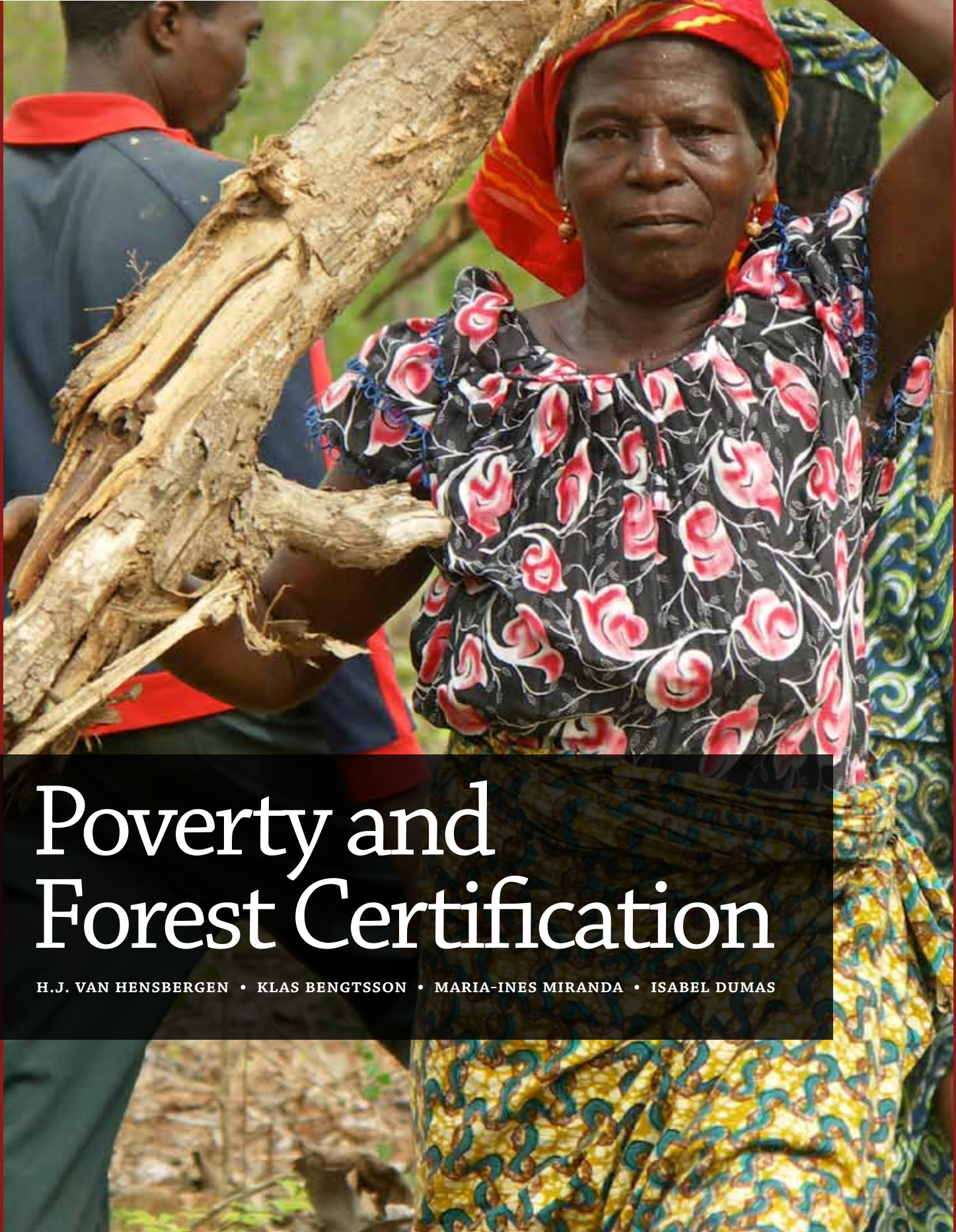


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Poverty and Forest Certification

H.J. VAN HENBERGEN • KLAS BENGTTSSON • MARIA-INES MIRANDA • ISABEL DUMAS

Organisation

The Forest Initiative

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Corresponding author

Klas Bengtsson SSC-Forestry
+4618150002

Address

Föreningen Skogen
(Swedish Forestry Association)
Box 1159 (Vasag.50)
111 81 STOCKHOLM

Authors

H.J. van Hensbergen
Klas Bengtsson
Maria-Ines Miranda
Isabel Dumas

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Preface

Forests are important for many people around the world. It may be direct, in the form of various products or indirect, such as in delivering ecosystem services that provide clean water, biodiversity and mitigation of climate change. Products and services like food, shelter, energy, medicines and water are often particularly important for the subsistence of the rural poor.

Forest certification was introduced in the early 1990s as a tool for improving forest management in order to secure appropriate consideration for ecological values while promoting economic growth and thus generating wellbeing of people. So far little is known about how forest certification impact people's livelihoods in and around the forests and how forest certification may contribute to alleviation of poverty. This is what this report aims to investigate.

Since the beginning of forest certification, SSC-Forestry has been one of the main consultants in providing training about forest certification around the world. Since 1996 SSC-Forestry has organized an international training program for forest certification financed by Sida. Currently, more than 600 certification specialists from more than 60 countries, have been trained by SSC-Forestry.

This report focuses on the ways that forest certification can impact poverty and it builds on SSC's combined experience of forest certification and sustainable forest management, during 20 years. It also integrates the joint learning of the broad network of the training course participants. The wealth of the reflected experience makes reading worthwhile and the hope is that the findings will contribute to further development of certification standards that meet the specific demands of the poor.

Sincerely

PER BJÖRKMAN
Co-ordinator
The Forest Initiative

Executive summary

More than one billion of the world's poorest people are dependent to some extent on forest resources for their survival. Their poverty is rarely the result of limited resources: many of these same forests make a major contribution to local, national and regional economies in other parts of the world. Rather, it often derives from a combination of bad forest management, weak governance and unfair income distribution.

Through improving management and governance, and making sure the benefits derived from forests are shared more equitably, forest certification potentially offers an important tool to help lift many millions of people out of poverty. This paper examines the way in which forest certification, in particular according to the Forest Stewardship Council Principles & Criteria (FSC P&C), has contributed to poverty alleviation, and discusses what can be done to increase its impact.

What we mean by poverty

Concepts of poverty were based initially almost entirely on monetary considerations. In developing countries the very poor are considered to be those that live on less than a dollar a day; in developed countries the poor are those living on less than 50 per cent of the median income. Increasingly, however, thinking about poverty has encompassed ideas related to the fulfilment of human needs and desires. At the same time, it increasingly considers the way individual people experience poverty.

We use a multi-dimensional definition of poverty that looks at specific human needs within four broad areas of the poverty experience:

- **Subsistence needs** (e.g. food quantity and quality, water, cash and non-cash income, common resources, electricity)
- **Self-realization needs** (e.g. education, media, transport and markets, land rights, capital)
- **Risk exposure** (crop failure and food security, loss of employment, violence and crime, health care, work-related risks, political instability, corruption)
- **Social inclusion** (participation in decision making, heritage assets, gender equity, age equity, ethnic equity, resource governance, legal access, land-use allocation systems).

Forest certification and poverty alleviation

We analyzed how the FSC P&C address these elements of poverty, and what impact they were likely to have.

Subsistence needs are the strongest focus of the FSC P&C. However, most of the emphasis is on obtaining information through social impact assessments; there is no specific requirement for managers to act on this information. The criteria also cover the rights of access to land and to traditional resources, protecting the resource base, the right of employees to organize and negotiate about pay and conditions, and fair compensation for the use indigenous peoples' knowledge. One requirement – preventing illegal activities – may even have a negative impact because of unjust laws that prevent poor people from using forest resources.

Self-realization needs receive relatively little attention, although education and land rights are referred to. There is no mention of access to media, roads and transport, and markets, although these are crucial issues for tackling poverty.

In terms of **risk exposure** the FSC P&C deal well with the risk of loss of employment and work-related risks, and some attention is paid to health care. Crop failure and food security are weakly addressed, while corruption – a pervasive problem in the forestry sector in developing countries – is dealt with from a legal point of view only.

Social inclusion is one area where the FSC P&C can be expected to have a major positive impact. Several criteria include the right to be consulted and to participate in decision making, and equity is promoted. Land-use allocation is adequately addressed only in the case of indigenous people; there is little to tackle the problem of governments selling forest concessions and leasing land for plantations without considering the needs of local people.

The new FSC P&C contain a significant change. Certified forest managers are required to work with employees and local communities to identify their concerns and needs, and agree objectives and concrete targets for a social management plan. In theory, this could address all of the poverty needs – but guidance is needed as to the types and levels of intervention expected.

Poverty alleviation impacts

Evidence suggests forest certification has had a positive impact on poverty. However, a lack of baseline and comparative data makes it hard to determine the extent of this impact, and which impacts can be attributed directly to forest certification. The existence of forest certification has in itself changed the forest industry during the last 15 years and many of the impacts have been felt in forests in general.

In a recent study 36 foresters from developing countries were asked about the impacts of changes in forest practices due to forest certification pressures in their countries, companies or organizations. They were asked whether forest certification had brought improvements in livelihoods and employment opportunities for poor people and employees, and respect for local communities and indigenous peoples. Most people strongly agreed: out of 180 responses, only four were negative.

A number of studies suggest that forest certification has brought benefits to people who experience poverty. These include improvements in:

- market access
- health and safety
- income and economic opportunities
- infrastructure development
- consultation

These results are backed up by various case studies and anecdotal evidence.

Future developments and recommendations

Since poverty alleviation is not an explicit target of forest certification, it is possible for organizations with vastly different performance to be certified. We agree with the FSC P&C's focus on creating an enabling environment for addressing poverty-related issues and the effects of forest-related economic growth, rather than on providing direct support, such as health care, education or electricity. A normative framework for each country would help ensure that interventions are appropriate and effective. Social impact management needs much clearer performance targets, and these need to be properly monitored.

For forest certification to contribute fully towards sustainable poverty alleviation, at least five factors need to be in place:

1. a regulatory framework that allows forest-dependent people access to the required forest resources
2. a forest management system that provides a sustainable flow of valuable forest resources to forest-dependent people
3. affordable harvesting and processing systems that maximize the potential value of the resource while minimizing the value losses during production
4. a market system that is accessible to products from all kinds of forest owners and allows a flow of information from the market to the forest in order that producers can optimize the value of their products
5. a market system that pays a fair price for the forest products based on the true costs of sustainable production. This price does not necessarily need to be higher for the final consumer if efficiency, legality and transparency in the chain can be improved.

Support for implementing sustainable forest management and certification should be accompanied by support for all aspects of the forest business. Many projects in which certification was the sole focus have collapsed as a result of market-access failures. Where support is given, it must continue for long enough to ensure success, based on a viable business plan with defined performance targets.

At the same time, developers of national forest certification standards need to engage much more forcefully with regulatory authorities in order to highlight and where necessary change poor regulatory systems. The current emphasis on timber legality is misplaced, since bad laws and poor forest practices are often at the root of the problem: better governance and training people to make better use of the forest benefits are likely to be more effective in conserving forests and improving lives for the poor.



These children in a poor village in Mali should be receiving significant benefits from the neighboring forest.



Agroforestry combine short term incomes, from in this case porang, with long term incomes from valuable timber products for example teak (Java, Indonesia)

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1 Introduction

People living in and around forests are often among the poorest people in the world. It is estimated that 1.2 billion people living on less than a dollar a day are associated with and/or dependent on forests. As well as being poor in monetary terms, these people are also deprived according to other indicators of poverty, often lacking in infrastructure, education and basic human rights.

We know that in some parts of the world, forests make a major contribution to national, regional and local incomes. Why, then, do so many people connected with forests live in poverty?

Of course, there are regions where forest resources are limited and alternative income possibilities limited – this is the case in some very dry forest areas, for example. And in areas of high population density, even a well-managed forest will give only a limited input to the total economy.

But these situations are the exception. In most regions, the sustainable use of forest resources offers great economic potential. Poverty is the consequence not of limited resources, but other factors:

- bad governance
- poor forest practice
- wood not being efficiently used
- unfair distribution of the income and benefits derived from forests.

Poverty in the forest sector is to a great extent the result of these four factors – complex in themselves, but also related to each other in an even more complex pattern.

The complexity of the problem, combined with the huge profitability of illegal and unfair business practices, makes improvement slow and difficult. Any attempt to improve living condition for poor forest-dependent people will have to face all these factors – some of which are not only difficult to fully understand but also often even dangerous to discuss openly.

Forest certification is a tool for addressing at least some of these issues, though it cannot on its own address them all. This paper examines the way in which forest certification has contributed to poverty alleviation, and discusses what can be done to increase its impact.



Well-being of forest workers and local communities is an important part of forest certification – picture from Mozambique

About forest certification

Forest certification has existed for around 20 years. The idea arose out of a demand from retailers to prove that their wood-based products came from well-managed forests. This followed campaigns from environmental and international development organizations revealing deforestation, forest degradation and human rights issues associated with the forestry sector.

The Forest Stewardship Council (FSC) provides the most widespread system of certification, particularly in the South, and is the main focus of this report. The FSC has 10 universal Principles & Criteria (FSC P&C),

though specific requirements can vary from country to country. Environmental principles include reducing the environmental impact of logging, maintaining High Conservation Value Forests (HCVFs) and contributing to conserving and restoring natural forests. The FSC P&C also includes a number of social criteria, relating to land tenure, indigenous peoples' rights, the long-term social and economic well-being of forest workers and local communities, and equitable use and sharing of benefits derived from the forest.

