

A Fair Share: sharing the benefits and costs of community-based forest management.¹

Sango Mahanty², John Guernier

Abstract

Community-based forest management has attracted significant attention in Asia, in part because of a belief in its potential to improve the welfare of the estimated 450 million impoverished people living in and around forests in Asia. The extent to which this potential is realised, however, depends strongly upon whether communities are able to secure the benefits that community-managed forests generate, and whether these actually reach the poorest at the community level. In addition, communities need to see real benefits in return for their time and energy expended in forest management in order to make a long term commitment to sustainable forest management.

This paper reports on recent work by the Regional Community Forestry Training Centre, which analysed Asian experiences in benefit and cost sharing in community-managed forests. RECOFTC facilitated a reflective process in 3 countries of the Mekong, and used the findings from this to stimulate discussion on benefit and cost sharing issues amongst a group of senior policy makers from 14 countries in Asia. The paper highlights institutional and policy constraints that need to be addressed for communities to secure a greater share of benefits from community-managed forests. It also discusses factors that constrain equitable benefit sharing within communities, particularly community level governance arrangements.

1. Introduction

Recent years have brought a marked expansion in Asia of community-based forest management (CBFM) in its various guises, with an estimated 18% of Asia's forests now under some form of joint or local management (Reeb and Romano 2007). Initially supported by governments as cheap mechanism for reforestation, CBFM is now viewed as a potential pathway to reduce poverty amongst the estimated 450 million plus rural poor who live in and around forests in Asia (ADB 2003). The extent to which this potential can be reached, however, depends both upon the place of CBFM in the wider rural economy and landscape, and its specific role in building up the assets of the poor (Mahanty *et al.* 2006).

There has been much recent debate on the role of forests in rural poverty reduction (Angelson and Wunder 2003; Sunderlin *et al.* 2005; Mahanty *et al.* 2006; Belcher and Schreckenberg 2007). While not providing a conclusive answer to this question, the debate has served to identify critical variables and issues that must be considered in the fray including:

¹ Paper for IASC 2008 Theme on Understanding the Benefits of the Commons

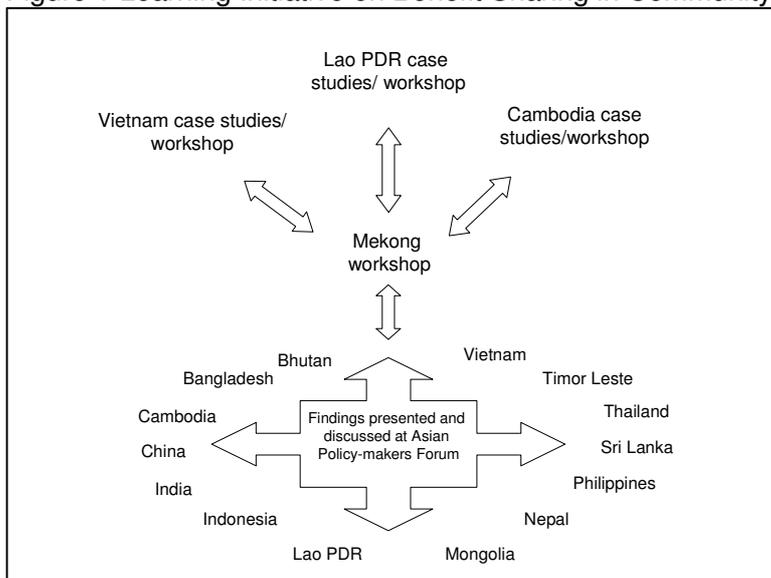
² Sango Mahanty formerly worked with RECOFTC, and is the corresponding author for this paper: sango.mahanty@anu.edu.au

- the role of non-forest livelihoods,
- the role of forest products as well as services,
- production chains rather than just direct use and sale of raw forest products, and
- the varying contribution of forests according to the socio-economic context from *poverty mitigation/avoidance* (providing a safety net from destitution and hunger for poor households), to *poverty elimination* through asset building and other lasting welfare improvements (Sunderlin *et al.* 2005).

While recognising the importance of this poverty-forests discourse in framing our topic, we largely skirt the question of the comparative worth of forest-based versus other pathways to poverty reduction. Our interest in understanding the potential of CBFM leads us to hone in on the factors that constrain and enable a workable scale of benefits to be generated through CBFM. This can contribute to an understanding of whether CBFM can play a meaningful role in poverty reduction, as well as whether it is providing sufficient incentive for communities to make long-term investments in sustainable forest governance.

The findings presented here are not based on field research, but draw from a series of case studies and discussions by practitioners and policy makers, known collectively as the 'learning initiative on benefit sharing in community based natural resource management'. These have been documented in two publications, and some highlights are synthesised here (Mahanty *et al.* 2007; RECOFTC 2007). The learning initiative involved a series of case studies and workshops, initially focusing in the Mekong region (Figure 1). We then expanded the geographic focus to Asia, while narrowing the scope of discussions to look specifically at community-based forest management. The national workshops were facilitated by WWF Greater Mekong Program with support from RECOFTC, the Netherlands Development Organisation (SNV) and a number of national partners. Regional processes were facilitated by RECOFTC, with support from WWF Greater Mekong Program, SNV, FAO and other partners. The synthesis of experiences from the Mekong region served as a stimulus for discussions in the wider Asian context. The role of the authors in this process has been of facilitators, documenters and synthesisers of emerging issues and lessons.

Figure 1 Learning Initiative on Benefit Sharing in Community Based NRM



2. Analysing the benefits and costs of community-based forest management

The process outlined in Figure 1 was guided by an analytical framework that drew on commons research. A working definition of benefits and costs was elaborated through a process of discussion (see Box 1).

Box 1 Potential benefits and costs of CBFM

The are potential **benefits** of CBFM are:

Social: strengthening and development of coordination and governance mechanisms, relationships and networks (social capital); political empowerment; creation of local work opportunities; institutional enhancement, tenure, capacities, welfare and security.

Economic: access to NTFPs and timber for direct household use; income from sale of NTFPs, agro-forestry yields, timber and environmental service markets; employment in CF activities.

