above clearly indicate that the sustainability of community-based forestry is critically dependent on wider forest value chains, which in the case of Nueva Segovia and Lepaterique were based on a host of intermediaries and hierarchical power relations that prevented successful incorporation of the local community forest operators into the national and global wood and furniture markets. Based on these facts, it would have been crucial for PROCAFOR to shift increasing attention to the politicaleconomic processes that mediated incorporation of these forest producers into the globalising forest markets, as well as paying more attention to the institutional mechanisms that mediated the rules and prerequisites of the overall wood production and trade in the Programme countries. Community forest operators in Nueva Segovia and Lepaterique, with limited experience of global forest markets, and with scarce resources to significantly intensify their timber production, had limited opportunities to guarantee the volume, uniform quality, and timely delivery that industrial-level timber and furniture buyers demanded. Poor infrastructure, competition with illegal loggers, and weak bargaining power further constrained the opportunities of these community forestry groups from obtaining a profitable market niche in the prevailing forest value chains. At best, PROCAFOR could have promoted new kinds of partnerships between these southern community forestry operators and some special furniture companies that were interested in strengthening their reputation as environmentally and socially responsible suppliers of tropical forest-based products.

## Conclusion

This article has analysed the impacts of the PROCAFOR forest development programme in relation to local livelihood, participatory processes, gatekeeping structures, and forest value chains, by drawing on case studies of Nueva Segovia in Nicaragua and Lepaterique in Honduras. In the analyses

of the intended and unintended impacts of the PROCAFOR Programme, considerable attention needs to be focussed on the role played by different actors, with their multifaceted interests and values, in shaping the rights, rules, and responsibilities of community forest development in the study sites. Although the PROCAFOR Programme's mission statements noted the multiplicity of the targeted beneficiaries within the Programme's areas of implementation, more attention would have been needed in the implementation of PROCAFOR to fully recognise and take into account the existing economic and socio-cultural heterogeneity within and between the targeted rural communities, with their complex land-use histories, heterogeneous forest-users, and multifaceted interests in forest resources. Concerning PROCAFOR's efforts in improving the local livelihoods, a framework that had better considered the role of forestry within a wider framework of livelihood strategies could have resulted in a more appropriate approach for economically, socially and environmentally sustainable community forest management in countries such as Nicaragua and Honduras. For example, the elaboration of a more integrated forest management plan, including both timber and non-timber forest products, could have helped the forest authorities to better recognise the ways various forest activities complemented and competed with each other in the local livelihood strategies.

Compared to the period of concession logging, PROCAFOR's participatory forest management programme significantly improved the local resource-users role in the allocation of forest resources and strengthened their ability to have an influence on forest governance. The earnings of the local residents engaged in timber harvesting likewise increased. Nevertheless, the continuing inability or unwillingness of governmental authorities to be accountable to the local population, together with capricious forest policies, eroded the legitimacy of the participatory forest management approach and the inclusionary forest governance promoted by PROCAFOR to a certain degree.

The opportunities for socially more transparent control of forest resources were strongly mediated by the existing hierarchies of power, and by the gatekeeping strategies, both in Nueva Segovia and Lepaterique. The PROCAFOR project leaders were well-informed and highly conscious of these hierarchies; however, most of them had limited opportunities or lacked the fortitude to try to significantly transform these politically delicate and highly influential power structures. In this respect, it would have been important to better ensure that the institutions regulating local forest use had also included legitimate representation of different segments of the local population (Pacheco 2004). Given the tendency of municipal authorities to cir-

cumvent the rules, more effective mechanisms would have been needed to guarantee that the commitments made in the agreements were implemented in practice. Credible law enforcement mechanisms would have been crucial in preventing illegal logging, while establishment of more secure usufruct rights for local resource-users could have helped to prevent outsiders from gaining unfair access to local forest resources.

Furthermore, participatory forest management as such seems to be a weak policy instrument for sustainable community forestry, if the wider politicaleconomic factors that structure the local producers' access to forest markets remain stratified (Ribot 2009). According to our analysis, PROCAFOR was sincere in its aim of considering the special conditions under which the small forest producers in Nueva Segovia and Lepaterique operated. Nevertheless, more efforts would have been needed to ensure improved market access and increased prices for these small and low-intensity forest operators in globalising forest value chains. Strengthening the collaborative networks of local producer associations with similar groups elsewhere could have increased their capacity to develop their operations, improve the quality of their products, and increase their influence on forest policies. As this chapter has indicated, the sustainability of community forest development programmes largely depends on how well the interlinked goals of forest conservation, improvement of local livelihoods, and formulation of economically viable and socially inclusive forest development strategies can be achieved over the long term. Development of socially transparent and politically accountable institutions at different levels of society is essential to ensure democratic forest governance and socially just forest management.

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#### **Comments**

#### Kari Leppänen

In general the study is well structured and its conclusions valid. However, I want to comment on two of the four main themes of the article, namely livelihood and gatekeeping. As they are rather new concepts in the development discussion, I want refer to the context of the previous millennium, when the Central American Forestry Programme (PROCAFOR) was implemented.

PROCAFOR started up in the early 1990s, after changes in the legislation in Honduras and Nicaragua finally permitted private forest owners to enjoy the benefits of trees that were on their land. Until then the common (though not necessarily entirely correct) interpretation of prevailing forest legislation was that trees in natural forests were the property of the State even if the land belonged to a private person or to a community. The landowners' rights were limited to collecting some non-timber forest products (such as resin) and firewood for domestic use. The development objective of PROCAFOR was "to integrate forestry activities in peasants' economy in an economically and environmentally sustainable manner" (PROCAFOR 2003, p. 10). This development objective remained the same throughout the 12year lifespan of PROCAFOR. Therefore, it is not fair to say as the authors do here that "in PROCAFOR's official vision, small forest operators were supposed to rely exclusively on forestry for their livelihoods, with limited recognition that most of the households both in Nueva Segovia and Lepaterique depended on an array of sporadic but mutually interdependent economic activities".