Forest management units (FMUs) can become FSC certified by demonstrat-

ing that they meet these criteria. Independent auditors carry out regular assessments, and certificates can be taken away if performance deteriorates. In addition, so that retailers can verify the traceability of the products they sell, every link in the supply chain needs an FSC chain of custody (CoC) certificate.

Other systems of forest certification also exist. Many countries have their own standards, which are often certified by the Programme for Endorsement of Forest Certification (PEFC). Brazil and Chile are the only countries in the South with significant PEFC standards.

2 Background and mission

There has been much discussion about the relationship between forests and poor people. This is usually based on the assumptions that forests are being lost because poor people are forced to destroy them in order to meet their immediate needs, and that forest-related people are poor because they do not make efficient and fair use of forest resources (Angelsen & Wunder 2003).

The discussions go on to provide estimates of the numbers of poor people dependent on forests for some or all of their needs. These numbers are invariably large. Scherr et al. (2003) state that a billion people live in the 19 forest biodiversity hotspots, and that 90 per cent of those living on less than a dollar a day are dependent on forest resources. According to the World Bank (2001) forest resources contribute to the livelihoods of 90 per cent of the 1.2 billion people living in extreme poverty.

In addition much of the forest area where the forest-dependent poor live is considered to be very badly managed. Poor forest governance in turn allows for large-scale corruption, illegal logging, disenfranchisement of the rural poor and monopolization of the forest resources by feudal elites (Scherr et al. 2003, Human Rights Watch 2009, Contreras-Hermosilla 2003).

Both global forest certification systems, the Forest Stewardship Council (FSC) and the Programme for Endorsement of Forest Certification (PEFC), address social objectives through their standards. Policy actions such as the Lisbon Process and initiatives including the Small and Low Intensity Forest Management (SLIMF) programme and the Forest Stewardship Council-Fairtrade Labelling Organization (FSC-FLO) pilot also address these social issues. FSC and PEFC social policies are based on the assumption that poor forest management unfairly deprives people who live in forests of the actual benefits available from the forest today, and that the present benefits are significantly less than the potential benefits a well-managed forest could provide. They also assume that by improving the livelihoods of the poor there will be a decrease in the irresponsible or destructive use of forests that will benefit environmental resources and forest biodiversity (Galizzi and Herklotz 2008).

Good forest management, then, has the potential to significantly improve the livelihoods of the forest-dwelling poor, creating a virtuous cycle which benefits both people and forests. However, the development of forest certification in the South has been erratic and there have been mixed results in different areas. In addition, there has been much more fluidity with organizations coming into and falling out of certification. As a result the areas covered by certification have not been as large as originally hoped, meaning fewer people have been helped to cope with poverty.

The aim of this study is to:

- describe and discuss the current state of knowledge on poverty in relation to forest management
- identify and highlight ways in which current pro-poor interventions in the forest sector, including forest certification, may be failing to meet their objectives
- analyze the results of the above and make recommendations on how forest certification should be developed to become an effective tool for poverty reduction

This study is addressed principally to the FSC and other organizations involved in certification. In addition, it is addressed to overseas development organizations, such as the Swedish International Development Agency (Sida), and private sector companies with an interest in certification and corporate social responsibility. We hope the results of the study will be used to benefit poor people who live in and depend on forests by making forest certification a more refined tool for poverty alleviation. In particular, we hope it will enable those who support small producers to increase the success of their interventions. We also hope it will enable larger certified organizations to take a more rational approach to the support stakeholders need for economic development.



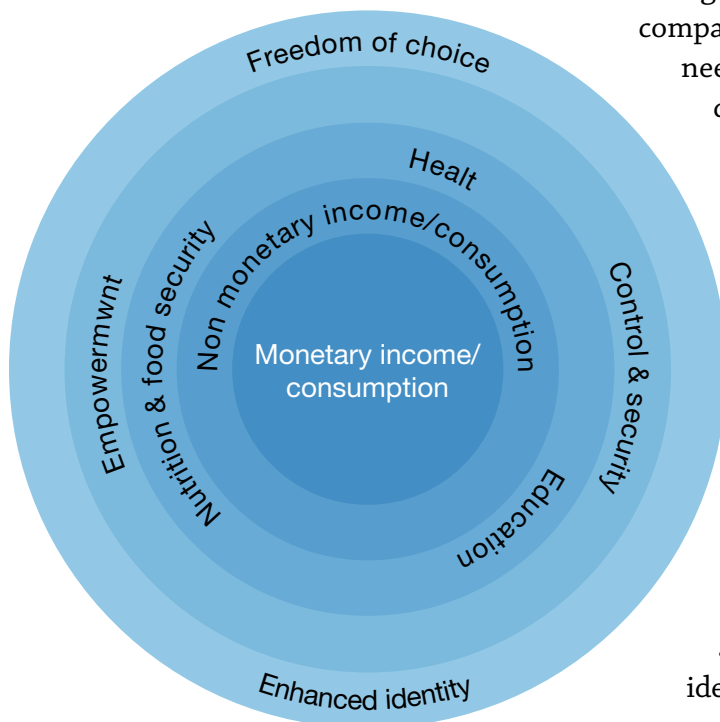
This child is one of the 1.2 billion people living in extreme poverty who depend on forest resources. Picture from south Tanzania.

3 Poverty among forest-dependent people – A working definition

3.1 What is poverty?

Poverty is a concept that has been revisited many times during the last 50 years. Many authors have sought to prepare definitions of poverty while others have reviewed the way concepts of poverty have changed (Kanbur & Squire 1999, Maxwell 1999, Henschel & Lanjouw 1996). The concept has become increasingly complicated as people have tried to adapt it to an increasing number of situations in an enormous variety of contexts. The major change during this period has been the increasing use of ‘soft’ indicators of poverty: these include such aspects as health, education, social and political empowerment, and security. In parallel with the changes in poverty definitions there have been changes in the way poverty is measured in order to cope with the increasing complexity and the desire to include all relevant poverty indicators.

Concepts of poverty were based initially almost entirely on monetary considerations. In developing countries the very poor are considered to be those that live on less than a dollar a day; in developed countries the poor are those living on less than 50 per cent of the median income.



Increasingly, however, thinking about poverty has encompassed ideas related to the fulfilment of human needs and desires. At the same time, it increasingly considers the way individual people experience poverty. While some dimensions of poverty relate to whole societies and communities, others are felt at the individual level: different people in the same situation are likely to have a different experience of poverty, which should be addressed in different ways.

Angelsen and Wunder (2003) show how poverty has expanded from a monetary-based concept to include other human needs: firstly non-monetary income; then nutrition, food security and health; security and wellbeing; and ideas related to freedom and identity (Figure 1).

Figure 1 Poverty and human needs (Angelsen & Wunder 2003)

Finally, poverty concepts have increasingly considered the causes of poverty and integrated these into the definitions and measures. This arises since some of the symptoms of poverty are themselves causes of further poverty. For example, poor health leads to poor school attendance and thus educational deprivation; conversely, a lack of education is itself a cause of poor health, as people lack knowledge of primary health factors, such as the importance of a good diet and not smoking.

Individual dimensions of poverty cannot, then, be perfectly isolated, since a change in one dimension is likely to cause a change in one or more of the other dimensions.

3.2 Human needs

Abraham Maslow (1943) introduced his well-known hierarchy of needs model (Figure 2) to explain human motivation. It is now recognized that this hierarchy is only weakly applicable and is strongly centred on a particular society (the middle classes in the United States) and time (early 1940s).

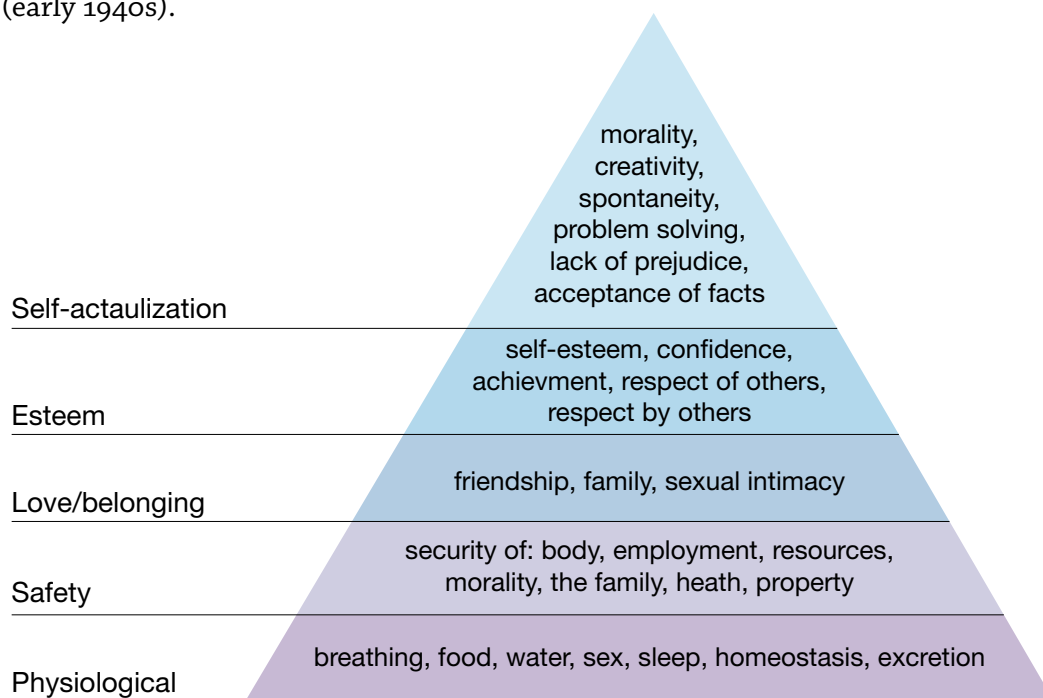


Figure 2 Abraham Maslow's 1943 hierarchy of needs for people living in the United States

However, the needs concept is useful when considering ideas about poverty at many levels. In addition, it demonstrates that poverty must be a multidimensional concept in order to be of use. In the United Kingdom, for example, the Joseph Rowntree Foundation (Parekh et al. 2010) uses 8 themes and 84 indicators in its annual national analysis of poverty and deprivation. It further divides its analyses between five components of the population.

This approach may seem unnecessarily complex, but when we asked a group of 40 representatives from the forestry sector of developing countries about the factors they considered important in relation to the experience of poverty of forest-dependent communities in their countries they produced a list of 46 such factors (Table 1). The list is by no means exhaustive.

The participants divided the list into two sections, one dealing with issues which occurred at the personal or local (village) level and the other with issues at the political and larger area level. There was no attempt to separate out the causes and the effects during this exercise but it can be seen from the table that many of the issues raised at the political level could be considered causal agents.

Major Problem for Forest depending people – Identified by the participants (“Level 1”): Local/Personal	Major Problem for Forest depending people – Identified by the participants (“Level 2”): Political
1. Housing	A. Political instability
2. Water/Sanitation (No clean water, pesticide, conflicts)	B. Illegal Logging (wood)
3. Food/Food security/Malnutrition	C. Corruption
4. Roads	D. Illegal Logging (Charcoal, firewood)
5. Health Facilities	E. Overpopulation + inefficient land-use (shifting cultivation, no irrigation)
6. Schools	F. Short term (aid and government) projects
7. Lack of medium/long term money	G. Gender Problems/Old Traditions
8. Ownership of land/Land claims	H. Perverse outcome of government “support”
9. Electricity	I. Lack of knowledge
10. Lack of capacity for disasters	J. Conflicting Laws (related to corruption)
11. Losses of land (for bio energy)	K. Weak legalisation/Law enforcement
12. Access to forest	L. Marginalisation of Forest Communities/Indigenous
13. Bad situation for women	M. Low income/No access to market
14. No job security (short term employment, accidents, family problems)	N. Migrant Forest Workers (HIV, Sex related problems, Lost relations/love)
15. Lack of safety net (no resources if accident/sick etc)	O. Irresponsible forest companies – no safety equipment etc
16. Lost graveyards	P. Bad policy (log ban – no alternative work)
17. Lost cultura/religious places	Q. Other land use (Hydroelectric)
18. Fragmentation of land – Loss of Land – No fair Compensation	R. Low industrial standards
19. Poor people sell land (cheap) – no education, desperate need of money, corruption/threat	S. Very small compensation for lost lands – (related to bad governance, corruption, law enforcement)
20. Lack of personal security – crime	T. Many problems related to lost land – have to move out
21. Alcohol and drugs – Violence + sexual abuse unions	U. No trade unions allowed or/and Government controlled
22. Often young men monopolise the household resource at the expense of women children and old people	V. No Partnership – Workers – Company – no common interest
	X. lack of alternative economies
	Y. Strong marginalisation of forest living people
	Z. Decentralization combined with no local resources for good planning and investments of resources available

Table 1 Poverty-related problems for forest-dependent people

3.3 HDI & MPI

The Human Development Index (HDI) was perhaps the first explicitly multidimensional tool for evaluating the living quality in different countries. It is based on three dimensions: income, life expectancy and educational attendance. The United Nations Development Programme (UNDP) has used it to compare countries since the early 1990s. Other organizations have also used the HDI, often adding other dimensions.