Environmental: maintenance of environmental services (biodiversity, soil health, agricultural productivity, carbon sequestration, air and water quality), enhanced and well-managed forest resource. (Adhikari and Lovett 2006; Tyler 2006; RECOFTC 2007)

The **costs** of CBFM include the time, money and opportunities foregone in:

- negotiating property rights;
- gathering information for management planning;
- negotiating and designing management arrangements;
- regenerating degraded resources;
- monitoring compliance with rules; and
- foregoing alternative uses of time and of land/resources (Adhikari and Lovett 2006, Jones 2004; RECOFTC 2007)

Previous commons research has established that the benefits or otherwise of resource management systems emerge through an interplay of governance arrangements at various levels, resource conditions, and socio-economic conditions, amongst other factors (Agrawal and Gupta 2005; WRI *et al.* 2005).

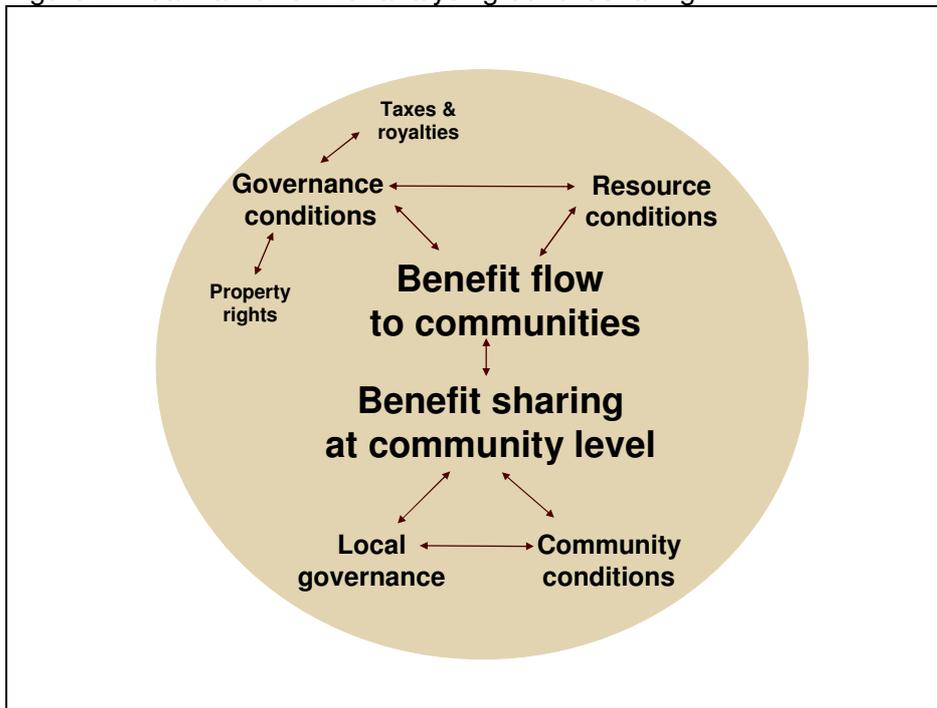
Clear property rights, while not the only factor, have long been recognised as an important pre-condition for effective management of the commons as they affects people's incentives, actions and, ultimately, economic and resource outcomes (Schlager and Ostrom 1992; Johnson and Forsyth 2002). This is clearly an important area to be explored in terms of benefit flow, although others have added that it is not just the *endowment* of rights that matters, but the *entitlement* to exercise these in practice, which may be enabled or constrained by factors such as capacity, social differentiation and governance processes at various scales (Leach *et al.* 1999). In other words, discussing property rights in isolation is not meaningful. The influence of other political, governance and capacity factors at different levels need to be considered, as these influence how rights are realised in practice.

There is a rich literature now on internal differentiation within rural communities in terms of household and individual assets and livelihood flows, exposure to social marginalisation and risk, and political disenfranchisement (summarised in Carter and Gronow 2005 and Hobley 2007). This highlights the importance of understanding local disparities that might emerge in sharing the costs and benefits of CBFM. Furthermore, it touches on the need to look beyond financial benefits to consider the interplay of a range

of assets (human, natural, socio-political and physical), flows and capabilities, all of which may contribute to or alleviate poverty (World Bank 2002; Brocklesby and Hinshelwood 2001; Hobley 2007).

This initial understanding of relationships was the basis for an analytical framework to examine experiences and emerging issues in benefit sharing (Figure 2). The framework directs attention to two levels in understanding benefit sharing issues: what benefits actually reach communities through CBFM (referred to here as *benefit flow*) and, secondly, how benefits and costs are distributed at the community level (referred to here as *benefit sharing*).

Figure 1 Initial framework for analysing benefit sharing



In examining *benefit flow*, two key influences were explored around broader governance conditions: 1) property rights and 2) other policies and laws governing commercial use of resources such as permits, taxes and royalties. The relationship between the health and productivity of the resource endowment and the scale and timing of benefit flow was also considered.

In terms of local *sharing* of benefits, analysis focused on the influence of local institutions and governance processes, participation, decision making processes and community conditions (essentially internal differentiation) to understand who gained what from CBFM.

An assumption behind this two-tiered approach is that distributional inequities in CBFM are reinforced by local as well as wider societal processes (Hobley 2007). This was borne out in discussions, although the background of participants as well as the regional context of the discussion weighted discussion more towards factors affecting benefit

flow. We also found deficiencies in applying this kind of binary framework, which are taken up in Section 5.

3. Benefit flow to communities

As outlined above, we focus here on three areas of influence: property rights and resource endowments for community-managed forests; the role of policies and laws controlling specific uses of such forests and revenue sharing; and the level of transparency in policy processes.

3.1 Property rights

Community-based forest management varies significantly across Asia in the nature and duration of rights provided to communities (Table 1).