Starting from the idea of respecting local and indigenous knowledge, the working hypothesis for PROCAFOR was that the landowners already knew the processes of producing agricultural products on their farms, as well as collection of the forest products that were already permitted. Therefore PROCAFOR concentrated on what the peasants were not supposed to know, i.e., timber harvesting and silvicultural activities. For this reason, it may be claimed that PROCAFOR did not consider the economy of local peasants as holistically as it should have done, but rather concentrated on income generation through timber harvesting activities.

The need for modification of the legislation was evident, as forests were swiftly disappearing and being replaced by other crops, such as coffee and maize, which were indisputably the property of the landowner. As the control mechanism was based solely on checkpoints at the roadside, it was safe to cut trees as long as they were not transported. People were also very clever in finding ways to avoid the checkpoints whenever they wanted to sell the logs they had cut. When the Law on Modernization of the Agricultural Sector (No. 31 of 1992) in Honduras, and the Forestry Decree (No. 45 of 1993) in Nicaragua were passed, the situation drastically changed: the ownership of trees was given to the landowner. It is clear that these changes in legislation were not welcomed by all. The same applied to PROCAFOR as a programme to assist the two governments in implementation of the laws and in raising the awareness of forest owners concerning the value of their forests, for example. In general terms, the implementation of the new legislation left the opportunists in the forestry sector with much less room to manoeuvre.

In theory, all landowners should have been content with the change. However, the option to sell their logs illegally remained attractive, as it provided higher profits with much less bureaucracy. For forest industries, the implication of the new legislation in the short run was an increase in the costs of raw material. For government officials, the new laws and their implementation meant extra work. The independent forestry professionals could have benefitted from the change, as it gave them a good many opportunities for work in preparing the mandatory forest management plans and the annual work plans. It is evident, however, that among these independent foresters there were also individuals who had greater interests at stake than their own work inputs.

The gatekeepers came from all these groups and, according to my estimate made in the early days of PROCAFOR, the majority of the gatekeepers wanted to keep the gates closed rather than open them. It is true that the problem of gatekeepers was not studied in detail before implementing PROCAFOR. The chapter rightly says that "Although everybody knew who was extracting illegally and where, illegal operators were rarely prosecuted because an official denouncement of illegal operator placed the informant at a high risk of retaliation." In fact, in the past century, the corruption in the forestry sector was a taboo that could not be mentioned in official connections, and was therefore very difficult topic to study.

In early 2001, I personally interviewed 58 high-ranking Central American forestry professionals representing the state forestry organisations, and the associations of private or communal forest owners, as well as independent professionals. One of the issues discussed in these semi-structured interviews was the control mechanisms exercised by the State forestry authori-

ties. Although the interviewees were guaranteed full anonymity, not a single one of them took up the matter of illegal logging, and I had to conclude (Leppänen 2003, p.163): "In this study it is important what is said and how it is said. But it is also important what is not said." That is why it is surprising that none of the 58 interviewees makes any reference whatsoever to illegal timber in the Central American market. At that time it was estimated that the illegal timber contributed to approximately 35% of the total volume of timber harvested in Costa Rica (Campos et al 2001). There were no studies available for the corresponding figures in Honduras or Nicaragua, but they could be estimated to be even higher. A more recent study (Richards et al. 2003) revealed that the corresponding percentage in Nicaragua was 40–45% and in Honduras 30–50% (pine forests only).

Many of the documents referred to here were presented at the Central American Forestry Congress in Panama in 2003. At the Congress, the illegal logging and other forms of forestry related corruption were quite openly discussed. Personally, I consider this as the first step toward combating forestry related corruption in Central America. After all, a problem cannot be solved unless it is clearly recognised.

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## 7. THE REALITIES OF PARTICIPATORY FOREST MANAGEMENT:

CASE STUDY ANALYSES FROM TANZANIA, MOZAMBIQUE, LAOS AND VIETNAM

Irmeli Mustalahti

#### Introduction

This chapter summarises the key findings of a research project carried out in 2003–2007 to study the practices and impacts of participatory forest management (PFM). The study was a qualitative and context-specific impact assessment which emphasised the participatory analysis of the processes involved in the implementation of PFM through donor-supported interventions. The study analysed local-level PFM projects in Tanzania, Mozambique, Laos and Vietnam. In this chapter, the terms 'local' and 'local people' means the members of a rural community, village or household in the study area.

In the literature, various terms are used to describe decentralised natural resource management in the sense that a genuine shift of management of and control over natural resources has taken place, from government authority to local people. In the case of management and protection of forest resources, the terms 'community forestry' and 'participatory forestry' seem to be the most common for referring to decentralised forest management. In this study, the term 'community forestry' was not used, because the concept of 'community' is difficult to define when the case studies represent various forms of cultural and historical contexts. Instead, PFM was considered as an overall term for decentralised forest management models, irrespective of tenure. The central issue here is that in PFM areas, local people participate in developing objectives, plans and rules for the use and management of their village or community forests, household forest areas, and/or co-management forests. Co-management refers to joint forest management (JFM) in which local people manage forest areas on behalf of, or together with, the central government or local government authorities, or with a concession holder (White and Mustalahti 2005).