The Multidimensional Poverty Index (MPI) was created for the 2010 Human Development Report (UNDP 2010). It combines both the incidence of poverty in a target population and the intensity of poverty. The incidence of poverty is the proportion of the population which falls below the poverty line while the intensity of poverty relates to the level of deprivation experienced by the average poor person. The MPI index for intensity of poverty is a multidimensional index with 10 dimensions grouped into three major categories: education, health and standard of living. These are closely linked to the Millennium Development Goals (MDGs)

Indicators used in the MPI

The following 10 indicators are used to calculate the MPI:

Education (each indicator is weighted equally at 1/6)

- Years of schooling: no household member has completed five years of schooling
- Child enrolment: any school-aged child is not attending school in years 1 to 8

Health (each indicator is weighted equally at 1/6)

- Child mortality: any child has died in the family
- Nutrition: any adult or child for whom there is nutritional information is malnourished

Standard of living (each indicator is weighted equally at 1/18)

- Electricity: the household has no electricity
- Sanitation: they do not have an improved toilet or if their toilet is shared (MDG definition)
- Drinking water: the household does not have access to clean drinking water or clean water is more than 30 minutes' walk from home (MDG definition)
- Floor: the household has a dirt, sand or dung floor
- Cooking fuel: they cook with wood, charcoal or dung
- Assets: the household does not own more than one of: radio, TV, telephone, bike or motorbike

A person is considered poor if they are deprived in at least 30 per cent of the weighted indicators. The intensity of poverty denotes the proportion of indicators in which they are deprived.

It should be noted that the MPI takes the household as the unit of evaluation and does not adequately deal with different experiences of poverty felt within households.

The MPI and HDI have both been designed to make comparisons between countries and, in particular, within countries from year to year to measure improvements. For this reason, neither index contains any factors relating to security or to empowerment and participation in decision making.

3.4 World Bank poverty concept

The World Bank (2000) employs a three-dimensional approach to poverty reduction, based on opportunity, security and empowerment.

‘Opportunity’ deals with building up the capital base on which poor people depend by stimulating economic growth and allowing the poor to build up and retain their assets. This includes their intellectual and health assets.

‘Security’ deals with both the political and physical insecurity in which people live. Reducing the risks to which people are exposed increases security. People can reduce their exposure to risks by, for example, building up stocks of food or cash to tide them over poor growing seasons. On the other hand, the existence of safety nets is an important factor that allows people to engage in high-risk, high-reward activities that may have the potential to lift them out of poverty (Kanbur & Squire 2001).

‘Empowerment’ deals with the ability of people to interact with social and political structures on equal terms. When properly empowered, people no longer need to resort to corrupt payments in order to achieve their legal aims. Empowered people are not marginalized when decisions are taken which directly affect them.

3.5 Absolute poverty and relative poverty

Much of the discussion about poverty, and our focus thus far, is related to deprivation in terms of absolute needs, such as food or housing. However, relative deprivation also becomes apparent when individuals in the same society are compared. This is the basis of much of the poverty analysis in developed countries. The poor, while by no means destitute in the way that poor people in many developing countries are, are certainly denied many of the opportunities and an appropriate share of the capital of their societies. This is sometimes described as social exclusion, as people in relative poverty are excluded from the mainstream rights and responsibilities enjoyed by members of their communities. The needs of people living in relative poverty also need to be considered in forest management standards.

3.6 Poverty variation

Standard measures of poverty usually aggregate information from many sources to provide policy-related information. This approach, while undoubtedly useful at this level, risks missing out a number of important factors.

Most people are not poor all of the time. There are good years and bad years (World Bank 1990). Individuals can fall into poverty as a result of illness or of losing a job. In subsistence economies, extreme hardship is often the result of a periodic extreme weather event. In other cases poverty is associated with periods of political instability and insecurity.

There are often also strong differences in poverty experiences between different members of the same family (Haddad & Kanbur 1990). In many poor societies women are marginalized

both in decision making and in the distribution of family income. Often men will have paid employment while women carry out subsistence agriculture and care for the family. In these cases men will often spend a large proportion of the money on their own priorities, such as a motorbike or entertainment, while the rest of the family is deprived of their needs.

3.7 Why are forest-related people poor?

As we have already highlighted, estimates suggest that more than a billion of the world's poorest people depend largely upon forests for their livelihoods. It is generally assumed that most could significantly improve their situation by making better use of the forest resources which they access, meaning that forests can make a significant contribution to poverty reduction.

Angelsen and Wunder (2003) ask:

- Why do the poor tend to depend more on forests?
- Does a high level of forest dependence necessarily correspond to a high potential to reduce poverty through forests in the future?
- Are forest products safety nets or poverty traps?

Much of the wealth is extracted from the forest by various elite groups (Angelsen and Wunder, 2003). They have the capacity to exploit high value timber, which requires expensive capital equipment, upfront concession payments and access to difficult markets.

The remaining non-timber forest products (NTFPs) are in general economically inferior products, requiring a high labour input and suffering from unreliable and low market prices. They are generally free to access and require few skills or capital inputs. This limits their market value since anyone can produce them. The price of a day's production tends to match the marginal cost of a day's labour in poor communities.

Some NTFPs give higher returns, but their unfair trade creates an enduring poverty trap. When higher values start to become realized, the elite usually gains control of the market, often by restricting the transport to market. The elite has the capacity to change the rules of the game and limit market access for the poor producers; this is typically the case for the charcoal and firewood market (Conteras-Hermosilla, 2003).



NTFP can be valuable but to get a fair price is often impossible for small producers. Picture from Guatemala.

3.8 A working definition of poverty

Given that poverty is essentially a state of existence experienced at the level of the individual we believe that a working definition must be centred on individuals. This implies that societies or communities are not in themselves poor but rather that many people in such societies experience poverty. This is recognized by Macqueen et al. (2008) who used the table below (Table 2) to show where forests could contribute to poverty reduction.

Categories of 'value' contributing to QUALITY OF LIFE	Categories of 'deprivation of value' contributing to POVERTY	Potential CONTRIBUTION OF FORESTS TO POVERTY REDUCTION
1. Personal identity, faith and culture	1. Personal meaningless, lack of belonging, inability to express culture	Forest stewardship values contribute to our identity, cultural diversity and spirituality
2. Aesthetic and recreational appreciation of the environment	2. Limited capacity to study, enjoy or preserve the environment	Forest landscapes provide a learning environment, intellectual stimulation and leisure opportunities
3. Social relationships and networks	3. Isolation within or exclusion from society	Forest ownership and access rules foster local relationships built on social and environmental justice
4. Creativity and fulfilment of endeavour	4. Drudgery, exhaustion, helplessness, low self-confidence	Forest management provides various opportunities for creative endeavour
5. Security and freedom from oppression	5. Vulnerability, insecurity, fear and oppression	Forest policies ensure social, economic and environmental stability based on sustainable use and conservation
6. Subsistence for all life according to its needs	6. Hunger, illness, lack of shelter, pain, low life expectancy	Forest products and services sustain humans and interdependent living organisms/ecosystems

Table 2 Forestry contribution to poverty reduction (Macqueen 2008)

Most forest certification stakeholders readily recognize that poverty is not an absolute condition but an experiential one when it comes to dealing with indigenous people in remote areas. Recent approaches to 'uncontacted' groups in the Amazon recognize that there is a balance between material well-being and sociocultural identity. These groups are undoubtedly lacking in most aspects of material well-being and have no access to evidence-based modern healthcare or formal education. However, it is unlikely that they consider themselves to be abjectly poor since they have no reference point with alternative lifestyles and probably feel spiritually well and content.

An important aspect of the poverty experience is the hopelessness, the inability to do anything to change the situation. Many people choose to experience one or more aspects of poverty: bungee jumpers choose fear, poker players choose risk, while supermodels choose malnutrition. In these terms, the nun's vow of poverty is in fact no such thing since it is a positive lifestyle choice.

Experiences differ between individuals within the same family group and within the same community. The type of poverty experience will also tend to differ between communities according to the conditions under which they exist. Thus in South Sudan at the moment perhaps the greatest poverty experience is caused by the risks associated with the Lord's Resistance Army terrorists. The presence of the terrorists greatly increases the risks of hunger and death or injury since they steal food, burn crops, and kill and maim people. Not all villages are or will be affected by their presence, but all villages live in fear. On the other hand

in Niger during the last few years many millions have been affected directly by hunger and death from starvation due to an episodic severe drought.

A definition of poverty must therefore include not only the actual situation but also the risks that people face. It must also include causative factors, since many of these are recognized as negative factors by the people who experience them, which exacerbates the poverty experience.



These women in Mali find themselves in a situation with little hope for the future. They have no capacity to make meaningful change to their lives.

Our definition is based on the classification of human needs, which draws from both Maslow's (1943) hierarchy of needs and Angelsen and Wunder's (2003) poverty—well-being interface. The definition is presented in Table 3, which shows the many dimensions that we consider important. In the table we have also attempted to classify the poverty dimension according to whether it is a cause or a symptom of poverty, and whether it relates to factors in the natural or social environment.

Table 3. The many dimensions of poverty based on Maslow (1943) hierarchy of needs and Angelsen and Wunder's (2003) poverty – well-being interface

Poverty Experience Group	Poverty Experience Need	Cause	Symp- tom	Environ- mental	Social	Description and Justification
1	Subsistence Needs	Food Quantity	X	X	X	Food shortages are one of the most commonly felt symptoms of poverty. Seasonal food Shortage is common. Hunger may be a result of environmental, social or economic factors.
2		Food Quality	X	X	X	Shortage of specific nutrients are another very common poverty symptom, shortages are often seasonal. Shortages are more often caused by social or economic factors.
3		Water	X	X	X	Lack of clean water in sufficient quantity is perhaps the most common problem of the rural poor. It leads to many other problems including ill health. Where water supply is distant time spent fetching water results in insufficient time for other activities such as food collection.
4		Cash Income	X	X	X	Low income was once the defining poverty factor. It results in many problems. Low income is socially determined and is generally caused by insufficient economic activity in an area and underemployment.
5		Non Cash Income and Subsistence Goods	X	X		Non cash income is the value of goods and services obtained and consumed by people for which they do not pay. In subsistence societies the majority of income may be of this type. Subsistence goods include those necessary for the provision of shelter which in many cases is constructed from free resources. This also includes barter goods and sharecropping. A very important subsistence good in many poor areas is fuel.
6		Access to Common resources	X	X	X	Common resources are an important source of subsistence and also cash goods. Important forest related common resources are fuelwood and construction materials. Restricted access to these is both a cause and symptom of poverty and can have important negative consequences. Common resources are often used as parts of coping strategies and for medicinal purposes.
7		Electricity	X	X	X	Access to electricity is a key resource for improved livelihoods. It increases the duration of the productive day. It also allows for refrigeration which increases the durability of perishable foods. It is a key enabler of education allowing learners to read after nightfall. Electricity availability is principally under social control although environmental aspects can play a role where for example electricity is generated by hydropower.
8	Self Realisation	Education	X	X	X	Education is perhaps the greatest tool for improving livelihoods. Lack of access to education is one of the most important symptoms of poverty. It is also a cause of poverty since poor education contributes to poor health and limits all aspects of self realisation.
9		Access to Media	X	X	X	Access to media is a significant contributor to improved livelihoods. The introduction of mobile phones in many developing countries has transformed agricultural markets. Access to pricing information has empowered farmers to achieve fairer prices for their goods. Access to knowledge enables people to participate in political processes.
10		Access to Roads and Transport	X		X	Lack of access to roads and transport is an important cause of poverty. It severely limits access to health and education resources as well as restricting the transport of goods for external markets.
11		Access to Markets	X		X	Access to markets is an important cause of poverty. It is not limited to physical access but also includes structural access. It is often found that scales and types of production are not adapted to enter the market on a competitive basis. This leads to much lower prices for goods.

Poverty Experience Group	Poverty Experience Need	Cause	Symptom	Environmental	Social	Description and Justification
12	Recognition of Individual Land Rights and access to Capital.	X	X		X	In many cases land insecurity is a key contributor to poverty. Where land is held communally or allocated by systems of feudal governance individuals do not have security of tenure. This lack of security contributes to the poverty experience in two ways. The lack of security means that land cannot be properly included in coping strategies. Where land title is not given it is not possible to use the land as a security for financing improved development. In many systems there are also gender related issues related to land tenure which severely disadvantages women. Lack of access to capital is an important cause of poverty since it prevents farmers from investing in improved methods such as ploughs, seeds and fertilisers.
13	Risk Exposure Crop Failure	X		X		In societies principally dependent on subsistence crops, the risk of crop failure and ensuing dependence on other forms of support (often charitable or hired labour) is a major contributor to the poverty experience. Crop failure is largely environmentally determined and it is an important cause of other poverty experiences such as malnutrition and increased dependence.
14	Food Security		X	X	X	Food insecurity and in particular the inability to achieve a balanced diet is an important symptom of poverty. Agricultural strategies that do not provide resilience against the vagaries of the weather and an overdependence on one or a few crops is typical of poor communities. It is both environmentally and socially mediated. In some extreme climates very few crops can be successfully cultivated. In other cases access to the market is limited to commercial channels for only a very few or even a single crop.
15	Loss of employment	X			X	Unemployment and underemployment is a key contributor to poverty. Where there is high unemployment particularly low skilled jobs have very little value and usually rates of pay are below subsistence levels. Where there is high unemployment job security is very low since workers can be easily replaced. Loss of employment leads to loss of income and is a major cause of people falling into extreme poverty.
16	Violence & Crime	X	X		X	Violence is commonly associated with the poverty experience. Violence is often associated with crime. Violence occurs at many levels; domestic violence, violence in the community, violence between interest groups, violence associated with political processes. Crime, in particular theft of resources, is an important cause of poverty and a symptom of it. It is a symptom of poverty that people live in fear of violence and crime, and it is a cause of poverty since it restricts the willingness of people to invest in affected areas.
17	Access to Health Care	X	X		X	Limited access to health care is an important symptom of poverty. Access can be restricted for financial reasons, social reasons and physical reasons. In many cases the distance to health care facilities is so large that many people cannot reach health care in time to receive appropriate help. In other cases social and often gender related restrictions mean that some part of the community is unable to access health care.
18	Work related risks	X	X		X	It is very often the case in poor communities that places of work are much more dangerous than they need to be. Equipment is often old and unsafe. But even where equipment is safe working practices ensure that people are exposed to unacceptable risk levels. Disabling injuries and the lack of a social safety net are an important contributor to poverty which affects not only the injured person but also their dependents.
19	Political Instability	X			X	Political instability is a major cause of poverty. It strongly limits the ability of people to make long term plans. This affects both individuals and businesses. At government level it leads to inertia at all levels. It is often also a cause of violence.