Table 1 Overview of rights associated with CBFM in Asia

Country	Forest ownership	Other rights
Bangladesh	State owned.	Access to timber and NTFPs
Bhutan	State owned.	Management and use, conditional on continued care for forest (can be revoked for unsustainable use)
Cambodia	State owned	Management and use
China	Owned either by the State or transferred to collectives in some provinces	Collectives can lease the forest areas to households, agricultural cooperatives, and private companies. Extensive rights to use, manage and transfer plots are allowed in theory, but in practice are often limited through regulations that determine what species can be planted, harvest quantities, transfer of lease titles.
India	State owned.	Management and use.
Indonesia	State owned.	Use and management rights on three terms: partnership between forest company and community forest group; community forest development; and village forest development.
Lao PDR	State owned.	Use and management rights.
Mongolia	State owned.	Management and use through long term leases over community forests.
Nepal	State owned.	Use and management rights for CFUGs over community forest areas.
Philippines	State owned.	Use and management of designated community forests.
Sri Lanka	State owned.	New law under development providing rights to develop, manage, use forest resources
Thailand	State owned.	Management and use rights.
Timor Leste	State owned	Community forestry policy still under development.
Viet Nam	State owned.	Forest land allocation through long term leases to household level and village level with extensive use (timber and NTFPs), management and transfer rights.

Source: RECOFTC 2007

The table highlights that while CBFM is generally based on rights to use and manage specific forest resources, ownership of the forest land generally remains with the State.

China and Viet Nam differ. In the case of China, substantial use and management rights over collective forests have been allocated to individual households and local collectives for 30-100 years (Hyde *et al.* 2003; Guangping and West 2004; Zhang and Kent 2005). In Viet Nam, similar long term leases with extensive rights are being provided through the government's Forest Land Allocation program, initially to individual households and now, at a pilot level, to communities (Nguyen 2005). In other cases, rights are limited to use and management of specific resources, which according to previous commons research, may provide a less effective basis for local forest governance (Agrawal and Ostrom 2001).

Added to this, access to NTFPs is generally more open than access to higher value commercial timber resources. Timber harvesting tends to be either highly regulated or, in Thailand and many provinces of China, not allowed at all due to logging bans in natural forests. The outcome of this further regulatory layer for higher value resources means that the potential flow of revenue from community forests, considering the available or future timber resources, is often not realised. As arrangements for sustainable management of harvest are put in place, policy makers acknowledge that the complexity of permit systems need to be reduced to open up timber harvesting opportunities to communities (RECOFTC 2007).

The duration of rights enabled through CBFM also varies in the region. In Viet Nam, for example, rights are conferred for a 50 year period, in Philippines 25 years, and in Indonesia arrangements range from 25-35 years. The duration of rights has implications for the willingness of community members to make long term investments in forest management, and ultimately the duration of benefit flow from community-managed forests (RECOFTC 2007).

Finally, the resource endowment determines what resources are immediately available, as well as the investments that may be needed to achieve a productive resource base. Across Asia, degraded lands have been the first target for CBFM, with some schemes also operating in production forests and buffer zone areas. In countries such as India, for example, CBFM has remained an intervention for degraded lands, although areas adjoining protected areas are now being considered. Some countries are experimenting with the allocation of higher value forest resources. In Philippines, Bhutan, Nepal and Mongolia, for example, community-managed forests also encompass some areas with substantial forest resources (RECOFTC 2007).

The dominant focus on degraded lands often stems from a lack of trust in community capacities to effectively manage higher value forests, as well as maintaining a stake for the State in forests valuable resources (RECOFTC 2007; Gerrard 2007). Some policy makers flag that allocating higher quality forest can pave the way for conflict related to geographical disparity in access to high value resources. In Bhutan, for example, officials anticipate that the scarcity of forest in some areas could eventually create disparities as communities gain access to different quality forest areas. An emergent issue, also relevant in other countries (Box 3), is the scope for conflict amongst communities and between communities and the State (RECOFTC 2007).

Box 3 Terai forests in Nepal

High timber values in the *Terai* forests, and the intent to share returns with distant users of high value forests, has led the government to manage these areas through a new

modality called Collaborative Forest Management (CFM). CFM shares forest management responsibilities and benefits between the central Government, Village Development Committees, and elected CFM committees, which represent both nearby and distant forest users. Unlike the long-established CF arrangements in the hills where CFUGs retain 100% of revenues generated from community forests, two key timber species in the *Terai* (*Shorea robusta* and *Acacia catechu*) are taxed at 15% when sold outside of the user group. This disparity in benefit flow from CF and CFM areas has led to conflict between user groups and government, particularly as the costs of management by CFUGs are not factored into revenue distribution in CFM

(RECOFTC 2007; Bampton and Cammaert 2007).

3.2 Other policy and legal controls on community-managed forests

Even where countries have supportive policy and legal frameworks for CBFM, tight controls usually apply to commercial use of community-managed forests. Additional permits and licenses must often be gained to harvest, transport and sell of high value resources, which can create a complex maze that must be navigated to actually gain a revenue stream from community-managed forests.

In the Philippines, for example, the same complex regulations that apply to large scale commercial logging operations are applied to community-managed forests. In order to harvest and sell timber from recognised community-based forest management areas, communities must submit comprehensive management plans prepared by professional foresters, and obtain separate permits for harvesting, transport and other operations. This in turn fuels corruption as each permit creates opportunities for rent seeking by officials. Once achieved, harvesting privileges have at times been cancelled without due process, creating an environment of uncertainty for resource users (Dugan and Pulhin 2007; RECOFTC 2007).

Revenues from forest resources, particularly higher value ones like timber, generally attract taxes and royalties (see Table 2). The apportioning of income between communities and the State varies substantially between countries.