In Tanzania, the reforms in local government legislation and land laws have been built upon by the 2002 Forest Act, and support a variety of PFM models. Consequently, Tanzania has one of the most advanced community forestry jurisdictions in Africa, as reflected in law, policy and practice (Blomley et al. 2008a). In 2008, it was estimated that 4.1 million hectares, corresponding

to approximately 12.8 percent of the total forest cover, was under some form of PFM (FBD 2008). In Mozambique, despite government policy statements on support for community participation in natural resources management, the current Forestry and Wildlife Law reflects a prevailing trend in government policies; namely, that the private sector is to play the leading role in economic development. The communities may extract forest resources for consumption purposes without tax but, for example, in the case of timber concessions, the requirements are that the concession area is delimited and that the operator has timber processing capacity (Mustalahti 2007a). Laos and Vietnam are still single-party systems led by the communist party and administered by party cells at different levels of society: In both Laos and Vietnam, natural forest land is, by law, owned and managed by the State on behalf of the nation as a whole. In Laos, villages are allowed to participate in management activities and share benefits, but cannot hold tenure of natural production forests. Only regenerated areas and degraded forest can be allocated to individuals, households and communities (Mustalahti 2009). In Vietnam, local people can have more extensive management rights over the forest resources. Domestic households, individual and communities can lease forest, can be assigned by the State to carry out forest management and protection, or have their forest use rights and ownership of planted production forests recognised by the State (Mustalahti 2007b).

## A house of participatory forest management

A number of developing countries are in the process of institutionalising PFM within national institutions and reducing dependency on donor projects. Mustalahti (2009) argues that wider elements must be in place to enable local people to participate in forest management in the long-term, and to for them to sustain their participation. To this end, Mustalahti (2009) defines these elements in PFM as including 'a building site', 'four corner stones', 'walls' and a 'roof'. The supportive institutions, laws and policy environment form the building site and the cornerstones are: (1) attitude change towards forests, (2) feeling of ownership of forest resources, (3) benefits from forest management and protection, and (4) general improvements in livelihoods. The walls are represented by provision of long-term extension services, which includes different areas of rural development, and provision of information needed. The roof is made up of the markets for forest products, and for other products and services from the area, for example, markets for environmental services and for the carbon trade. Mustalahti (2007a) argues

that the two most critical elements regarding the viability of PFM are: (a) forest governance, and (b) forestry extension services. This chapter seeks to analyse how and why the problems related to these two factors hinder the processes aimed at sustaining PFM over the long term and reducing the dependency on donor projects. Basically, the study seeks to determine if PFM is the reality or only donor rhetoric.

The chapter first presents a short theoretical framework of decentralised forest management, in this case referred to as PFM. The four national case studies are also briefly presented. After that, the discussion section presents the analysis of PFM based on the case studies and the literature of the two critical factors, governance and extension services, necessary for the viability of PFM. Finally the conclusion attempts to provide answers and make some recommendations for donor organisations based on the present study and other similar studies in the field of PFM.

## **Conceptual framework**

It is important to recognise that holding a title to land does not automatically mean that local people are 'owners' and 'decision-makers': according to Schlager and Ostrom (1992) the owners hold rights of access, withdrawal, management, exclusion and alienation. For example, in all of the case study countries discussed here, this type of ownership of forest land is not possible since communities, villages and households can hold the tenure to common-property forest land, but they cannot, for example, sell the forest land. The decision-making rights of local people are also questionable, because the regulations on the use of and trade in forest products, and on forest management planning requirements, often limit the scope for local input in decision-making (Mustalahti and Lund 2010). Ribot and Peluso (2003) present an access theory related to natural resources that focuses on ability, rather than the emphasis on rights which prevails in property theory. They emphasise a wider range of social relationships that can work to constrain or enable people to benefit from resources, without focusing on property rights alone.

Local people, the members of a rural community, a village and its households, unquestionably have a substantial amount of knowledge of the local environment, and they may already conserve and manage natural resources (Hobley 1996; Arnold 1998; Miah and Rahman 2006). However, they may not immediately become conservation minded or economically oriented forest managers when their legal rights over natural resources have been

legitimised (Matakala and Kwesinga 2001; Ferguson and Chardasekharan 2004; Blomley and Ramadhani 2006). It is also important to keep in mind that local people in the same village or community are not a homogeneous group - different groups often have conflicting interests, and the local elite is vulnerable to the temptation to use their power in order to increase their own benefits (Mustalahti 2006). What is called "Hardin's tragedy of the commons" (Hardin 1968) can be a risk, especially in the areas where local people have limited access to natural resources and overuse of resources by the local community or outsiders destroys the sustainability of common property (Kajembe and Kessy 2000; Adhikari et al. 2007). Dietz et al. (2002) define common-pool resources that do not have institutions for governing their use as "open-access resources", arguing that in order to avoid overuse - the tragedy of the commons - it is important to develop a coherent theory of how institutions cope or do not cope effectively with the problems of overuse, free riding and the distribution of resources. According to Ostrom et al. (1999), local institutions are more likely to adopt effective rules that facilitate their efforts than are regimes that ignore resource problems entirely or that presume that central authorities must make all decisions: If local authority is not formally recognised by larger regimes, it is difficult for users to establish enforceable rules and, conversely, if rules are imposed by outsiders without consulting local participants, local users may engage in a game of "cops and robbers" with outside authorities.

It has been recognised how difficult it is to implement the rules and frameworks which call for local people's access, rights and participation (Kellert et al. 2000; Ballabh et al. 2002; Andersson 2003; Ferguson and Chardasekharan 2004), as well as the difficulties inherent in trying to upscale and sustain these frameworks nation-wide after phasing out of external funds from donors (Brown et al. 1999; Persson 2003; Mayers and Bass 2004; Blomley and Ramadhani 2006). Even if devolution occurs, the transfer of powers is often meaningless, as it does not include financial provisions necessary for local decision-makers to actually fulfil their obligations. Alternatively, after a period, devolution is followed by deliberate attempts at re-centralisation of rights to resources and revenues (Nhantumbo 2000; Shackleton et al. 2002; Larson 2003; Ribot 2003; Ribot et al. 2006; Mustalahti and Lund 20010). The political powers, external advisers, state laws and regulations, and elite groups at different levels of society do not always promote the decentralisation of rights to manage, conserve and benefit from forest resources. Instead of decentralisation, powerful actors may aim to allocate rights and powers to local elites and local branches of central government in order to benefit from valuable resources (Uttling 1993; Sivaramakrishnan 2000; Larson 2003; Shackleton et al. 2002; Ribot et al. 2006). The risk of decentralisation is that decentralisation of forest management merely displaces, the central-level problems to the local level, and bureaucracy is transferred from central level to sub-national level (Mayers and Bass 2004).