Poverty Experience Group	Poverty Experience Need	Cause	Symptom	Environmental	Social	Description and Justification	
20	Corruption	X			X	Corruption is strongly associated with poverty. It is an important cause of poverty. Poor people are faced with small scale corruption on an enduring basis in their every day dealings with officialdom. Large scale corruption perverts markets and ensures that people will never receive adequate returns for the goods they produce.	
21	Social Inclusion	Participation in Decision Making	X	X		X	An important part of the poverty experience is the feeling of disempowerment when most decisions affecting your livelihood are made by others behind closed doors. It is both a cause of poverty and a symptom. Decisions made without the participation of those affected by them are likely to lead to poor outcomes. Poor outcomes can be caused either if the decision was poor in itself or when those excluded from the process fail to engage with the ensuing changes.
22	Heritage Assets	X	X		X	Lack of belonging is an important contributor to the poverty experience. For refugees this is one of the key symptoms. Thus the loss of heritage is strongly felt by many poor people when they move. Heritage objects are often also related with the spiritual wellbeing of people and restrictions of access to them are an important cause of loss.	
23	Gender Equity	X	X		X	In many societies one or other gender is socially disadvantaged. Most commonly women. This can be due to restrictions in employment, inability to have land tenure, lack of property rights for goods, lack of access to decision making processes etc. It is an important cause of poverty and is often felt as a symptom of poverty when the person is reduced to being a chattel.	
24	Intergenerational Equity	X	X		X	In many societies one or other age group is strongly disadvantaged as a result of cultural or administrative actions. Often old people are worst affected by poverty since they are unable to carry out the physical labour to grow crops or to earn a wage. On the other hand in some societies older people control all of the resources and it is the youth who are disadvantaged. It is often also in societies undergoing rapid change that older people experience the most severe poverty symptoms.	
25	Ethnic Equity	X	X		X	Inequity of rights is a contributor to poverty for many ethnic minorities. These rights are often related to failure to recognise land tenure for indigenous peoples. This leads to members of these groups being forced onto marginal land which contributes strongly to their poverty experience. It is both the marginalisation itself and the impacts of this which contribute to poverty.	
26	Resource Governance	X			X	Poor resource governance is a strong contributor to poverty. Poor governance has many faces. In some cases the forest management system chosen is unlikely to achieve its objectives. In other cases governance benefits only small portions of the population. In many cases the governance system is not capable of forest management. Often governance does not include the people who rely on the forest for their livelihoods and as a consequence makes most of their activities illegal. It is one of the strongest factors causing poverty.	
27	Access to Legal System	X	X		X	The poor rarely have access to the legal system. This is both a symptom and a cause of poverty. The poor are effectively disempowered.	
28	Land use allocation system	X			X	The failure of land use allocation systems (often associated with corruption) can be a major cause of poverty. This is particularly the case when land use allocations are made without reference to the people affected. A major symptom of this lack is the current Food-Fibre-Fuel debate about land use allocation. Often very large areas are ceded to external investors at very low costs.	

4. Certification standards and expected impacts on poverty alleviation

Forest managers have a wide variety of standards that can be applied to the work they carry out. These include internationally based standards for forest management such as the FSC Principles and Criteria (FSC P&C), national forest management standards, and PEFC-endorsed national standards. In addition there are standards that deal with only certain aspects of forest management, such as ISO14001, which deals with environmental management, and OHSAS18001, which deals with health and safety.

4.1 Types of standards that are relevant to poverty

Poverty-related issues are addressed in a variety of forestry-related standards in different ways and at different stages of the production chain. Forest management standards address poverty issues at the level of the forest management unit. Selected International Organization for Standardization (ISO) performance standards can be used to address particular poverty issues. Chain of custody standards sometimes address poverty issues in manufacturing industries. In addition, various corporate social responsibility (CSR) standards address the interface between corporations and their stakeholders.

Forest management standards

Forest management standards for the purpose of certification go back a little more than 20 years. Initially, certification was based on proprietary standards of environmental NGOs, such as the Rainforest Alliance Smartwood standard and the Soil Association Woodmark. In 1994 the establishment of the FSC created the first internationally applicable standard, the FSC P&C. Since then a variety of national and regional standards have been developed for a variety of situations. The FSC and PEFC systems issue the most certificates. The FSC system provides a universally applicable standard which is locally adapted, while the PEFC system operates by recognizing and accrediting national schemes. In all cases the standards deal with both environmental and social impacts of forestry while requiring that forest management is economically viable.

There are some important differences in practice between the requirements of the FSC and PEFC systems, in that the FSC P&C has universal requirements while PEFC does not. For example indigenous peoples' rights are protected in all national FSC standards but only in some PEFC standards. For the purposes of this study, it is not possible to make an analysis of the expected impacts of 'the PEFC standard' on poverty-related issues since there are in fact a number of different PEFC standards. In addition, national PEFC standards are strongly concentrated in developed countries, where the type of poverty found in developing countries is much less common. The principle developing countries where a PEFC standard exists are Brazil and Chile while China is developing its own national scheme which it hopes to enter into the PEFC system. Since the core standard of the

FSC P&C is the same everywhere, we have focussed our attention on the poverty-related impacts of the FSC system, though it is reasonable to expect other systems to share at least some of its impacts.

ISO

ISO 14001 is the most common ISO standard applied in the forest, while both ISO 14001 and ISO 9001 are applied in many timber processing facilities. Although ISO 14001 is principally an environmental standard it is possible to include the social environment in an ISO 14001 management system. In addition ISO is in the process of releasing its ISO 26000 standard which deals with CSR. However, this is a guidance standard and will not be auditable or certified.

OHSAS

Occupational Health and Safety (OHSAS) standards are an important tool in the fight against poverty. Forestry work is inherently dangerous due to the large forces required to harvest, transport and process timber. The rates of disabling injury and death are amongst the highest of any occupation, even in developed countries where health and safety standards are strongly applied and safety training is given. Injuries can leave workers unable to support themselves and their families. In many developing countries the statutory compensation rates are completely inadequate to support an individual.

Chain of custody

Chain of custody (CoC) standards deal principally with the technical issues surrounding the traceability of timber through the production process. However, recently both FSC and PEFC have introduced requirements for occupational health and safety performance by CoC holders.

Corporate social responsibility

CSR standards are based on the 'triple bottom line' concept (people, planet and profit) which also lies at the heart of most forest certification standards. Leading providers of CSR standards include AccountAbility (AA1000 standard), Social Accountability International (SAI – SA8000 standard) and GoodCorporation. These standards cover many of the issues covered by the forest management standards, but their requirements are much more specific. For example, the GoodCorporation standard (GoodCorporation, 2010) includes more detailed labour relations requirements than is specified at the criterion level of the FSC standard.

One aspect that is not adequately dealt with by any CSR standards is the acquisition of land. In many countries where the title to all land is held by the government, foreign companies are able to obtain land on very favourable terms (Oakland Institute 2011, Shepard & Mittal 2010, Friends of the Earth 2010). It is not uncommon for land to be made available to companies on 99-year leases at a ground rent of US\$1 per hectare per year. This is land which could be used for many purposes: even for subsistence agriculture the derived value per year would far exceed the nominal land price.

Transferring this land to external investors effectively deprives the communities living alongside it of the future value. The investors are gaining significant benefits without ad-



Forest work is inherently dangerous. Workers carrying out dangerous work without proper protective equipment. Ghana

equately compensating those who would otherwise occupy the land. This type of land allocation is often associated with some form of corruption (von Oppeln & Schneider 2009); although this should be dealt with by the standards, the manner in which the benefits of corruption flow to the beneficiary are often difficult to define.

Fair trade

There is a wide variety of systems of fair trade certification in use; as in the case of forest certification these range from in-house proprietary standards to widely respected international standards. The Fairtrade Labelling Organization (FLO) is the most important international body governing fair trade. It has a system for recognizing national standards which allows the seller of a certified product to apply the relevant Fairtrade label. FLO has a number of standards dealing with a range of products and also distinguishing between systems of small producers and systems for sharing benefits with hired labour. During the last two years FLO and FSC have been cooperating in the production of a standard which will allow FSC-certified products from small producers to carry a Fairtrade label as well as the FSC label. The entire standard is available at www.fairtrade.net/fileadmin/user_upload/content/18052010_EN_Fairtrade_Standard_for_Timber.pdf.

The standard addresses some significant causes of poverty among small timber producers. The Fairtrade system is based on the payment of a Fairtrade premium over and above the cost of sustainable production. This premium must be separately accounted for and it must be used for the benefit of the producer community. The producer community itself supervises how this money should be spent through a Fairtrade Association, which must be transparent and participative in its decision making.

In addition the standard has requirements for secure contracts from buyers, which strongly enhances the security of employment. There are also provisions for pre-financing production, which can help to overcome the lack of access to capital that limits many producers.

Finally the standard extends the social and environmental requirements already included in the FSC standard for forest management to the processing plants in the production chain. When fully implemented, it could have significant impacts on poverty among small growers.



Sawmill workers at the FLO-FSC Fairtrade pilot project in Chile are members of the local Fairtrade Association

4.2 Forest management standards and expected impact on poverty experience needs

Of all the standards relevant for addressing poverty among forest-dependent people, forest management standards have a unique position as they try to include, to some extent, all of the other standards. The idea is that certification under a forest management standard will improve social, environmental and economic sustainability. By also including CoC in the concept, this improved forest management can be communicated to the market as well. The challenge is then of course to cover all the key aspects of sustainable forest management within only one standard.

FSC P&C is the only global forest management standard in widespread use in countries where extreme poverty can be expected. It is also the forest management standard with the highest market acceptance. This makes it especially relevant if improved market access for forest products from countries in the global South is a key objective of the certification system.

We carried out a cross reference analysis to evaluate how well the FSC P&C covers the poverty aspects identified and discussed in chapter 3. The table in Appendix 1A cross references the currently applicable (January 2011) FSC P&C and the poverty experience needs of Table 3. The table in Appendix 1B cross references the 2011 draft FSC P&C which will most likely be adopted during 2012. Each criterion of the two standards was analyzed to determine if it was likely to have an impact (positive or negative) on the poverty experience needs.

This discussion focuses on the currently applicable FSC P&C, and concludes with brief discussion of the likely impacts of the new FSC P&C.

Subsistence needs

Subsistence needs are the strongest focus of the FSC P&C based on the number of criteria which have some relevance to these needs. However, most of the emphasis is on obtaining information about social conditions by carrying out social impact assessments (4.4, 7.1 and 10.8); there is no specific requirement for managers to act on this information. The other criteria dealing with these issues concern the rights of access to land and to traditional resources, or in the case of criterion 5.5 protection of the resource base. In relation to cash income the FSC P&C requirements are once again rather weak, referring only to the right of employees to organize and negotiate about pay and conditions. For indigenous peoples the use of their knowledge must be fairly compensated.

The requirement of criterion 1.5 to prevent illegal activities may in many cases have negative impacts, particularly in developing countries. In many cases forest law and land tenure law can be seen as part of the problem leading to poverty. Laws in some countries make almost any forest activity illegal; in many cases this has disenfranchised rural people from the trees and other resources that they and their forebears have tended for long periods (Fairhead and Leach 1996). Forest laws have in many cases been developed for the benefit of urban elites and foreign timber harvesters. In such cases the law is simply not supporting poverty alleviation.

Self-realization needs

There is relatively little attention paid to self-realization needs in the FSC P&C. Education and more specifically training to carry out a particular role in forest management appears in criterion 4.1 and 7.3. Other than this education is considered within social impact assessments carried out to inform management. Individual land (and communally held land) rights are recognized in FSC P&C 1.1, 3.1 and 3.2; this includes customary rights of indigenous peoples.