Table 2. Revenue distribution from community forests

Country	Policies or guidelines regarding revenue from community forests
Bangladesh	<ul style="list-style-type: none"> • Determined through Participatory Benefit Sharing Agreements for Social Forestry programs (e.g. 1) for Sal Coppice Forest Cons and Devt: FD 65%, beneficiaries 25%, Tree Farming Fund 10%; 2) for strip plantations, FD10%, Land owning agency 20%, beneficiaries 55%, Local Union Council 5%, Tree Farming Fund 10% • Apart from timber revenues, villagers able to use thinnings, fruit, and grow other crops in the woodlot peanut, ginger, turmeric etc).
Bhutan	<ul style="list-style-type: none"> • No royalties paid for direct use • All forest products sold are subject to market sales tax of 5%.
Cambodia	<ul style="list-style-type: none"> • No royalties paid on NTFPs or timber for direct use. • Commercial use of timber and NTFPs require permits and level of royalty is to be set by a joint Prakas (Decree) by the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Economy and Finance.
China	<ul style="list-style-type: none"> • Revenue sharing depends upon local management regimes (i.e. whether land management is communal or allocated to individual households) • Taxation rates and regulatory fees for forest products vary across counties and provinces and are dependent on types of forest products. The central government is making efforts to clarify the system of taxes and fees and thereby reduce the financial burden (on average 50% of gross revenue of forest products) it places on rural

Country	Policies or guidelines regarding revenue from community forests
	populations (Liu and Landell-Mills 2003).
India	<ul style="list-style-type: none"> Royalties set at province level. Usually 100% of NTFPs and other intermittent yield products (e.g. thinnings) go to community. For commercial timber, a portion is paid to the province government (typically between 10-25%, depending on the province)
Indonesia	<ul style="list-style-type: none"> In Java where the forest area managed by Government Company (PERHUTANI), the share revenue for partner maximum 25% of total revenue from standard price of timber product, while timber tax (forest product provision) paid by the company. Agro forestry yield 100% for partner (Executive Director Guideline of PERHUTANI Co. No. 1/2002);
Lao PDR	<ul style="list-style-type: none"> Under MAF Regulation 0204/2003, log royalties from competitive timber sale as follows: 30% to national treasury, 20% to Forest Development Fund (national), 25% to District Forest Mgt Unit for operations and implementation costs, 25% to Village Development Funds. Revenue from NTFPs is unregulated.
Mongolia	<ul style="list-style-type: none"> None developed so far.
Nepal	<ul style="list-style-type: none"> CFUGs retain 100% of takings from NTFPs and timber, except for the following species if sold for commercial purpose outside CFUGs, for which a 15% royalty is paid to central government: <i>Shorea robusta</i> and <i>Acacia catechu</i> from the Terai region.
Philippines	<ul style="list-style-type: none"> CBFM beneficiaries can retain 100% of income from trees planted by them, but for natural forests (timber and NTFPs) a 25% royalty is paid to government.
Sri Lanka	<ul style="list-style-type: none"> Legal arrangements currently under development.
Thailand	<ul style="list-style-type: none"> No rules specified, though in practice NTFPs are unregulated. Logging ban means no legal timber harvesting.
Timor Leste	<ul style="list-style-type: none"> None developed so far
Viet Nam	<ul style="list-style-type: none"> For commercial use of NTFP, a royalty of 5-25% is paid to the government, depending on the specific species. Individual and community forest owners can take 100% of timber revenue from any forest they have planted (corporate owners pay 2% tax) (Nguyen pers. comm.) For poor forest, the timber revenue kept by individuals and communities depends on the number of years they have protected the forest. For commercial timber a tax of 15-45% is collected by government, depending on the specific type of timber. For natural forest, Decision 178/2001/QĐ-TTg specifies that forest "owners" can keep 2% of the incremental value of timber achieved since the forest was allocated. In practice, the actual percentage applied varies between provinces and is higher than 2% in early community forestry provinces where better data exists for calculating incremental growth.

Source: RECOFTC 2007

A critical point of discussion in relation to revenues was: what is an appropriate level of return to communities relative to the State? A number of considerations emerged on this point.

In South Asia, Viet Nam and China, the trend is towards liberalising returns from community forests in favor of the local communities. This has come first with the direct and commercial use of NTFPs, while in most cases a proportion of timber revenue is held by Government. The situation with Nepal's community forestry in the hills is an important exception to this, where communities can hold 100% of revenues from community forests. This is generally viewed as providing a strong incentive for effective forest management. As well as minimising taxes, several Forum participants also suggested that subsidies for forest management should gradually be minimised to encourage community forests to be managed as a commercial enterprise (RECOFTC 2007).

In setting revenue levels, the costs incurred by communities in managing the resource are generally not considered. The *Terai* case discussed earlier highlights the disincentives created for communities if they are investing in forest management, but their costs are not recognised or factored into benefit distribution. One example of an attempt to factor in costs is the application of differential rates of revenue being allocated

for planted compared with natural forests. In addition to pure financial costs, a slightly more sophisticated approach might also factor in opportunity costs to communities and the costs and savings to government, including for any non-forestry infrastructure and services provided through the community forestry initiative. However, complex formulas and procedures for revenue collection can also raise the cost of collection to the point where they outweigh the revenue raised; in pure financial terms, government participants argued for keeping the procedures simple (RECOFTC 2007).

Implementing laws involves costs, both to the authority responsible for implementing them and to those needing to comply. These costs increase with the complexity of legal processes. An important issue for benefit flow related to this is the relative magnitude of costs compared with benefits. Where processes are overly complex and require large investments of money and time to meet requirements, with many hurdles to jump, it becomes more difficult for the commercial benefits of CBFM to outweigh costs. If the process is very complex and the benefits at the end are small, CBFM may not prove a rational choice for communities. In Philippines, for example, the process for obtaining permits for commercial use of resources are as onerous as those imposed on the large scale commercial forestry operations (Dugan and Pulhin 2008). This weighs heavily on small scale forest producers in comparison with the expected returns. Furthermore, there is growing acknowledgement that informal taxes and rents flourish in complex regulatory environments (Paudel *et al.* 2006).

Another important point relates to the use of revenues from CBFM. Participants in the Policy-makers Forum found that in general the linkage between royalties taken by government and reinvestment back into forestry and, more specifically, CBFM, was very weak, and the management of these funds lacked transparency. There was a perceived need for these revenues to be reinvested back into forest management, rather than disappearing into central revenue.

3.3 Policy development and implementation processes

Currently, countries that do have supportive policies and laws for CBFM often face gaps in implementation and, by implication, benefit flow because:

- Local forest users and officials do not know about and/or understand the laws and policies.
- the direct and opportunity costs of following them are too high. Chinese participants, for example, highlighted that the high cost to local forest users in following the permit requirements for commercial forest use meant that often users did not follow these.
- they do not address local realities, or clash with institutional arrangements at the community, local government and provincial levels. Indonesian participants highlighted that such disjuncture is often found between laws and rules operating at different levels in their country. (RECOFTC 2007).