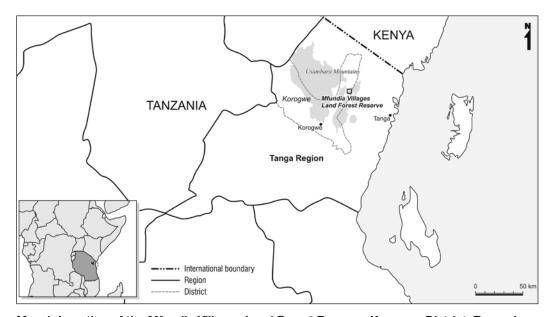
Ribot (2004) states that the benefits of decentralisation can be realised when decentralisation results in the transfer of meaningful powers to democratically elected and downwardly accountable decision-making bodies. Lund and Treue (2008) argue that decentralised forest management could form an important bottom-up supplement to the top-down promotion of democracy: forest management could offer rural people official rights to local forest resources, as well as direct and democratic participation in how these resources are managed. According to Lund and Treue (2008), local level management also contains the "self-correction potential" of addressing social inequities such as those related to elite capture and majority dominance. A key question in regard to the PFM initiatives is whether the political leaders are ready to establish a formal system according to which local people, through their advocacy organisations and decision-making bodies, for example, can effectively hold their elected leaders accountable to agreements on rights and responsibilities for forest resources, and their use, management and conservation.

According to Chambers (1989), a first step for enabling people to claim their rights is to provide information and then encouragement through the advocacy organisations and the judicial systems. Swantz (1990) suggests that instead of analysing the degree of people's participation, the concept of 'resistance' should be looked at more closely – oppositional forces in specific situations. Transparent participatory forest management could offer rural people an opportunity to hold their leaders accountable and show their oppositional forces towards elites and leaders. Quanghebeur et al. (2004 p. 163) argue that real participation can generate contestations, discussions, struggle and negotiation over the framework offered by the participatory approach: "In this sense we are able to re-consider the success and failure of participatory approaches not so much in terms of the effectiveness of their application, but rather in terms of the possibility to refuse their government." Mustalahti (2007a) argues that, although the implementation of PFM varies from country to country and even between different areas of the same country, PFM in a conceptual understanding should aim to include, as a minimum condition, the main principles of participation in that local people have responsibilities, not only as labour but also as decision-makers with control over resource use, management and conservation. This conceptual understanding of PFM was used here for analyses in four PFM case studies presented in what follows below.

## **Case studies**

In the four case study countries presented here, Finland has supported various forms of PFM based on the legal and political conditions in the recipient countries. The case study projects of the present study thus reflect different forms of PFM: (a) village forest management carried out by an individual village or group of villages (a case from Tanzania), (b) joint forest management in central government forest areas where local people participate in forest management and protection activities (cases from Mozambique and Laos), and (c) participation by individual farmers and households in farm forestry and in forest management in natural and planted forest areas (a case from Vietnam). These case studies were:

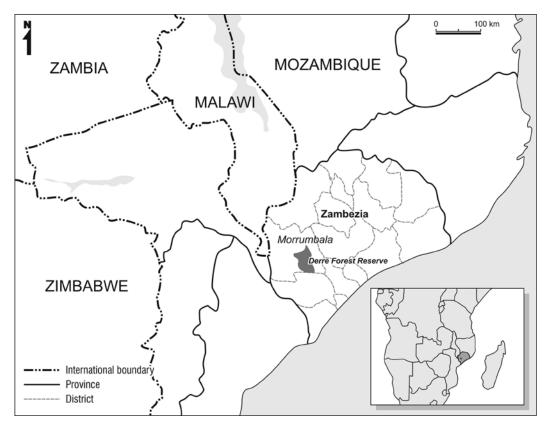
**Tanzania:** The objective of the East Usambara Conservation Area Management Programme (EUCAMP 1999–2002) in Tanga Region was to contribute to Tanzanian efforts to conserve biodiversity in harmony with the needs of local people (EUCAMP 1999).



Map 1. Location of the Mfundia Villages Land Forest Reserve, Korogwe District, Tanzania.

As a part of its project activities, EUCAMP operated under the Tanga Regional Catchment Forest Office, with financial support from the Government of Finland (GoF) and the European Union (EU). One of the Programme's activities was the establishment and management of planning of village land forest reserves (VLFRs), done in collaboration with District Councils. The Mfundia VLFR, in Korogwe District, was selected as a case study area for an action-oriented research project in 2003–2007. (Mustalahti 2006; Mustalahti 2007a).