Issues relating to access to media and communication, access to roads and transport and access to markets are not dealt with in the FSC P&C at all, apart from a requirement to respect customary rights of way. Access to media is one of the most potent weapons in the fight against poverty. In many countries the advent of the mobile phone has allowed farmers to obtain immediate market price information for crops such as rice and coffee (Smith 2009). This has helped them to negotiate improved prices since they are well aware of the transport costs from production site to point of sale. Access to markets is one the greatest problems for poor producers, who typically are unable to produce enough to enter the market on their own account. This leaves them reliant on middlemen, who often cheat them, to buy their crops.

Risk exposure

The FSC P&C deals quite well with two types of risk associated with poverty: loss of employment and work-related risks. In addition, some attention is paid to access to health care for employees and their dependants. Loss of employment is dealt with both directly and indirectly: directly by requiring employers to respect organized labour and in protecting employees from arbitrary dismissal by having accessible dispute resolution procedures. The requirements for diversification of local forest economies also gives indirect protection against unemployment since it decreases the likelihood that all employees will be affected in the same way by economic cycles.



Corruption and political instability often make long term investments in forest plantations to risky for poor people. Consequently results are often disappointing. Picture from West Africa.

Crop failure and food security are dealt with only very weakly by including areas of critical resources for local populations in the definition of High Conservation Value Forest (HCVF). Food security must be recognized as one of the most important aspects of land resource management since reserving land for forest uses may deprive populations of resources of last resort or of resources required to prevent specific nutrient deficiencies.

Risks related to political instability are not dealt with by the FSC P&C while corruption is dealt with only from a legal point of view in criteria 1.1 and 1.2. It must be recognized that corruption is one of the most important factors contributing to poverty and inequity in societies. Corruption is ubiquitous in the forestry sector in developing countries and it is a significant factor in the cost of production. Corruption payments are often higher than the value of the timber at source (pers. obs. Cameroon 2010) and act to drive down the prices that can be paid to producers.

Social inclusion

It is in the field of social inclusion that the FSC P&C has perhaps the strongest requirements in relation to the fight against poverty. Firstly the right to be consulted and to participate in decision making is included in the FSC P&C in four criteria: 3.1 for the case of indigenous peoples' land, 4.3 and 4.4 in relation to organized labour and members of local communities and 9.2 in relation to the identification of HCVs forest values. Gender equity is indirectly protected by application of relevant International Labour Organization (ILO) conventions. Ethnic equity is specifically considered for the case of indigenous peoples. Intergenerational equity is partly covered by the ILO convention on prevention of child labour; however, the rights of older people are not covered by the FSC P&C.

Land-use allocation and in particular participative land-use allocation decision making, are adequately addressed in the FSC P&C only in relation to indigenous peoples' rights. In many countries governments have centralized land-use allocation so that concessions are sold for the benefit of the government elite without consideration of the needs of the people. Leases for afforestation projects are similarly allocated without proper consideration of their social impact (Oakland Institute 2011). This is increasingly the case for bioenergy projects.

Expected changes as a result of the introduction of the new FSC P&C

The analysis in Appendix 1b shows that potentially all of the poverty needs could be addressed, subject to the decisions of forest managers.

The most significant change in the new FSC P&C is the issue of 'engagement' with local stakeholders, both employees and members of local communities. This requires that certified forest managers enter into a process with stakeholders to identify their concerns and needs. This communication will then lead to agreed objectives for a social management plan, which could be aimed at satisfying any of the poverty needs. The social management plan will include concrete and verifiable targets for the objectives. The level of intervention will be determined by the scale and intensity of the forest management operations.

In addition, the draft FSC P&C separates community relations from workers' rights and introduces practices aimed at gender equity.

In order for the new FSC P&C to be effective, there will be a need for guidance as to the types and levels of intervention expected from organizations of differing scales and intensities. It therefore remains to be seen if forest managers and communities will make appropriate choices for their poverty-related interventions.

5 Forest certification and poverty alleviation impacts

In the introduction we discussed the motivations that forest certification stakeholders have in relation to poverty alleviation. The fight against poverty is seen as an integral part of forest conservation. As we have seen from the analysis above, forest management certification standards in themselves make only rather weak requirements of certified forest managers. These requirements have been supplemented by the policy actions of the FSC, including the SLIMF standards, the Lisbon Process to support small producers and, most recently, the FLO-FSC Fairtrade initiative.

When considering the impact of forest certification on poverty, we should consider only the changes in forest management practices that are a direct result of forest certification. This is not easy since the existence of forest certification has in itself changed the forest industry during the last 15 years and many of the impacts will have been felt in forests in general. There have been a variety of reviews of the social impacts of forest certification and these are discussed separately below.

5.1 Professional opinions of the impact of forest certification on poverty alleviation

A recent review of a forest certification training programme reported many positive impacts for poverty alleviation (SSC Forestry 2011.) It found that the training had caused significant changes in the participants' organizations, leading to improvements in their environmental and social performance. These improvements have affected many of the poverty-related dimensions discussed in chapter 4.

A total of 36 foresters from developing countries were asked about the impacts of changes in forest practices due to forest certification pressures in their countries, companies or organizations. The respondents were all previous participants in a training programme on sustainable forest management and forest certification sponsored by Sida and therefore had a good understanding of the requirements of forest certification and how the standards should be applied.

The group was asked to indicate their level of agreement with five statements. It is clear from the responses (Table 4) that this group consider that there have been significant improvements in poverty-related aspects as a result of movements towards forest certification. These improvements have been felt across the entire spectrum of poverty experience groups from subsistence needs to social inclusion needs.

The first statement in Table 4 deals mainly with issues related to subsistence needs but also with some self-realization needs such as access to education. It includes the impact on affected communities, not only on directly employed workers, indicating that the positive impacts are felt outside the organization itself.

The second statement deals with improvements in the situation for employees, relating mainly to self-realization needs but also to needs related to risk exposure and social inclusion. Positive impacts include better training, risk reduction, better employment security and improvements in communication between workers and their employers.

The third and fourth statements relate mainly to social inclusion aspects for both communities and indigenous peoples. In both these cases the respondents indicated very strong agreement that there had been significant improvements in the relationship between these groups and forestry organizations as a result of moves towards certification and sustainable forest management.

The fifth statement concerns increases in local economic activity as a result of certification. It relates mainly to self-realization needs such as access to secure employment and access to markets.

For all of these statements there was strong agreement that there had been benefits due to moves towards certification. Remarkably only four out of a possible 180 responses disagreed with any statement while 20 responses were neutral. No opinion was given in 13 cases, where the respondents had been involved more in technical efforts to develop national or organizational standards than in applying them.

In most cases where the respondents were asked about concrete improvements as a result of moves towards certification, they were able to provide detailed information; a number of these cases are discussed in more detail in SSC Forestry (2011)

Most of the organizations known to this group are still in the early phase of preparing for forest certification. As these organizations improve in relation to the forest certification criteria ongoing improvements in poverty-related aspects of their performance can be expected. It is not the certification itself that causes improvements but the changes made in preparation for certification. In some cases the organizations involved are unlikely to become certified due to forest conversion-related issues; even so, they are pursuing forest management improvements according to the other parts of the FSC P&C.



A recent review of a forest certification training programme reported many positive impacts for poverty alleviation

Question	Strongly agree	Partly agree	Neither agree nor disagree	Partly disagree	Strongly disagree	No opinion
The implementation of SFM and FC in our company/organization/country have resulted in the following improvements:						
Livelihood for poor people living in and around the forest have improved, for example: basic needs like water and food security, basic education, basic health care etc.	14	13	5	1	0	3
Livelihood for the employees has improved, for example: safety equipment is provided, training is provided, use of chemicals reduced, payments are safe and more fair, long-term employment when relevant, etc.	18	12	4	0	0	2
Respect for local people/community has improved (respect for land use rights, water rights, access to forest, cultural places, compensation for losses, etc.)	19	10	4	1	0	2
Respect for indigenous people has improved (traditional rights, land use rights, cultural places, compensation for using traditional knowledge, etc.)	18	8	3	1	0	4
Increased employment opportunities and/or support for business development for communities	15	13	4	1	0	2

Table 4. Changes relevant for poverty alleviation in forest practices due to forest certification. The study is based on questions to 36 foresters from developing countries.

5.2 Case studies of poverty alleviation in certified forestry

We have chosen five short case studies of poverty alleviation to illustrate how the forest certification process according to a range of standards has affected the poverty experience of people living in and alongside forests. They have been selected to illustrate different poverty experience groups. Three of the cases are described based on interviews and meetings with many people at different levels in each organization and discussions with external stakeholders over many years (Perum Perhutani, Forestal Arauco and Kilombero Valley Teak Company). The other two cases are based on discussions and site visits (Grupo Agroindustrial Occidente, Guatemala) and experiences from auditing activities (Knysna Forest). Although all five are aiming for FSC certification, only three have achieved this at the time of writing.

Further case studies are presented in *Celebrating success – Stories of FSC certification* (FSC, 2011). The focus is on environmental improvements, but social aspects and poverty are discussed in several of the 18 stories. This ‘celebration’ report lacks hard evidence, but many factors point in the same direction – forest certification improves livelihoods for poor people.

Perum Perhutani, Indonesia

Perum Perhutani is one of the state-owned forest companies of Indonesia. It operates the largest teak plantations in the world. It was originally certified under the Smartwood system in 1990, three years before Smartwood became an FSC-accredited certification body (Donovan 2005). Donovan now considers that the company should have been certified on a partial

basis, for each forest management unit (FMU). Reports suggest that the key issue in relation to certification compliance was the very fragmented and complex nature of the organization. This meant that sustainable forest management issues were not embedded in company management at all levels, indeed, managers of some FMUs were not even aware they were FSC certified (Drakenberg, pers. com.) The certificate was later withdrawn following criticism of the organization's social practices, in particular after the company's forest guards shot people dead on company land. Since 2004, with the support of Tropical Forest Trust (TFT), Perhutani has been pursuing recertification on an FMU by FMU basis.

In preparing for certification Perhutani has implemented changes that are likely to have a significant positive impact on livelihoods in the future. In certification-ready FMUs communities have been given access to land for the purpose of Taungya-style agriculture during the last two years of rotation and the first two years of the regeneration. Villagers are allowed access to the plantations for gathering NTFPs. Local community associations participate in the revenue from the teak harvest under a profit-sharing agreement based on the length of the cooperation between the community and the company. The company also allows the under-cropping of closed canopy stands with crops that can tolerate this environment. These are all significant benefits for local people.

Local community associations have become the interface between the company and the local population. They are democratically structured membership organizations, and it is through them that the funds received from the profit sharing are administered. The profit-sharing model is a significant improvement on the previous situation.



Making land available for agroforestry during the production cycle is an important benefit for people living next to certified plantations. Perum Perhutani, Indonesia

Forestal Arauco, Chile

Forestal Arauco is the largest forestry company in Chile with almost 750,000ha of plantations of mainly pine and eucalyptus. In addition the company owns 300,000ha of unplanted land, of which approximately 80 per cent is natural forest. The company began its path to certification in 2000 when it decided to engage in ISO14001 certification for environmental management. In 2003 it achieved certification under the PEFC-aligned Certfor scheme. At the time of writing it has completed its pre-assessment for FSC certification and is awaiting the main audit.

In order to comply with certification the company has made significant changes to its management practices during the last 10 years. On the social side these have been significant in a variety of ways. The company has greatly improved its relationship with the indigenous Mapuche. This has included changes in the way it communicates with Mapuche communities and support for training Mapuche women in traditional handicrafts. In addition the company has provided building materials for traditional *rukas* (communal houses) which are now used by the communities to attract tourists and to demonstrate aspects of the Mapuche way of life.

Specifically in order to comply with the requirements of FSC certification the company has developed a series of hybrid forums to provide guidance about its forest management. These forums cover a variety of fields including, on the social side, labour relations, indigenous communities and contributions to local communities. The outputs from these forums give strong guidance to management about how to deal with the issues arising. The membership of these hybrid forums consists of experts and interested parties, the majority of whom come from outside the company. This represents a significant transfer of decision-making influence from the company to external stakeholders.

The company also has a strong history of involvement in education and training, both for its own workers and for the community at large. It runs literacy training for its workers and for contractor labour. In addition, the company provides in-service training courses for teachers at primary and secondary schools covering a range of fields.

In the field of economic development, the company has a programme to develop local sourcing of its requirements. It provides entrepreneurship training for start-up businesses that hope to become suppliers.

Grupo Agroindustrial Occidente (GAO), Guatemala

GAO has been working with natural rubber tree plantations for more than 50 years, processing natural rubber as a raw material for export. In 2009 the board of directors made it a corporate priority to comply with the FSC P&C within natural rubber plantations for the short, medium and long term.

After almost three years of changes to comply with the FSC P&C, in May 2011 five farms were FSC certified in forest management. During September 2011 the company went through chain of custody assessment, and expect to achieve CoC certification by the end of 2011. These two certifications have been very important for the company because they add value



Using oxen to haul logs is both environmentally friendly and creates better paid employment in certified native forests in Chile.

to the natural rubber tree plantations. This has encouraged GAO to create new products: as a result, it now produces mattresses, pillows and raw material for tires from natural rubber.

One evident positive social impact is regarding health conditions. The use of dangerous pesticides was stopped and safer alternatives used instead. People use personal protective equipment and have received medical kits. A training programme has built awareness of the importance of being protected, and safety measures are regularly updated. Creating a culture of self-protection has been (and remains) a huge challenge for the company: previously, people in rural areas tended not to use preventative safety measures, only taking action when an accident occurred. In order to change this practice, the company has implemented a long-term system for training and for evaluation and monitoring of the results achieved.