People cannot exercise their rights and responsibilities if they do not know about or understand rules and regulations relating to CBFM. Two dimensions were identified to this issue of legal fluency. Firstly, there is a barrier in the language of national level policies and laws, which is typically quite legalistic or technical. There is a need for key documents and rules to be translated into plain language that is accessible to non-technical people. A second related issue is the need to improve awareness at the community level, as well as amongst field based staff involved in implementing CBFM

from government and non-government organisations, as they often lack information on rights and responsibilities (RECOFTC 2007).

Apart from information, the other key ingredients for effective implementation of CBFM policies include sufficient resources, capacity and a supportive bureaucratic culture in government. Forum participants recognised that capacity is often also low amongst field staff and local government on current rules and regulations and how to implement these in practice. Operational regulations and guidelines that are clear and easy to understand by staff at this level could help to build capacity on policy implementation. Participants from Bangladesh highlighted the need for attitudinal and cultural change within government agencies for participatory approaches to flourish (RECOFTC 2007).

Lack of coherence between rules and regulations at different levels (village, sub-district, district, province, national) has emerged as a key challenge for decentralisation, and also has implications for benefit sharing. One issue discussed was the level of formal authority vested in local governance bodies. Formal recognition can enable local bodies to engage in wider policy and planning processes and influence decisions. In India, one way of strengthening the linkage between Joint Forest Management Committees and *panchayats* (elected sub-district governments) has been to include representatives from the *panchayat* on Joint Forest Management Committees. This is seen as a useful approach because it enables checks and balances on village level governance arrangements, as well as providing access to wider development resources through *panchayats*. In the case of India and Nepal, CBFM bodies are gradually taking on a role beyond CBFM to negotiate and mediate wider rural development activities, and becoming a nodal point for developmental activities (RECOFTC 2007).

The key factors affecting benefit flow from CBFM are summarised in Table 3.

Table 3: Summary of issues in benefit flow

Constraining factors	Necessary actions identified in workshop discussions
Rights that are weak, limited or of short duration	Well designed and implemented legal frameworks
Conflicting rules at different scales	Governance arrangements at different scales need to be connected and complementary, including working with and complement local traditions, practices and institutions.
Procedural complexity for using and selling high value resources, with associated scope for corruption	Minimising procedural complexity and transaction costs in compliance with laws and policies; laws should be simple to understand and to implement.
CBFM considered in isolation from other development options	CBFM bodies become nodal points for integrated development in communities through legal recognition and linkage to other levels of government
Revenue sharing mechanisms reduce level of return to communities, especially for high value resources	Factoring the costs of CBFM into revenue sharing arrangements
Communities keep more of low value resources and less of high value resources	Liberalising returns to communities. Government help communities to get a better price for forest products to expand the benefit base by facilitating better information, capacity building on value addition and enterprise management, and facilitating linkages with other market actors

4. Access to benefits at community level

The communities engaging in CBFM are microcosms of the wider societies in which they operate, with differing assets, opportunities, and ability to influence governance processes and outcomes (Mahanty *et al.* 2006). Early CBFM initiatives witnessed the problem of elite capture, where the resources and opportunities related to CBFM went to the relatively better off households or groups rather than the poorest. Elite capture is also an emerging issue in countries adopting CBFM more recently (Mahanty *et al.* 2007).

Some have suggested that a degree of social inequity may provide incentives for some individuals to bear a greater share of the cost, and to provide leadership in CBFM, where there is enough commonality of interest and mechanisms to mediate conflict (Varughese and Ostrom 2001). The challenge in CBFM, the Philippines delegation noted, is to gain equity in while harnessing the entrepreneurship and potential of better off community members to support the interest and needs of poorer members.

CBFM experiences to date highlight that equity is not an automatic outcome of CBFM, and promoting more equitable sharing of benefits has become a pre-occupation for many practitioners as well as governments in the early adopting CF countries such as Nepal and India. Two key factors that have emerged in this work is the need to understand the 'social endowment' – the socio-economic conditions and stratification within communities where CBFM is implemented. Some practitioners in Nepal are arguing that this kind of household or group level focus may allow a more targeted and effective approach to improving the lot of the poor than community level initiatives (Dhungana *et al.* 2007).

The vast differences in the social, economic and political contexts of the countries involved in this process meant that discussion tended to focus on the second of these points: how local governance arrangements could better engage disadvantaged groups in CBFM processes and the role of different stakeholders, including Government and NGOs, in facilitating this. The work of CARE Nepal, shared by Rajendra Lamichhane (Box 5) shows that an approach based on analysing and understanding who the poor and disadvantaged are, together with interventions to improve their representation and voice in CBFM governance bodies, can improve their situation. In the long term, scaling up such approaches requires a level of policy support, highlighting again the need for good linkage between policy and practice at different scales.

Box 5: Can a pro-poor approach mediate more equitable benefit sharing?

The caste and gender inequities in Nepalese society also pervade the local forest governance institutions associated with CBFM. Nepal's long and rich experience in CBFM has been marred by the fact that Community Forest User Groups, the key decision making body for managing community forests and sharing the benefits from these at the local level, have often been captured by the high-caste elite, with exclusion of the poor, women, and *dalits* ("untouchable" castes).

CARE Nepal's SAGUN program was one amongst many CF programs have in Nepal that have attempted to address the 'second generation' issue of elite capture through targeted pro-poor strategies.

The project involved capacity building to foster good governance practice (participation, transparency, accountability, predictability) in local bodies, and to support the rights of excluded groups and economic empowerment of the poor. Specific activities included:

- Identifying poor households through a participatory well-being ranking process according to their physical property, social status, employment, and income.
- Establishing mechanisms and processes to ensure active participation by the poor in community forest management processes, and to gain their adequate representation in CFUGs, e.g. affirmative action to get higher rates of participation by women and *dalits* on the executive bodies of CFUGs. This was backed up with capacity building activities to develop leadership and group management skills in user groups, governance literacy classes, and policy advocacy campaigns.

The program has led to a substantial increase in the number of women, poor, and *dalits* taking on key decision making roles in community forestry bodies. SAGUN has used a public hearing and auditing process to improve transparency in CFUGs, enabling members of user groups to critically discuss, question and examine the day-to-day business of executive committees over the year. This has reportedly had a positive impact on the accountability of executive bodies and reduced corruption.