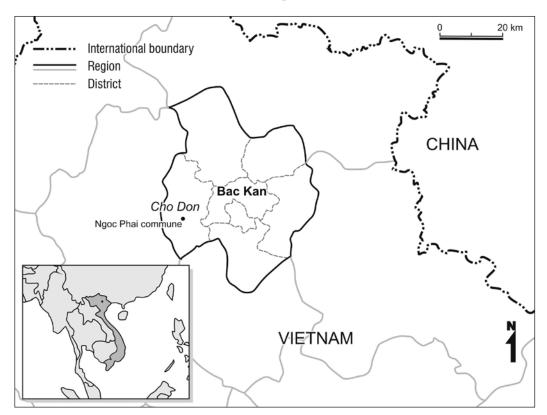
**Mozambique:** The GoF supported provincial forest services and forest inventories in Mozambique (Projecto de Maneio Sustentavel Recursos, PMSR) from 1999 until the end of 2004. During the process of developing sustainable PFM in Derre Forest Reserve, ACODEMADE (Associação Communitária de Defesa e Saneamento do Meio Ambiente do Derre), a community association, was identified by the PMSR Project to act as the principal coordinator and promoter of local activities.



Map 2. Location of Derre Forest Reserve, Morrumbala District, Zambezia Province, Mozambique.

The main objective of ACODEMADE was to ensure protection and conservation of Derre Forest Reserve, with the additional intention to set aside a 30,000-hectare forest area. The eastern side of the reserve was aimed to allocate for community concession management. In 2003–2007, the research aim was to study a forest management model that included the participation of ACODEMADE, the community association, local communities, the private sector, and provincial government authorities in joint forest management and conservation of a State-owned forest reserve (Mustalahti 2006; Mustalahti 2007a).

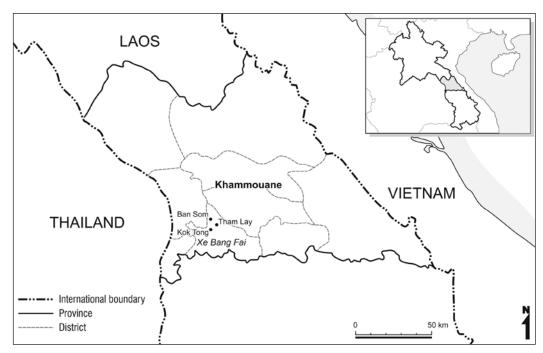
**Vietnam:** The Vietnam-Finland Forestry Sector Cooperation Programme (VinFinFor 1999–2003) focused on allocation of forest land to households and provision of microcredit for farm forestry and rural development initiatives in the communes of Bac Kan Province. The overall development objective of VinFinFor was to contribute to sustainable rural development in Vietnam's mountainous regions through the integration of forestry activities in rural land-use and economic development.



Map 3. Location of Ngoc Phai commune in Bac Kan Province, Vietnam.

The VinFinFor Programme assisted local authorities in the forest land allocation process, which was considered a precondition for the success of the programme, particularly in the areas of environmental protection, forest management and poverty reduction. Given the forest sector's long-term horizon, any investment in forestry requires security of land tenure at household level. The programme was not only concerned with the management of allocated forest lands, but also with broader issues of rural development and farm forestry in two districts in Bac Kan Province. The programme offered opportunities to study the implementation of PFM at the household level, along with wider aspects of livelihood resource management. The Cho Don Commune was selected as a case study area. (Mustalahti 2007a; Mustalahti 2007b).

**Laos:** The five-year Forest Management and Conservation Programme (FOMACOP) and its Village Forestry Sustaining Phase were implemented between 1995 and 2001 with financial support from the World Bank (WB) and technical assistance via the development assistance of GoF. The ongoing project is called the Sustainable Forestry for Rural Development Project (SUFORD) and it's main aim is the establishment of Production Forest Areas (PFAs) in the four timber-producing provinces – Khammouane, Savannakhet, Salavan, and Champasak.



Map 4. Location of case study villages in Xe Bang Fai District, Khammouane Province, Laos.

The FOMACOP participatory forestry model was based on 50-year land allocation contracts with village organisations, village forest associations, and the provincial governments. These contracts authorised villagers to manage State production forests in accordance with government-approved forest management plans. At present, forest management units (FMUs) representing collaboration between local villages and the district technical staff are still responsible for carrying out production forest management on behalf of the central government. In 2004–2007, a study was carried out which aimed to compare the PFM models of FOMACOP and SUFORD implemented in three villages, Som, Kok Tong and Tham Lay, all located in Xe Bang Fai district in Dong Phousoi Production Forest in Khammouane Province (Mustalahti 2007a; Mustalahti 2007b).

## Discussion of key findings

The key lesson learned from the case study countries was that through the forestry projects local people experienced and came to recognise that forests can provide both monetary and non-monetary benefits; this recognition has resulted in an attitude change towards forest resources (Mustalahti 2007a). The nature, value, amount and current availability of the benefits derived was less important, since for the attitude change, it was more important that local people came to see themselves as participants in forest management and as conservers, not just as consumers (Mustalahti 2009). However, after all the case study projects of PFM, it is still questionable how committed the political actors are towards institutionalisation of PFM and providing support to communities so that these communities obtain benefits from living within a forest harvesting activity area (Mustalahti and Lund 2010). This lack of political will has resulted in legal frameworks and implementation processes that do not improve rural livelihoods. The findings from the case studies presented here show that PFM faces resistance by the very same central governments and sub-national level administrations that proclaim support for the PFM, and that this resistance restricts the viability of PFM to a great degree, as discussed in the sections below.