Another positive impact of FSC certification has been improved houses for the families living inside the farms. The company has also provided a primary school for employees' children: a significant development, as it is common practice in Guatemala for children work to work alongside their parents in the field.

Knysna Forest, South Africa

The Knysna Forest is, technically, one of the best-managed mixed-species high forests in the world. Reduced impact logging practices are exemplary and harvesting schedules have minimal impact on natural forest dynamics.

However, an FSC pre-assessment in 1998 determined that the managers of the forest, then run by the State Directorate of Forestry of South Africa, had no interaction with the abjectly poor shanty town dwellers on the forest fringe. A corrective action request was issued.

Two years later, in 2000, the auditor returned to the Knysna Forest with a group of international students of sustainable forest management. The forest managers organized a picnic lunch at a field office attended by stakeholders. During this lunch a man suddenly ran over to the auditor and proceeded to shake him vigorously by the hand, thanking him for the corrective action request. The subsequent consultations by the forest managers had, he said, completely changed the way his poor community lived with the forest. There appeared to have been relatively little physical change in the community's living conditions, suggesting that the main improvement to their poverty experience was a feeling of empowerment as a result of being consulted.



Forest workers in the FSC certified Knysna forest are highly trained and make use of proper protective equipment in order to reduce the risks of their job. South Africa

Kilombero Valley Teak Company, Tanzania

In 2001 the Kilombero Valley Teak Company of Tanzania made preparations for FSC and ISO14001 certification. At that time the company was majority owned by the Commonwealth Development Corporation, a company owned by the British government which invests in developing countries in order to foster economic activity. It was responsible for around half the economic activity in the Kilombero Valley, one of the poorest parts of Tanzania. The company has a long history of direct support for the local communities, both through its social fund and via ad hoc contributions. These ad hoc contributions included providing company transport to import food from Dar-es-Salaam during the drought emergency of the late 1990s. The company chose to include the social interface in its ISO14001 performance criteria so that it could integrate its management for ISO and FSC certification.

As part of the process of preparing for FSC certification, the company held two workshops which were attended by stakeholders from the district as well as national stakeholders. Local social stakeholders attending the meeting included the bee-keepers association, the Ifakara women's weavers cooperative, representatives of the workforce and small contractors. Local government was also represented at a variety of levels. One issue highlighted during these meetings was the lack of knowledge about the heritage aspects of the district.

The valley was a focus of the Maji-Maji rebellion against German occupation in the early 1900s. As a result the region was forcibly depopulated and resettlement did not begin until the 1940s, with the main influx of people arriving from the 1960s onwards. Oral history and its association with the landscape was lost during this hiatus. The company commissioned a survey of heritage resources in the district, which was carried out by an archaeologist from the department of antiquities accompanied by an archaeologist from the South African Heritage Resources Agency. This study revealed that the valley had been in more or less continuous occupation by man for at least 250,000 years; artefacts were found from the middle stone age, the late stone age, early farmers, the iron age (c.600-300 years ago) and the site of a district court dating back around 200 years. It became clear that the valley was an important link in the trade route which carried goods up and down between the Islamic-controlled coastal region and the African Great Lakes.

The results of the study were presented at the second stakeholder workshop and caused jubilation. The local communities had been given back a heritage. It gave them a sense of belonging, a right to be there, which had previously been absent. Insecurity about their rights of occupancy was now dispelled. An important part of their poverty experience had been eliminated.

5.3. Reviews of impacts of forest certification on poverty

Almost since the beginning of the FSC system stakeholders have wanted evidence that forest certification has positive effects on reducing poverty. A variety of studies have been published using a range of methodologies. Karman & Smith (2009) carried out a broad review of studies of the impacts of forest certification that included a review of some social aspects.

Difficulties

As stated above, hard evidence for impacts on poverty has been difficult to obtain because of the difficulty of following conventional scientific procedures. Normal practice would be to compare and contrast the evolution of similar certified and non-certified forest social environments over time. However, certified and uncertified forests in the same area are unlikely to be entirely independent of one another since both forest managers and forest-dependent communities will communicate with one another. When the forests to be compared are far apart, the natural and socio-political environment is likely to be different. Scientists faced with such problems will normally measure the independent variables they believe could be of interest: along with certification status, these would include, for example, land ownership type, forest regulation type, local governance system, climate, and a number of others. They will then use statistical methods to tease out the correlation between poverty indicators and certification status, having corrected for the influence of other variables. Unfortunately this can only succeed when there are many independent observations. Robust results would require studies based on at least tens and probably hundreds of certified forests. Since this is not possible given the relatively low number of certified forests in developing countries, the studies reported have all used less robust methods, which suffer from a variety of problems.

Another confounding factor is that in developing countries many certified forests have benefited from extensive technical support over and above the certification process. In these cases it is difficult to separate the impacts of the technical support – improved sawing technologies, better extraction methods, etc. – from the impacts of changes made for the purposes of certification.

In addition, few if any of the forests both certified and uncertified have any baseline information from before the studies were carried out, so that it is impossible to determine if differences seen are due to certification or preceded certification. In many cases there are likely to have been differences prior to certification, since forest managers who were already carrying out activities with a positive impact on poverty are more likely to have been early adopters of certification.

The choice of variables for the analysis is another problem since poverty is so multidimensional and the dimensions themselves are not independent. We therefore expect there to be strong correlations between the variables. Furthermore, many of the variables are subjective and difficult to measure, particularly at the level of the forest management unit. In any case it is usually possible only to evaluate a few relevant variables, so that for example the Rainforest Alliance (Newsom, 2009) used three social indicators (number of employees, number of sites of importance to indigenous people protected, and number of serious accidents and fatalities) in their analysis of the impacts of the Smartwood programme.

Methods

The existing studies include a few which attempt to use the robust comparative method. The Rainforest Alliance study (Newsom, 2009), for example, compared accident and fatality rates from certified forests to national statistics (though it is of course likely that the statistics from certified operations, where these exist, are already included in these national rates.)

However, most of these studies are flawed because of the short duration of the studies or lack of replication.

Other studies have looked at the known differentials that are due to certification. A number have looked at the effect of the price differential between certified and uncertified timber as a means of evaluating improvements in income. Where the increased income is directly transferred to smallholder forest owners this is an appropriate measure. However, if the increased income is held by community elites (as the authors have observed in a number of cases) the effect on the poor is minimal. Where the increased income is paid to companies, it can be assumed that in most cases the money ends up in the hands of the shareholders.

Probably the most robust and general method used in these studies has been to evaluate the Corrective Action Requests (CARs) issued by auditors since it can be assumed that appropriate action has been taken either before issue of a certificate or during the life of the certificate. The evaluations based on CARs probably underestimate the true impacts since many management actions would normally have been taken before the organization was submitted for certification.

Results

A properly designed comparative study of six community forest operations in Brazil was carried out by Lima et al. (2008). The study considered only a limited number of social variables, including the quality of administration in the community, the use of personal protective equipment and increased incomes from certification. The study could not detect important differences between the certified and uncertified community producers. This failure can be ascribed to the fact that certification was only part of a suite of support measures offered by various agencies to all of the communities before the study. This support was provided by the same agents regardless of certification status, so the similar results are not surprising. Certified communities did not in this case achieve higher prices for timber but did find market access easier.



Rainforest Alliance in its analysis (Newsom 2009) reported on a variety of parameters but did not provide comparison data with uncertified companies except in the case of accident rates. There is weak evidence that accident rates are lower in certified than in uncertified operations; however, the calculation of the rates is in itself compromised by misreporting of individual events as rates per 100 worker years.

Workers in Vietnam in an uncertified sawmill have no protective footwear when working with dangerous equipment.

Other studies have concentrated on certification reports and CARs. Pena Claros et al. (2009) focussed their evaluation on tropical forest situations where poverty rates are generally highest. Their study was based on CARs issued by auditors; in a few cases where FMUs had been certified for more than five years it was possible to compare the results of the first and second main audit. Table 5 shows the results of this evaluation of a total of 3102 mentions of specific criteria in the reports drawn from 104 main audits. There are some notable poverty-related issues included in this list, chiefly CARs related to health and safety issues (Criterion 4.2). These were found in 87 out of the 104 reports, occurring on average almost three times in each report.

Other important poverty-related CARs in this list include monitoring of social issues (8.2), training of forest workers (7.3), community employment opportunities (4.1), evaluation of social impact (4.4), mechanisms to resolve disputes (2.3), local community control over forest management (2.2) and possibly some aspects of respect for national and local laws and identification of high conservation value forests

Criterion	Description	Ranking	Distribution
4.2	Health and safety for employees and families	8,2	87
7.1	Management plan	6,7	79
6.5	Use of reduced impact logging techniques to reduce impact to the forest	5,6	74
8.2	Monitoring of indicators, such as productivity, forest diversity, socioeconomic impacts	4,8	76
5.6	Harvesting regulations to assure long-term sustainability	4,5	61
6.2	Rare, threatened & endangered species	4,0	73
8.3	Chain of custody	4,0	58
5.1	Economic viability	3,7	68
7.3	Training and supervision of forest workers to ensure implementation of the management plan	3,1	61
8.1	Frequency and intensity of monitoring	2,8	63
6.1	Assessment of environmental impact	2,7	54
4.1	Communities are given employment, training, services	2,7	46
1.1	National & local laws	2,6	46
1.5	Protection from illegal activities	2,6	54
4.4	Evaluation of social impact	2,5	60
6.3	Ecological functions & values	2,4	55
2.3	Mechanism to solve disputes	2,3	44
6.4	Protected areas	2,1	44
6.7	Waste (garbage)	2,0	54
9.1	Define existence of high conservation forest values	1,9	52
2.2	Local communities maintain control or they delegate it	1,9	30
7.4	Public summary of management plan	1,8	57

Table 5 Corrective Action Requests (CARs) from tropical forest certifications (Pena Claros et al. 2009)

Table 5. The most commonly mentioned criteria given to the forest management units (FMU) in the list of Correction Action Request (CAR). Data was extracted only from main reports (n=104 main reports). "Ranking" refers to the percentage of times a given criterion was mentioned in our sample (total of 3102 times). "Distribution" refers to the percentage of FMU that had at least once an issue raised in certain criterion.

Other important poverty related CARs in this top 22 list include: Monitoring of Social Issues (8.2), Training of forest workers (7.3), Community Employment Opportunities (4.1), Evaluation of Social Impact (4.4), Mechanisms to Resolve Disputes (2.3), Local Community Control over Forest Management (2.2) and possibly some aspects of respect for national & local laws and identification of HCVF.

In their comparison of first and second main assessments, Pena Claros et al. identified two areas where the CARs had not been fully corrected during the life of the first certificate: these were both poverty related, namely health and safety issues and social impact assessments. By contrast, giving opportunities for employment to local communities, which was a common issue in the first assessment, was uncommon in the second. This suggests an increase in income and economic activity in the community.

Without additional information these conclusions may be somewhat misleading. In the case of health and safety, for example, it may be that when the most dangerous practices are eliminated auditors start to notice other less risky but still dangerous behaviours. Conversely, employment opportunities for local communities may be considered less important in a second round evaluation if auditors are convinced that efforts have been made but the communities have not responded.

Teitelbaum (2009) reported on the effects of forest certification on the relations between indigenous communities in Canada and certified companies. One impact was the ability of communities to leverage third-party funding as a result of certification. Another important poverty-related improvement was in communications between companies and communities.

Cashore et al. (2006) reported on a range of case studies of certification in developing countries globally including in Eastern Europe, Asia, Africa and Latin America. Here again improvements in health and safety as a result of the certification process were highlighted as being the most common poverty-related improvement. Other poverty-related benefits included improved pay and employment conditions, infrastructure development for communities and provision of training. Employment of indigenous peoples in forestry work is another important benefit highlighted. Others were improved prices for timber from certified markets, and improved wood processing efficiencies related to the introduction of new technologies alongside certification.