Program facilitators recognize that long term change will depend on institutionalising pro-poor practices into policies and Forest Operational Plans, and continuing empowerment and capacity building of marginalised groups, and adopting an integrated and holistic approach to address the situation of women, *dalits* and the poor in rural Nepal by expanding the social, economic, natural, physical and individual assets of these groups. (Lamicchane and Maharajan 2007; RECOFTC 2007)

The Nepal example highlights that engagement of the poor can be facilitated through: a strong understanding of the social structure and processes in communities, who is marginalised, why and in what ways; and capacity building alongside positive discrimination. The capacity building process needs to be directed not just at the community level, but also to local government, project staff, and government. In the long run, achieving an improvement in the circumstances of the poor may depend not just on equity in governance structures and processes, but also the development of entrepreneurial skills and capacity to enable effective participation or initiation of enterprise activities by such groups (Kelly and Aryal 2007).

A summary of the key factors identified as affecting local benefit sharing from CBFM is shown in Table 4.

Table 4: Summary of issues in benefit sharing

Constraining factors	Possible actions identified in workshop discussions
Poor understanding of local social and political dynamics, particularly in new CBFM countries	Simple and workable methods to analyse the social structure of communities and work with communities to identify who are the poor and disadvantaged in CF

	<p>initiatives.</p> <p>Capacity building in social mapping methods and sensitization of government, field staff and local actors.</p>
Weak skills and capacities of disadvantaged groups	Targeted capacity building for effective engagement with decision making processes, entrepreneurship etc.
Poor representation by disadvantaged groups in CBFM bodies	<p>Combination of positive discrimination plus national, provincial and local government as well as civil society assisting CBFM bodies to function with good participation, transparency, accountability.</p> <p>Institutionalize effective pro-poor approaches in user group constitutions, operational plans and guidelines helps to improve uptake.</p>
Weak accountability in CBFM bodies	<p>Provide a legal framework for JFM committees to act as a democratic, decentralised local institution.</p> <p>Develop criteria and indicators for assessing benefit sharing outcomes by forest user groups and local government.</p> <p>Build capacity of project staff, field level government staff, community user groups, disadvantaged CBFM body members in:</p> <ul style="list-style-type: none"> ○ Monitoring benefit sharing ○ Financial management ○ Transparent, accountable and participatory governance
Scope for conflict in the event of inequitable benefit sharing	Develop effective conflict management mechanisms to mediate conflict within communities and between communities and other stakeholders.

5. Reflecting on costs, benefits and the space between local and non-local factors

As noted earlier, a purely financial measure of benefits can create an incomplete picture of the ways in which CBFM might be significant to the poverty agenda. The learning initiative has highlighted that although non-financial social benefits are locally significant and valued, it is often economic benefits and environmental services that at the core of negotiations between communities and the State. This may be because the environmental and economic spheres represent the areas of greatest overlapping interest between communities and the state. Secondly, financial benefits lend themselves to quantification and can be more readily measured than intangibles such as 'political empowerment'. Third, there may be a caution on the part of civil society not to embrace intangible benefits too closely in discussions with the State, lest they make it too easy for the State to avoid providing more tangible benefits.

Although costs were discussed in this learning initiative, in terms of the time, money and opportunities foregone that are intrinsic to CBFM, they received less attention from practitioners and policy makers. Clearly a better understanding of costs will enable a more meaningful analysis of net benefits to various groups. However, this remains a relatively new area and was less well understood by participants.

The preceding two sections share a number of findings from this process with practical implications for field level action, research and policy. However, we have also found some shortcomings with the analytical framework in Figure 2, with its binary emphasis on local and non-local factors.

The “arrow” in Figure 2, between benefit flow and benefit sharing, needs further analysis. The line between wider governance processes and local governance is more porous than is suggested in the framework, with influences flowing in both directions. State laws and guidelines may direct the establishment, structure and functioning of community bodies, for example in Nepal and India, where guidelines specify representation of women or disadvantaged groups on user group committees (RECOFTC 2007). Conversely, the process of developing and implementing policies and laws involves negotiation, interpretation and exchange between various levels of actors (Tyler and Mallee 2006). Laws can also constrain local governance, where community bodies lack legitimacy under national policies and laws. For example, the Law on Forest Protection and Development in Vietnam enables village communities to hold forest rights, but these village level bodies are not recognised under civil law, and therefore cannot gain formal powers with respect to forest management (Vickers and Dickinson 2007).

We earlier said that we skirted the issue of forest-based versus other livelihood strategies, as this was beyond the scope of the paper. The framework has directed attention to forest related benefits and the distribution of these when, as already noted, a range of livelihood strategies may be open to community members. We do not contend, therefore, that CBFM alone offers a pathway to poverty reduction. We also recognise that, in practice, the linkages between forest based and other livelihood strategies cannot be escaped. Indeed the relative costs would be integral to a closer analysis of the opportunity costs borne by a community when participating in CBFM.

Finally, the framework raises a wider question of how quantitative and qualitative measures can be compared in analysing benefits and costs. Is it meaningful, for example, to compare political empowerment with revenue? This was an issue with costs in particular, as costs in time and opportunities foregone are challenging to quantify. The question of how to compare and weigh up costs and benefits is not an issue that we take up here, but is recognised as an important area for further discussion and research.

The framework has provided a useful starting point to examine and compare lessons between cases and between countries. However future work could usefully be directed to exploring the space between the local and non-local factors identified in the framework, and the messy interactions that pervade this space. Recent research on multi-level governance systems in the commons (Berkes 2008) may yield some useful insights. Another fruitful avenue might be analysis of experiences from the minerals sector, where benefit sharing issues have been a core concern for some time.

6. Conclusion

Returning to our starting point of linkages between benefit sharing in CBFM and poverty reduction, a number of issues emerge from the preceding discussion.