# A house with an unstable building site: Vested interests in forest governance

Even in the rare cases where all of the legal factors, for example, supportive laws and regulations, are in place, there appears to be a large number of institutional and governance related barriers to PFM. In all four countries,

particularly in the areas where significant high-value timber exists, a struggle appears to be taking place: sub-national administrations have no or very few incentives to promote PFM, and they become gatekeepers to the forest resources in order to ensure institutional and personal benefits (Mustalahti and Lund 2010). The analysis in our case studies has revealed obstacles to the implementation of PFM which are connected to the personal interests of actors at various levels of government. For example, In Tanzania, PFM provides a legal framework for village governments to assume control and management of forest areas, and has been shown to significantly reduce the effects of uncontrolled logging and forest disturbance (Mustalahti 2007a; Blomley et al. 2008a). In such cases, sub-national authorities and in some instances even national forest authorities find that they face a clear conflict of interest over the continued benefits they enjoy from illegal harvesting in unreserved forests, which conflict with their responsibilities to assist communities in securing tenure and forest management rights under PFM. This conflict of interest often manifests itself through the slowing down of key stages in the legal process of PFM establishment, such as district or regional authority approval of forest management bylaws, management plans, and benefit-sharing agreements (Mustalahti 2007a, Blomley et al. 2008b). This was also recognised in Mozambique and Laos, where investors, mainly foreign, obtained large allocations of forest concessions, while PFM was proceeding very slowly (Mustalahti and Lund 2010).

However, forest governance also seems to have problems at the community level (Mustalahti and Lund 2010) since the transfer of forest management to come under the control of mandated local institutions with clear roles and responsibilities seems to undermine some of the corrupt networks that perpetuate illegal logging, leading to declining benefit flows to those higher up the chain. For example, in Derre Forest Reserve in Mozambique, a group of community 'fiscais', a patrol team that works voluntarily to stop illegal logging in the reserve, reported that their work is dangerous because illegal loggers are violent, and community members who are involved with the illegalities may also act aggressively towards the patrol teams. The simple licence holder – normally local private people – who pay for a licence, which costs USD 10-40 per cubic metre depending on the species, have been known to have obtained credit from Chinese timber exporters to pay the licences and are using local community members as labour. In Mozambique, as well as in Tanzania, the Chinese and other foreign investors are very powerful in the forestry sector because of their financial capacity to cover the costs of all licences needed, such as logging, transport and export licences, as well as other costs in terms of the demand for 'tribute' or more direct bribes at various levels of the society. Millega et al. (2007) and Mustalahti and Lund (2010) report a common problem in developing countries: the centrally placed forest officers, who control the issuing of licences for valuable timber, are dismissed at regular intervals for issuing too many logging licences, accepting tribute or allowing illegal export. Based on the arguments of NGOs, local newspapers and sawmill operators, the forest authorities and their political leaders are either unable to or are uninterested in stopping the illegal logging, which is being driven by the strong demand for logs in the export markets (Mackenzie 2005; Mustalahti and Lund 2010).

The decentralised model of forest management confers a large number of responsibilities on local government and civil servants, whose working facilities and conditions are for the most part very poor. In all case study areas, the district forest authorities were expected to change from operating as forest guards to becoming facilitators and extension providers responding to local needs. At the same time, there were simply no funds for extension services to provide information on PFM, and the civil servants were too occupied with other activities, such as issuing logging licences, that brought money into the official and practical system. There are several reasons for this, including the low salaries paid to civil servants, and a lack of capacity in financial management to ensure a transparent way to collect the royalties. It cannot be denied that corruption at different levels in these societies is the fundamental reason for the disappearance of funds in the forestry sector. It seems that donors are promoting the forestry sector in these counties without seriously trying to face the prevailing reality. In all four case study countries, the forestry sector is very dependent on foreign funds from international donors, while valuable forest resources are disappearing without collection of revenue. In addition, there is continuous misuse of donor funds in the forestry sector; but the donors are still supporting sectoral programmes through government structures, and have not developed more transparent ways to support forestry initiatives.

It appears that in all four case study countries central governments have a great interest in commercial timber exploitation, and are without clear ways to promote PFM in which communities and sub-national forest authorities could legally benefit from the local resources. The situation resembles a house with an unstable building site in that the lack of central government interest in promoting good forest governance, which would ensure adequate benefit sharing and revenue collection, forms a shaky foundation for the long term viability of PFM.



Picture 1. Collapsed building in Derre Forest Reserve in Mozambique: The funding budgeted to build the local forestry training centre never reached the community level and the building site was finally washed away during the rainy season.

# A house without strong walls and roof: Lack of forestry extension and market access

The viability of people's participation in PFM activities is still questionable in all four case studies, because it appears that all four projects in the study had relatively limited tangible impacts on the long-term access of people to information and benefits. Mustalahti (2007a) found that extension services, market access, and marketing information were the three most difficult elements for the projects to sustain. For this reason, there is a genuine risk that after the participatory projects end and donors leave, local people will be employed only as a short-term labour force in forest management and protection. For example, in the case of joint forest management between government authorities and local people, the risk is that local people used as the labour force, often even without any guarantee of being paid and do not feel responsible for the resources. In a later study, Mustalahti (2009) argues that the local people's attitude towards forest resources differs according

to how far they can make decisions over use of local resources and how much they can generate benefits from forests while participating in the PFM activities. In all four case study countries, there seems to be difficulty in ensuring the presence of legal and honest markets for forest products from PFM areas. For example, in Tanzania, the village governments pointed out that in future they would like to sell timber from their village forest, but that this might be difficult because they do not know: (a) the prices of timber, (b) which tree species are most valuable as timber and (c) what the sustainable harvesting level per year is (Mustalahti 2009).

In Mozambique, the case study project facilitated income-generating activities such as carpentry, beekeeping and fish farming. Observations made during interviews held after the end of the project showed that when the project was over the majority of the trained people stopped these activities. Mustalahti (2006) reports that the main reasons offered for this by the carpenters and beekeepers interviewed were: (a) the communities were far from markets and this meant difficult market access, (b) they lacked skills and the capacity to organise transport, purchase tools, and (for the carpenters) materials such as good quality, legally harvested timber, (c) there was difficulty in producing high-quality products to the standard demanded by the external markets. The local environmental association reported that farmers failed to continue the activities because the external facilitation and the capacity building in these three key issues had ended when the project phased out. The local extension organisations, such as local government and regional agriculture and forestry authorities, are very weak in providing long-term capacity building input, due to lack of funding, human capacity and motivation to work in remote areas (Mustalahti 2006). Similar problems were also reported in Tanzania: there were no phasing out strategies to ensure sustainability, and local authorities in both Mozambique and Tanzania expected that there would be some additional donor support from Finland. However, the donor, the Ministry of Foreign Affairs of Finland, decided to support other areas and projects as well as allocate funds to the direct budget support of government budgets rather than to specific projects. Due to the fragmented donor support, funding for PFM projects in both the case study countries ended.