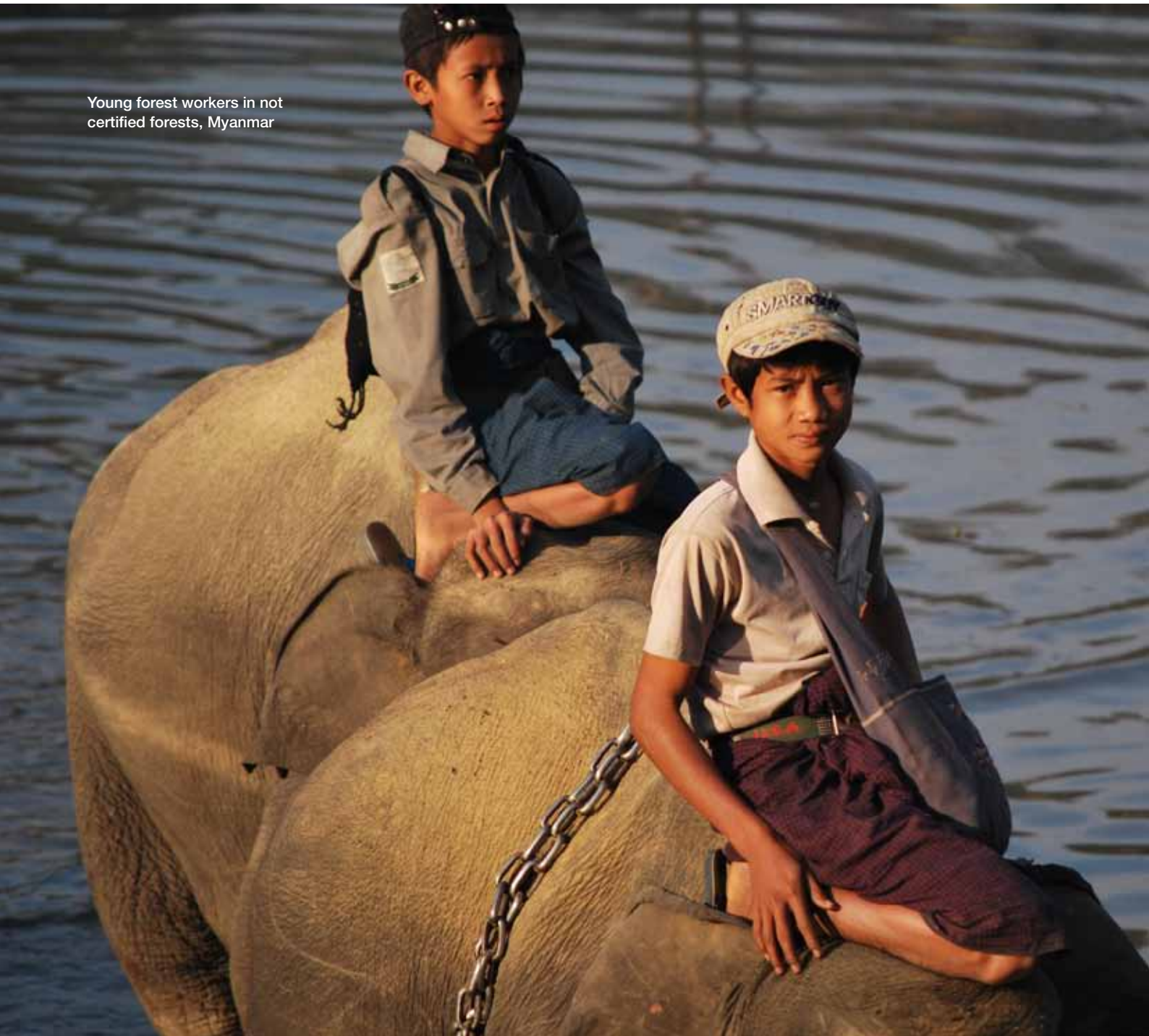
WWF (2005) carried out an assessment of CARs in Europe including three former Soviet Republics. This study also demonstrated the importance of certification in relation to health and safety issues. Other improvements included social conditions for forestry workers, proper payment of social security contributions for workers, improved public safety and better consultation with communities and other stakeholders.

There are many ways in which certification may benefit the poor even in forests that are not certified. In some cases the example of certified forest management as a successful land use may stimulate others to join in. Macqueen (2007) highlights a number of impacts forest enterprise associations in a variety of countries have had on elements of the poverty experience (lack of access to basic needs, insecurity and violence, social isolation and powerlessness, inhumane working conditions, environmental degradation, identity crisis linked to cultural degradation).

In other cases outgrowers – smallholders producing controlled wood under contract – for certified companies have received significant economic benefits. There is controversy related to the effectiveness of these schemes in terms of poverty alleviation (Karambidza, 2003).

According to Cairns (2000) they are on the whole beneficial, but on the very small scale are unable to lift people out of poverty. The authors have personally met beneficiaries of the Sapi scheme in South Africa who have been able to build houses from the outgrower income.

Young forest workers in not certified forests, Myanmar



6 Discussion

6.1 Implications for forest certification standards and auditing

The reviews, case studies and questionnaire surveys indicate that certification itself does have positive impacts on poverty both directly and indirectly. This is likely to be a result

of the multi-dimensional impacts of good forest management, as suggested by Kanbur & Squire (2001). Endamana et al. (2010) have indicated that, in the Congo Basin, large certified forestry concessions provide greater environmental and social benefits than the small-scale development projects often favoured by development-related NGOs.

Since poverty relief is not an explicit target of standards such as the FSC P&C, these improvements show that many organizations and certification body auditors recognize that poverty-related issues need to be taken into account in forest management. However, since this is not explicit in the FSC P&C, it is possible for organizations with vastly different performance to be certified.

According to Mayers (2006) 'prevailing standards and definitions of sustainable forest management contain socially benign rather than pro-poor aspirations'. From our own analysis of the FSC P&C given above we would concur.

Many of the criteria dealing with poverty alleviation address the causes of poverty rather than the symptoms: unless these causes are dealt with, treating the symptoms becomes a never-ending drain on the resources of those involved. On the other hand both the social impact assessments required for management planning and the criteria used for monitoring social impacts concentrate more strongly on the symptoms of poverty rather than the causes of poverty.

There are political issues involved in dealing with poverty and its symptoms since this should be primarily the role of government. In many cases poverty is caused or allowed to continue as a result of government actions or inactions. The involvement of senior government officials in corruption plays a major role in perverting markets and preventing the poor from making an honest living. If certification requirements cause certified organizations to take over the duty of the government to look after its people then the



popular pressure for reform will diminish: certified organizations take on board the full social and environmental costs associated with poor governance and non-performing politicians will be free to continue their malpractices.

In essence the FSC P&C requirements deal more with the organizational outputs, while the monitoring and management planning requirements deal more with the outcomes. To put it more concretely, the social impact assessments and monitoring focus on food, education, water, health etc., while the management actions concentrate on such things as security of employment, diversification of economic activity, access to dispute resolution and compensation for losses. This leads to problems, as the monitoring and management planning is not closely tied to the management actions required by the FSC P&C.

We have argued elsewhere (van Hensbergen et al. 2010) that certified forest managers' actions in relation to poverty should be more closely aligned to the part that their FMUs play in both the local landscape and the local economy. This should then also be related to the incidence of poverty in and around the FMU. We agree with the FSC P&C's focus on creating an enabling environment for addressing poverty-related issues and the effects of forest-related economic growth, rather than on providing direct support, such as health care, education or electricity.

It is very difficult for the FSC P&C to reflect the variability of social conditions, even within a single country. We therefore believe that the FSC national/interim standard should make reference to a normative framework developed within the country. This would ensure that the social interventions are appropriate and effective while not proving too onerous a financial burden on certified managers. This normative framework would then become the reference against which auditors are able to evaluate the FMU performance. The framework should itself be developed and agreed by a multi-stakeholder group including national or regional FSC members. It should be open to review by the same multi-stakeholder group at intervals not necessarily aligned with the revision process of the national standard indicators.

Finally, since the impacts of poverty-reducing activities are often felt only after a relatively long time, it is to be expected that the effects of these activities are not detected by FSC-required monitoring systems within the lifetime of a certificate.

6.2 Poverty and monitoring requirements for FSC certificate holders

As outlined above, there is in the present FSC P&C a misalignment between the requirements for management planning and monitoring, and the management interventions. While the planning and monitoring requirement of the P&C refers to concrete aspects of poverty such as food, shelter and health, the management interventions relate to such things as allowing access to forest resources, diversification of production, use of NTFPs, freedom of association, and health and safety at work.

Two things need to happen in order to achieve a greater agreement between the monitoring and the management. The management requirements themselves should require perfor-

mance targets to be set in relation to social aspects so that progress against these targets can be evaluated. The monitoring requirements should be changed to include monitoring of the management interventions demanded by the FSC P&C, something which is not explicit at this time. For example, where criterion 4.4 demands regular consultation with affected people, managers should determine with what frequency and how this will be done, and should then monitor this to ensure that it happens effectively. This is not explicit in the FSC P&C.



Due to corruption associated with forest resource allocation, management and forest product transport these indigenous forest dwellers in Cameroon have no chance to get good benefits from exploitation of their forests.

There is in general a misunderstanding amongst FSC stakeholders about the purpose and practice of monitoring. Monitoring is a potentially expensive, technical undertaking, which if it is to be effective often requires the input of trained statisticians. Simply gathering environmental and social information is not monitoring. Monitoring is an activity in which observations are made in order to determine if the variable in question has moved out of some predetermined range. It requires tests to be designed that have a known probability of detecting such changes. But the more important part of the design of a monitoring system is selecting which variables are important enough to measure, and then to determine the range in which the managers want them to fall.

Most of what at present passes for FSC monitoring is simply a form of data gathering carried out in a way which will never enable forest managers to determine if their activities are having an impact. Monitoring in relation to poverty should target specific aspects of the poverty experience where management can be expected to make a difference. For example, since worker health and safety is clearly such an important aspect (serious accident rates in forestry in developing countries are between 5 and 30 times as high per m³) as in developed

countries) monitoring of this is vital in order to ensure that the action taken by management is effective. Ideally an accident rate of zero is the target but in most cases this cannot be achieved in the short term, so a continuous year on year reduction in accidents might be selected as a predetermined target. We need statistical assistance in this because accidents are random events: an increase in one year may be a result of the workplace becoming more dangerous, or simply bad luck.



Most of what at present passes for FSC monitoring is simply a form of data gathering. Picture: Ivory Coast

The issue of monitoring, and in particular social impacts monitoring, needs to be addressed by FSC stakeholders with expert advice from statisticians. A suite of proper monitoring techniques needs to be developed to address specific needs in such a way that information from monitoring flows back into the management decision-making process. At present social impact management rarely has performance targets, so its monitoring is irrelevant. What is needed is an agreement on how to determine which social impacts are important, how to set performance targets, and how to measure performance against these targets.

6.3 Forest product markets

Non-timber forest products (NTFPs) have often been highlighted as a potential means to lift people out of poverty. Angelsen and Wunder (2003) point out that for various reasons this is not the case for most NTFPs. Most are relatively low-priced items with high labour demands for extraction, and often occur at relatively low density so that collection costs are high. They are often far from transport networks so the cost to reach market is high. In addition many are perishable so do not reach the market in good condition. Furthermore, many NTFPs have an uneven production, producing gluts in some years with little available in other years.

The most successful NTFPs are those that have been domesticated or brought into private ownership by some other means. For example, the Seven Week Fern (*Rumohra adiantiformis*) was for many years collected from natural forests in South Africa for the flower-arranging

business in Europe. Today most of the supply to the market comes from domesticated plantings which have resulted in a higher reliability and sustainability of the resource and a much lower collection cost. The lower labour requirement for collection means that fewer people are now employed – but those who now work in the business are formally employed and should therefore enjoy the benefits of minimum wages, job security and social insurance.

However, when NTFPs achieve high values in the market it is usual for external stakeholders to try to monopolize the resource for their own benefit (Dove 1993, Conteras-Hermosilla 2003) They use political connections to redefine the ownership of or access to the resource.

This is of course precisely the situation with timber. In most poor countries the timber resource belongs to the state and is sold off at low prices to members of the urban elite – although this is slowly changing as more communities are claiming group ownership of local forest resources.

Shea nuts are a key ingredient of many cosmetics and foods. These producers in Burkina Faso receive very low payment in exchange for the unrefined fat they produce. Middlemen who carry out logistics capture a high part of the local value.



Even where local people do own the trees, they have difficulty making a decent living from exploiting and selling timber. Capital costs for production are very high for people without access to capital finance. The market demands higher volumes than they can produce alone. As a result they are forced to sell their timber to middlemen, who usually pay prices that are far below the market value. Some middlemen with political influence also control the transport system, making it illegal for forest owners to transport their timber for sale without them. Increasingly, markets also demand finished or semi-finished products that are beyond the technical ability of the poor.

On the other hand Butterfield et al. (2009) have shown how the technical assistance for processing that is sometimes coupled to forest certification support can have very significant impacts on incomes for small forest businesses. In one case profits increased by over 200 per cent and in another case annual losses in excess of US\$500,000 were converted to profits of more than US\$1,000,000.

Restrictive management plans mean that production will always be maintained at low levels so that the potential production of high value timber is never achieved. Forest management in the tropics is generally based on a zero-silviculture model. In other words, no efforts are made to assist forest growth: trees are extracted, and it is hoped that they will simply be replaced in the future by natural means. Years of experience in tropical forestry have demonstrated that this does not happen: successive harvests have usually meant the commercial extinction of target species Sist et al (2001). The result is the impoverishment of the forest and the impoverishment of the people who depend on it.

If forest management is to succeed as a poverty alleviation tool in the long term it requires interventions in the short and long term. Forest markets must be addressed to ensure that a greater proportion of the value remains with the forest-dependent communities. Equally, forest management must be improved in order to ensure a sustainable and increasing supply of valuable timber.

6.4 Fairtrade certification of timber

The new Fairtrade standard for timber products, published in 2010 by FLO-Cert, is designed as an add-on to the existing FSC standards in order to enable simultaneous FSC and FLO certification. The standard was developed as part of an FSC social initiative to give preferential market access for timber originating from poor communities. At present the standard is being piloted in a very few sites. The standard requirements are grouped with the SLIMF standards so that only FSC SLIMF certificate holders may also become Fairtrade certified. The standard itself deals with the organization and governance of the Fairtrade Association and the administration of the Fairtrade fund. It extends the FSC's social and environmental requirements to processing plants in developing countries.

There are requirements that will be important in the context of poverty alleviation. Purchasers are required to pre-finance production where necessary, providing important support in situations where capital is unavailable from normal sources. Purchasers are also required to

enter into a stable contract with the supplier, reducing the commercial risks for both forest owners and the workers at all levels of the production chain.