Acknowledging that CBFM is one of a range of livelihood streams in rural communities, the benefits generated by forests depends strongly upon the initial resource endowment in community-managed forests, the level and duration of rights given to communities,

and the additional controls that might apply to the use and sale of high value resources to forest resources. Typically, rights have tended to be weak, and State control of and revenue capture from high value resources such as timber persists in the face of CBFM. This is diminishing the potential benefits that could flow to communities from community-managed forests. Without addressing such issues, the contribution of CBFM to the poverty agenda is more likely to remain at poverty mitigation/avoidance than a meaningful contribution to poverty elimination.

We have highlighted that the potential benefits from CBFM may go well beyond financial revenues from commercial use of forest products, even though these are often at the heart of negotiations between communities, the State, and commercial interests. At the community level in particular, it may be the non-financial benefits of CBFM, in terms of human assets, resource security, development of social capital and political empowerment that make the greatest difference to the poverty agenda. This is particularly the case where a small stream of financial benefits must be shared among a large group of local users.

At the community level, there is nothing new in the understanding that those benefits that are generated through CBFM do not automatically reach the poor. Some critical areas for attention have been identified here, which include: understanding dimensions of differentiation within communities, as well as positive discrimination at times, which is supported by capacity building at all levels. Equity considerations are not intended as a constraint for local entrepreneurship or leadership. Rather, they highlight that the poor need a place at the table, and the empowerment and capacity to take up opportunities and negotiate space. The need for local governance bodies to operate transparently and have accountability, with appropriate legal and procedural supports, has also been highlighted as a basis for benefit sharing. In Asia, civil society is playing an important role with testing such approaches, and there is considerable scope for exchange between early and newer CBFM-adopting countries.

Finally, the benefit sharing initiative has highlighted the need to look in an integrated way at local factors and wider governance issues to gain a more holistic understanding of the interactions between factors in different spheres and at different scales that influence benefit sharing processes and outcomes. Further work in this area will be a worthwhile investment as benefit sharing issues have continued importance not just for CBFM, but also in emerging areas such as payments for environmental services.

References

- Adhikari, B. and J.C. Lovett, 2006. "Transaction Costs and Community-based Natural Resource Management in Nepal." *Journal of Environmental Management* 78 (2006): 5-15.
- Agrawal, A. and K. Gupta, 2005. "Decentralisation and Participation: the Governance of Common Pool Resources in Nepal's Terai." *World Development*, 33(7): 1101-1114.
- Agrawal, A. and E. Ostrom. 2001. "Collective Action, Property Rights, and Decentralisation in Resource Use in India and Nepal", *Politics and Society*. 29(4): 485-514.

Angelsen, A. and Wunder, S. 2003. Exploring the forest-poverty link: key concepts, issues, and research implications. CIFOR Occasional Paper No. 40. Center for International Forestry Research, Bogor.

Asia Forest Network, 2007. Realising MDGs, Restoring Forests. Report of the 11th Asia Forest Network Meeting, 28-30 November 2006, RECOFTC Bangkok and Chacheangsao, Thailand, AFN, Manila.

Asian Development Bank, 2003. Forest Policy, Working Paper June 2003, Manila.
http://www.adb.org/Documents/Reports/Forest_Policy/working_paper_fp.pdf

Bampton, J. and B. Cammaert, 2007. "How Can Timber Rents Better Contribute to Poverty Alleviation Through Community Forestry in the Terai Region of Nepal?" in R. Oberndorf, P. Durst, S. Mahanty, K. Burslem and R. Suzuki (eds), *A Cut for the Poor: Capturing Opportunities in Forest Harvesting and Wood Processing for the Benefit of the Poor*. Ho Chi Minh City, Viet Nam 3-6 October 2006. FAO, RECOFTC and SNV, Bangkok: 85-100.

Belcher, B. and K. Schreckenber, 2007. "Commercialisation of Non-Timber Forest Products: A Reality Check", in *Development Policy Review*, 25(3).

Berkes, F., 2008. "Commons in a Multi-level World", *International Journal of the Commons*, 2(1): 1-6 (downloadable at <http://www.thecommonsjournal.org/index.php/ijc/article/view/80>).

Carter, J. and J. Gronow, 2005. *Recent Experience in Collaborative Forest Management: a review paper*, CIFOR Occasional Paper No. 43, CIFOR. Bogor, Indonesia.

Dhungana, S.P. B.K. Pokharel, B. Bhattarai and H. Ojha, 2007. Discourses on poverty reduction from forestry in Nepal: A shift from community to household approach?, Paper presented to the International Conference on Poverty Reduction and Forests: Tenure, Market and Policy Reforms, Bangkok, 4-7 September 2007.

Dugan, P. and J. Pulhin, 2007. "Forest Harvesting in Community-based Forest Management in the Philippines: Simple Tools Versus Complex Procedures", in Oberndorf, R., P. Durst, S. Mahanty, K. Burslem and R. Suzuki (eds), 2007. *A Cut for the Poor. Proceedings of the International Conference on Managing Forests for Poverty Reduction: Capturing Opportunities in Forest Harvesting and Wood Processing for the Benefit of the Poor*. Ho Chi Minh City, Viet Nam 3-6 October 2006, FAO, RECOFTC and SNV, Bangkok: 38-46.

Fisher, R.J., Maginnis, S., Jackson, W.J., Barrow, E., Jeanrenaud, S. 2005. *Poverty and Conservation: Landscapes, People and Power*. IUCN. Gland,

Gerrard, P. 2007. Report of a national-level workshop Ban Geun, Lao PDR. In: *A fair share? Experiences in benefit sharing from community-managed resources in Asia*, eds. Mahanty, S., Burslem, K. and Lee, E. Regional Community Forestry Training Center, Bangkok.