According to the households interviewed in Vietnam, their main motivation for forest protection is production of non-timber forest products (NTFPs), which can be collected from the protected forest areas. In 2005, all case study households received additional income and supplementary food security from forest products. For example, they sold bamboo to a chopstick company and to a paper factory owned by the forest enterprises,

and used other NTFPs for their own home home-use or sold them at local markets. In 2005, one of the case study households managed to earn USD 160 by selling bamboo from their 4.7 hectares of protected forest. This was a relatively good income opportunity for the household, considering that in Ngoc Phai commune the average yearly income per household is USD 830 (Mustalahti 2007b). However, the price of bamboo is still low, and individual households do not have options to negotiate the prices, because these are regulated by forest enterprises owned by the central government. For that reason, the project promoted agroforestry models and introduced fruit trees and multipurpose trees for steep slopes. However, the project finished before it had managed to help farmers find markets for their products. Because of the lack of markets and marketing extension services related to their agroforestry crops, some of the households decided to convert their forest land into monoculture maize, cassava and elephant grass to use as fodder for pigs, cows, buffaloes and chickens (Mustalahti 2009).

In Laos, an earlier project (1995–2000) in the case study area emphasised the knowledge of village level organisations to estimate the annual sustainable harvesting level. For example, forest inventory activities were carried out during village level training and extension. Currently, the forest management units (FMUs) operating under the district administration are the recognised State organisation for forest management, and FMUs are responsible for sustainable management of the production forest areas in the district. According to the village forest committees, the villages have not been empowered to make decisions on, for example, permissible species and logging level per year, nor can they negotiate prices for the timber in their village. In 2006, the new management system report implies that, for example, a village called Som received USD 923 for timber. Under the earlier system implemented in the earlier project, the same village earned USD 14,000, or c. USD 4650 per year from competitive bidding for timber from the village forest management area during the three years 1997–1999 (Mustalahti 2007b).

It is still argued that very little forestry extension is carried out without donor funds (Mustalahti 2006; Mustalahti and White 2007; Mustalahti and Lund 2009). The experiences from the four case study countries discussed here show that, in spite of a relatively conducive legal framework, administrative discretionary powers working against PFM constitute a massive constraint on implementation of forestry extension, particularly in regard to marketing. Especially in areas where the government authorities and civil servants stand to lose control over financially valuable resources, there seems to be very little interest in providing communities with access to resources and the

capacity to utilise these resources legally (Mustalahti 2007a). PFM without forestry extension and market access is like a house without strong walls and a roof: PFM requires strong commitment from community members; and poor people simply cannot afford to spend their time on forestry activities if their net output is negative. The house will fall apart if the skills, knowledge and funds to maintain the walls and roof are lacking.

### **Conclusions**

PFM requires radical reforms in forestry and land laws, but must also be supported by reforms in sub-national forest administration and financing of forestry management and protection. Despite a number of positive reforms in the four countries studied, the "promise" of PFM to improve livelihoods does not appear to have materialised. However, it could be argued that PFM is currently not only rhetoric: communities do manage their forests, and local participation in resources assessment, management and protection is a reality in all four case study countries. The key question is the viability of PFM activities in long run. The donor presence is still very visible in the forestry sector in all four countries; and there are clearly still problems in devolving actual benefits to the people. When donors were present, the villages received regular extension services, however, these services were mainly related to awareness raising and establishment of management agreements. Actual benefits from extension services in terms of knowledge of market values and benefits from actual revenues or salaries are still not there. The failure to define costs and benefits, as well as the allocation of rights and responsibilities among the sub-national forest administration, the communities, and the private sector, are risks to the long-term viability of PFM.

In all four case study countries, current heavy donor dependence in the forestry sector has meant that provision of extension services has been very uneven and subject to availability of project funds. Without strong measures to improve forest governance, particularly in addressing illegal logging and improving revenue collection, finance forestry extension, and improving market access, the viability of PFM will be limited. Improved forest revenue collection could improve public finance potential at the village level, as well as provide funds for sub-national level forestry authorities to carry out extension services. Still, the commitment to PFM on the part of sub-national administrations and national governments in all four case study countries is questionable, partly because of the unclear benefit sharing and taxation mechanisms. Clarifying these mechanisms seems to be a very difficult issue to

tackle through donor support. When donor support is based on the financing negotiations and agreement between national and international actors, there is a risk that donors will end up supporting only the establishment of new PFM areas but not the creation and implementation of viable mechanisms for management and benefit sharing with clear national commitments to PFM.

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### **Comments**

Jesse Ribot

Abraham Lincoln noted that "a house divided against itself cannot stand." He was paraphrasing Jesus: "...Every kingdom divided against itself is brought to desolation; and every city or house divided against itself shall not stand" (King James Version of the Bible, Matthew 12:25). Lincoln and Jesus were talking of divisions within society. But these divisions, whether territorial or class based, are reproduced within the House of State. Governments must speak across divisions – appeasing the poor with promises of a better life while assuring security for the rich and landed. In so doing, the House of State is always divided against itself. Herein lays the paradox. Governments stand precisely through double talk – contradictory speech across lines of division.

Mustalahti observes, "PFM faces resistance by the very same central governments and sub-national level administrators that proclaim support for PFM". PFM is divided against itself. Should this surprise us? No indeed, given how common sustainable contradictions are, they should be at the centre of our analysis. Such divisions are not cynical plots to deprive the poor of their due. They are part of statecraft. They are part of double mandates and the contradictory requirements of state, that manifest as tensions faced by the honest forester who needs to create harmony and bring in taxes for government, the project manager who must manufacture success for donors to keep the funding flowing, or the honest bureaucrat who cannot take the risk of empowering villagers for fear of relocation to a horrible post if things go wrong.

These tensions reside within people who believe in local rights while also being trained that "business is business and business must grow!" (Dr. Seuss 1971). Conservation and management must serve exploitation, taxation and the generation of foreign exchange. Local people then must be harnessed to these ends through conservation projects that barely pay them anything, and through conservation consciousness generated from forest benefits. The contradictions are built in. The interests are indeed, as Mustalahti suggests, 'vested' – whether or not all actors honestly wish for better livelihoods and lives for the resource-dependent poor. So, we need to pay more attention to how policy makers, administrators, front-line foresters, donors (including bureaucrats in the cities or the national capital, and front-line practitioners) perceive, confront, navigate and resolve such tensions. We usually observe

their outcomes, as Mustalahti has done so well. But, we need to attend better to the generation of these very contradictions, and pay more attention to the politics and cultures of government and administration that sustain them.

Mustalahti shows that resistance is not limited to peasants (a la Scott 1976). States too drag their feet (see Poteete and Ribot, forthcoming): they commonly slow approval of community forests while allowing commercial concessions quick passage. Forestry administrations have many mechanisms for doing this. History tells us where these instruments come from. Setting licensing fees is an old and tested means of keeping the poor from access to forestry profits. These fees block access and slow approvals. For example, administrators in the tropical hardwood forests of the south coast of West Africa focused their attention on cornering the lucrative timber markets for their European clients. The colonial historian R.L. Buell reported that "Before 1924, natives held [forest] concessions and sold wood upon the same basis as Europeans. But the competition became so keen and native cutting so difficult to control that in an arrêté [administrative order] of 1924, the government declared that a native could not cut and sell wood except for his own use without making a deposit with the government of twentyfive hundred francs - a prohibitive sum" (Buell 1928:II256). He goes on to say that the same system of concessions is also used in the French Congo, resulting in "...the locking up of the resources of the territory in the hands of a dozen large companies..." (Buell 1928:II256).

Local people are not just kept out of markets. They are also given low prices when they manage to enter markets, as in Mustalahti's case of bamboo in Vietnam, where they have little power to bargain with the monopsony or oligopsony urban-based or large-scale buyers - all usually also supported by licensing, permit and tax policies that are rarely challenged by donors. Donors too do not want to make waves. They rarely challenge powerful interests within forestry markets. Indeed, in the case I know best, Senegal, the donors (most recently the World Bank) work with the merchants, with the false justification that they can only progress in gaining access for the poor by cooperating with those who control marketing – in the process consolidating market access control by the rich few. In this context, donors, governments and large NGOs make promises they cannot fulfil. They give with one hand and take back with the other. They promote participation in conservation while supporting exploitation by the wealthy. They are divided against themselves. Divisions generated outside can also be internal to 'communities'. One member has Chinese backing for licence fees to exploit commercial timber, while the others are trying to guard the forest against overcutting.

Capital penetrates state and 'community'. To reconfigure an old phrase, today 'China is knocking down all walls'. The walls of the house of participatory forestry, which Mustalahti likens to outcomes of PFM, are weak. The roof, which Mustalahti analogised as the market, provides little shelter – and could crush the inhabitants when the walls fall. Access to markets is never uniform and fair. Some get in and others do not. The roof's uneven weight brings down the walls it weakened. When a village woodcutter is in the market and the conserver is not, they are at odds. Indeed, conservation and production are often divided into market and non-market affairs. The work of conservation is rarely viewed as labour - it is not salaried or directly remunerated. It is paid in a stream of public goods over years. The lack of direct remuneration for conservation is another place where market access is skewed. The building of a highway is considered an act of labour. Yet, maintaining a public forest is not. While communities benefit from the commerce a highway brings, nobody today would ask communities to build a highway without pay. In the colonial period, roads were built by forced labour called corvée. Is participation in conservation just modern corvée? To place woodcutting and conservation on an even footing, immediate remuneration for labour would be a positive step. Differentiated remuneration is divisive and destructive. When participatory forestry is for those who are excluded from markets (and wages), those community insiders who are paid cash to cut for outside merchants become one more tool to knock down the house of participation.

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#### FOOTPRINTS IN FORESTS

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Does Finnish forestry assistance matter? What are its footprints in forests and forest policies? This book, based on the results of a major research project and some related research, argues that although the direct effects of Finnish forestry assistance are more clearly seen in forest policies than in forests themselves, its impacts go beyond its seemingly modest effects. Forestry assistance has, as a part of a larger aid complex, in many ways affected states and societies, and what happens in the forests is ultimately dependent on how the political and social forces work.

With an introductory overview and case studies from Tanzania, Mozambique, Vietnam, Nepal, Laos and Central America, Footprints in Forests aims to demonstrate the complex reality and manifold consequences of Finnish supported forestry interventions and to give examples how the effects and impacts of Finnish forestry assistance can be seen from different perspectives. Finland has been keen to provide 'value-added' through forestry assistance which has taken many forms. The main aim of this book is to stimulate informed discussion on these issues in such a way as to contribute to the search for new practices.

The authors of the book are researchers who have followed the changes in Finnish forestry assistance though careful field work in Africa, Asia and Central America. They have been affiliated with the Institute of Development Studies (IDS), now part of the Department of Political and Economic Studies at Faculty of Social Sciences, University of Helsinki.



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