- Gilmour, D., Malla, Y., Nurse, M. 2004. Linkages Between Community Forestry and Poverty. RECOFTC, Bangkok.
- Guangping, M. and R.A West, 2004, "Chinese Collective Forestlands: contributions and constraints", *International Forestry Review*, 6 (3-4): 282-298
- Hobley, M. 2007. Where the World is there Pro-poor Forestry and Tenure Reform? Rights and Resources Initiative, Washington DC.
- Hyde, W. F, J. Xu and B. Belcher, 2003. "Introduction" in W. Hyde, B. Belcher and J. Xu (eds), *China's Forests: Global Lessons from Market Reforms*. Resources for the Future and CIFOR, Washington DC and Bogor
- Johnson, C. and T. Forsyth, 2002. "In the Eyes of the State: Negotiating a 'Rights Based Approach' to forest conservation in Thailand", *World Development*. 30(9): 1591-1605.
- Jones, B.T.B., 2004. "CBNRM, Poverty Reduction and Sustainable Livelihoods: developing criteria for evaluating the contribution of CBNRM to poverty reduction and alleviation in southern Africa", CASS/PLASS Occasional Paper Number 7, downloadable from www.cassplass.org.
- Kelly, M. and P. Aryal, 2007. "Managing the Risks of Community-based processing: Lessons from Two Community-based Sawmills in Nepal", in Oberndorf, R., P. Durst, S. Mahanty, K. Burslem and R. Suzuki (eds), 2007. *A Cut for the Poor. Proceedings of the International Conference on Managing Forests for Poverty Reduction: Capturing Opportunities in Forest Harvesting and Wood Processing for the Benefit of the Poor*. Ho Chi Minh City, Viet Nam 3-6 October 2006, FAO, RECOFTC and SNV, Bangkok: 74-82.
- Lamichane, R.P. and M.R. Maharajan, 2007. "Equitable Benefit Sharing in Community Forestry: experience of the SAGUN program" unpublished paper by CARE Nepal; Maharajan, M.R. and B. Shrestha, 2006. "Public Hearing and Public Auditing in Community Forestry User Groups", *Insight: Notes from the Field*, 1 (1): 28-41.
- Leach, M., R. Mearns and I. Schoones, 1999. "Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resource Management", *World Development*, 27, 225-247.
- Liu, J. and N. Landell-Mills, 2003. "Taxes and Fees in the Southern Collective Forest Region" in W. Hyde, B. Belcher and J. Xu (eds), *China's Forests: Global Lessons from Market Reforms*. Resources for the Future and CIFOR, Washington DC and Bogor; Lu, W., N. Landell-Mills, J.
- Liu, J. Xu and C. Liu, 2002. *Getting the Private Sector to Work for the Public Good: Instruments for Sustainable Private Sector Forestry in China*, IIED, London; Miao, G. and R.A. West, 2004. "Chinese Collective Forestlands: contributions and constraints", *International Forestry Review*, 6(3-4): 282-298.
- Mahanty, S., Gronow, J., Nurse, M. and Malla, Y. 2006. Reducing poverty through community-based forest management in Asia. *Journal of Forests and Livelihood* 5(1): 78-89.

Mahanty, S., M. Nurse, M. Rosander, C. Greenwood, M. Halley and B. Vickers, 2007. "Benefit Sharing in the Mekong Region – Lessons and Emerging Areas for Action", in S. Mahanty, K. Burslem and E. Lee (eds), *A Fair Share? Experiences in benefit sharing from community-managed resources in Asia*, RECOFTC, WWF and SNV, Bangkok: 91-110.

Nguyen Quang Tan, Personal communication, 27 June 2007

Nguyen, Q.T., 2005. Trends in forest ownership, forest resources tenure and institutional arrangements: Are they contributing to better forest management and poverty reduction? The Case of Viet Nam, paper prepared for FAO Workshop on Forest Ownership and Resource, 18-21 October 2005, FAO, Bangkok; Ministry of Agriculture and Rural Development Forestry Sector Manual (Chapter 5).

Paudel, D., Keeling, S.J. and Khanal, D.R. 2006. Forest products verification in Nepal and the work of the commission to investigate the abuse of authority. Country Case Study 10. VERIFOR. Forest Policy and Environment Programme. Overseas Development Institute, London.

Poffenberger, M., R. Soriaga and P. Walpole, 2006. Communities and Forest Stewardship. AFN: Bohol, Philippines

RECOFTC, 2007. *Sharing the Wealth, Improving the Distribution of Benefits and Costs from Community Forestry: Policy and Legal Frameworks*. Synthesis of discussions at the Second Community Forestry Forum, 21-22 March 2007, Bangkok, Thailand, RECOFTC, FAO and SNV, Bangkok.

Reeb, D. and F. Romano, 2007, "Forest tenure in Africa and South and Southeast Asia: Implications for Sustainable Forest Management and Poverty Alleviation", Paper presented to the International Conference on Poverty Reduction and Forests: Tenure, Market and Policy Reforms, Bangkok, 4-7 September 2007.

Schlager, E. and E. Ostrom, 1992. "Property Rights Regimes and Natural Resources: a Conceptual Analysis", *Land Economics*, 68(3): 249-263.

Sunderlin, W.D., Angelsen, A., Belcher, B., Burgers, P., Nasi, R., Santoso, L., Wunder, S. 2005. Livelihoods, Forests and Conservation in Developing Countries: An Overview. *World Development*: 33(9), 1383-1402.

Tyler, S.R., 2006. "Conclusions: community-based natural resource management in action." *Communities, Livelihoods and Natural Resources: action research and policy change in Asia*. Ed. S.R. Tyler. ITDG Publishing and IDRC, Ottawa: 373-390.

Tyler, S. and H. Mallee, 2006. "Shaping Policy from the Field", in S.R. Tyler (ed). *Communities, Livelihoods and Natural Resources: action research and policy change in Asia*. ITDG Publishing and IDRC, Ottawa: 347-372.

Varughese, G. and E. Ostrom 2001. "The Contested role of Heterogeneity in Collective Action: some evidence from community forestry in Nepal", *World Development*, 33 (9): 1383-1402.

Vickers, B and C. Dickinson, 2007. "Report of a National-level Workshop: Hue, Viet Nam" in S. Mahanty, K. Burslem and E. Lee (eds), *A Fair Share? Experiences in benefit sharing from community-managed resources in Asia*, RECOFTC, WWF and SNV, Bangkok: 69-78.

World Bank (2002). *Linking Poverty Reduction and Environmental Management: policy challenges and opportunities*. Washington D.C.

Zhang, Y. and S. Kent, 2005. "Collective Forests and Forestland: physical asset rights versus economic rights" in P. Ho,(ed), *Developmental Dilemmas: Land Reform and Institutional Change in China*, Routledge, London and New York: 283-307.