Finally, the Fairtrade premium, which has been set at 10 per cent of the ex-works price, is significantly higher than for other commodities. This will mean a significant increase in the income due to producer associations and their communities. Even with this relatively high premium, the difference between the cost of using Fairtrade timber and ordinary timber is in general only 1-2 per cent of the retail cost of the product. The additional Fairtrade levy paid by the retailer in the consumer country to the Fairtrade Association adds a further 1.5–2.5 per cent (Fairtrade Foundation 2009, Fairtrade Sweden pers. Comm.).

Most Fairtrade producers, being SLIMF organizations, have only small areas of forest so produce only small volumes of timber. The timber market is essentially a commodity market and market access is dependent on having sufficient volumes to satisfy the consumer. For most consumers this means volumes of hundreds or maybe thousands of cubic meters per year. At the same time many SLIMF organizations produce relatively small volumes and will need to increase activities and/or co-ordinate themselves for meeting this kind of demands.

6.5 Legality, chain of custody and poverty

There is currently a strong focus in multilateral fora on the illegal timber trade. There are demands in the international market for demonstrating that timber, particularly from developing countries, is from legal sources. A number of certifiers provide certificates of legal origin for timber from countries where this is considered a problem. Under FSC certification, legality is a given, as principle one of the FSC P&C requires legal compliance.

Legal origin is verified by systems for tracking and tracing timber back to its sources, and complementary systems for verifying that this source complies with all legal requirements. Certification systems use their own CoC requirements to verify that timber entering the supply chain is from certified sources – which means, of course, that they are also of legal origin.

The volume of illegal timber in the supply chain from developing countries is very large and certainly far exceeds the volume of legal timber. As a consequence, large amounts of revenue are lost by governments and forestry authorities in these countries (Human Rights Watch 2009). It is argued that if these revenues are collected then they can make a significant difference to the livelihoods of their people. But will any additional revenues actually be spent on improving the livelihoods of the people? Historical evidence suggests otherwise.

It is our contention that legality often is part of the problem. Unfortunately, in many developing countries the systems of forest governance and the associated systems of forest management underpins rural poverty and increase forest degradation. The systems of forest governance often effectively transfer the forest values from the people who live in and around the forest to urban elites and foreign investors. (It should be noted that in most African countries much of the framework for forest law was inherited from colonial authorities, who used the forests for their own benefit.) Typically the fraction of log value that remains

with the forest communities is 1 per cent (Ayine 2008). Logs are usually exported from the forest to the nearest cities where urban dwellers get employment.

Development of forest certification in the South

The inconsistent development of forest certification in the South has limited its potential for poverty alleviation. Certification in the south has been driven by different factors which relate to the type of organisations that have been certified (Miranda et al 2011).

Large forestry companies, in particular those with plantations of exotic species, have become certified for purely commercial reasons. In general, these were involved in the first round uptake of certification between 1997 and 2002. In most cases these organizations, once certified, have been able to maintain their certificates. There are some exceptions where the certificates have subsequently been lost due to major non-compliances with the standards which were not detected at the time of first certification.

Medium-sized companies and some communities became certified in the expectation of finding improved markets for their products. In many cases these markets have failed to materialize or the additional revenues derived from them have been considered insufficient to justify continuing with certification. In most cases these mid-sized organizations do not have direct contact with overseas customers prepared to pay extra for certified forest products. Instead they are dependent on the traditional middlemen, exporters and importers, who are not always interested in a more transparent business and rarely interested in sharing extra values created on the market (Scherr et al. 2003). In some cases poor governance has also played a role in withdrawal from certification, as for example in Bolivia, where government-sponsored land invasions in the lowlands have led to large-scale forest clearance.

In many cases certification of small communities and in particular indigenous communities has been sponsored by NGOs and government aid organizations. In general, building capacity has

taken a long time, so these have fallen into the most recent round of certificates issued between 2005 and 2011. In many cases these certificates lapsed quite quickly for a variety of reasons. In some cases the businesses are simply too small to support the certification costs, even with the benefits of Group Certification and SLIMF systems. In other cases the local capacity has not been sufficiently developed to maintain the performance level required to keep the certificate. For small producers, the possibilities of getting direct access to overseas markets interested in paying extra for certified forest products are even smaller than for mid-size companies.

In many cases aid donors simply assumed that with certification all of the usual business and market-related problems would disappear, so that large benefits would flow to the certified small and community-owned businesses. This has not been the case. Certification is only one aspect of an integrated package of interventions necessary for successful forest resource management that can benefit the poor.

In the short term at least, it seems that the greatest impacts for improving livelihoods due to certification are associated with large organizations. Simply due to their size, they affect large numbers of people, and they have the capacity and know-how to maintain their certificates. Most importantly, they generally have direct access to markets prepared to pay more for certified products and/or enter into better long-term business agreements.

In the longer term, it will be necessary to address the business management, forest management and market- and production-related issues of medium, small and community producers in order to increase the impact of their certification in the South.

Laws often ensure that forest dwellers are extremely restricted in how they can use the forest, so it has no value for them. As a result, forest dwellers have no interest in protecting forest resources since almost any other land use has higher value for them.

The enforcement of the law is often accompanied by the development of a large organization of forest officers, who often make their living by extorting corrupt payments from both legal and illegal forest operators; they play no real part in eliminating illegal activities.

The current investment in timber tracking and chain of custody control with its focus on legality will likely have limited positive impact for the rural poor in developing countries. What is required instead are significant changes in the way that forest tenure and forest rights are governed in order to ensure that significant benefits are moved from urban elites to the forest poor. This is unfortunately not something that falls within the compass of certification systems with their reliance on legal compliance as the performance baseline.

6.6 Future developments

Forest certification on its own cannot solve forest-related poverty or even ensure that forest resources make significant contributions to the livelihoods of the poorest people.

In order to create a system in which sustainable poverty alleviation is achieved it is necessary for at least five factors to be in place:

1. a regulatory framework that allows forest-dependent people access to the required forest resources
2. a forest management system that provides a sustainable flow of valuable forest resources to forest-dependent people
3. affordable harvesting and processing systems that maximize the potential value of the resource while minimizing the value losses during production
4. a market system that is accessible to products from all kinds of forest owners and allows a flow of information from the market to the forest in order that producers can optimize the value of their products
5. a market system that pays a fair price for the forest products based on the true costs of sustainable production. This price does not necessarily need to be higher for the final consumer if efficiency, legality and transparency in the chain can be improved.

Most development projects and in particular forest certification-related projects have focussed on one or two of these aspects, so it is not possible to expect significant positive results from them. In other cases changes have been made which affect only one of the aspects. For example, in Burma villages have gained access to the valuable teak resource through a process of decentralization of forest governance, but have been specifically excluded from high value markets for the timber. The timber can only be legally sold on the low value domestic market, but inevitably buyers then sell it on to the high value export market, either legally or illegally. In Cameroon where villages have been given forest management rights,

the sustainability of the yield is questionable: yields are in some cases sold off to other forest owners, who harvest the trees from other forests. The developers of the necessary forest management plans charge very high fees for very inferior work. Finally, the corruption in timber transport ensures that only a small fraction of the value of the timber harvested ever reaches the communities.

In order to improve this situation, the developers of national forest certification standards need to engage much more forcefully with regulatory authorities in order to highlight and where necessary change poor regulatory systems. The international certification systems themselves need particularly strong safeguards for countries where the laws conflict with the fundamental principles of forest certification; although forest certification is potentially a tool for improving poor regulatory systems, denying certification to all forests from the worst-performing countries could be considered as a last resort.

There is a need for a much more proactive approach to developing markets for certified forest products from poor communities. This may include the development of fair timber broking organizations to deal with the problems of volume concentration and quality management faced by poor producers. In some cases this has been addressed successfully by developing producer organizations (or cooperatives), for example in Mexico and Brazil – but similar efforts in less developed countries have not been successful.

In addition there is a need to implement and develop new technologies that are suitable for small producers in terms of cost and simplicity but which are still able to produce high quality, higher value products.

Development projects need to take a much more integrated view of the entire value chain from forest management to final market in order to address all of the limiting aspects at once.





7 Conclusion and recommendations

With so many of the world's poorest people closely dependent on forests, forest certification is potentially an important tool for poverty alleviation. The guidelines given by the standards are important for reducing almost all aspects of poverty. Even if strong evidence for poverty impacts is hard to obtain, practical experience clearly shows the power of the instrument when properly implemented. The possibility to improve market access via the CoC system also addresses one of the major aspects of poverty alleviation – increased incomes for the sector. Proposed improvements to the FSC P&C, including especially the setting of concrete social performance targets and their monitoring, will further strengthen forest certification as an indispensable tool for socially responsible forest management.



However, forest certification can only to a very limited extent deal with the problem of an unfair distribution of the profits from the forest. Urban elites, often in cooperation with international companies, have managed to monopolize most of the value from the forest

sector. We find, as an example, that typically only 1 per cent (often less) of the already low value of the logs stays within the local communities. Income received by local people for their labour is often also in the range of 1 per cent of the lumber value. Forest certification does not include strong tools to change this (unacceptable) situation, which is often linked to corruption and bad governance in general. In a situation with bad governance, including corruption and bad forest laws that fail to protect the interests of the poor, it is very difficult to implement forest certification. However, even in the worst possible situation forest certification is an important tool for forest owners and industries that want to improve forest management by using the standards as guidelines and preparing themselves for third party certification in the future.

In chapter 6 we have highlighted a variety of problems that need to be addressed in order to ensure that forests and their resources play a more important part in poverty reduction.

In relation to the certification standards, there is a clear need to improve the way that poverty-related issues are addressed. The revised FSC P&C offers a way forward by asking organizations to develop a social management plan with targets that can be monitored. However, this will only be effective if the FSC P&C is accompanied by normative guidelines to determine how certified organizations should use their limited resources to the best effect and achieve an appropriate balance between poverty relief and local economic development.

National working groups and development aid donors need to address as forcefully as possible situations where forest governance limits the possibility for the forest-associated poor to benefit from the higher value resources of the forest. This is not a simple problem since the current beneficiaries of the resources are likely to protect their rights by both legal and illegal means.

Where support is provided for implementing sustainable forest management and certification, it should be accompanied by support for all aspects of the forest business, from management of the resource, through processing to marketing and sales. Many projects in which certification was the sole focus have collapsed as a result of market-access failures. Fairtrade timber offers an opportunity in this respect, but there is a need to bring together potential buyers with the sellers in order to shorten the market chain and reduce the time taken to make decisions. Where support is given, it must continue for long enough to ensure the success of the business. This is likely to mean support for a period of five to seven years, based on a viable business plan with defined performance targets.

The current emphasis on timber legality is unlikely to have the desired effects either in terms of resource preservation or in terms of improving the situation for the poor. Illegal timber will in any case be diverted to less demanding markets. The introduction of better governance and training of stakeholders use of the forest benefits, in combination with increased efforts on the introduction of systems for a more fair distribution of the income, is likely to be a more effective approach to conserving forests and protecting their resources.

Glossary of abbreviations

CAR	Corrective Action Request
CoC	Chain of custody
CSR	Corporate social responsibility
FLO	Fairtrade Labelling Organization
FLO-Cert	Fairtrade inspection and certification body
FMU	Forest management unit
FSC	Forest Stewardship Council
FSC P&C	Forest Stewardship Council Principles and Criteria
HCV	High conservation value
HCVFs	High Conservation Value Forests
HDI	Human Development Index
ILO	International Labour Organization
ISO	International Organization for Standardization
MDGs	Millennium Development Goals
MPI	Multidimensional Poverty Index
NFTPs	Non-timber forest products
OHSAS	Occupational Health and Safety
PEFC	Programme for Endorsement of Forest Certification
Sida	Swedish International Development Agency
SLIMF	Small and Low Intensity Forest Management
SAI	Social Accountability International
UNDP	United Nations Development Programme

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Appendix 1A Cross reference of FSC forest management P&C (January 2011) to poverty needs

Poverty experience group	Subsistence needs						Self-realisation needs						Risk exposure						Social inclusion									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Poverty experience need	Food quantity	Food quality	Water	Cash income	Non-cash income	Access to Common Resources	Electricity	Education	Access to media	Access to Roads and Transport	Access to Markets	Recognition of Individual Land Rights	Crop failure	Food security	Loss of Employment	Violence	Access to Health Care	Work Related Risks	Political Instability	Corruption	Participation in Decision Making	Heritage Assets	Gender Equity	Intergenerational Equity	Ethnic Equity	Resource Governance	Access to Legal System	Land Use Allocation System
FSC standard criterion																												
1.1												X				X				X							X	X
1.2																				X								
1.3														X								X	X		X			
1.5	*	*			*	*																						
2.1																												X*
2.2	X	X	X			X																						
2.3																											X	
3.1						X					X										X			X			X	X
3.2						X					X													X		X		X
3.3																						X						
3.4				X																								
4.1								X						X														
4.2																	X	X										
4.3				X										X							X							
4.4	O	O	O		O	O		O					O	O	O		O				X							
4.5																											X	
5.4				X										X														
5.5	X	X	X		X	X																						
6.6																	X	X										
6.7																	X	X										
7.1	O	O	O	O	O	O	O	O					O	O														
7.3								X																				
9.2																					X							
9.3			X			X								X								X						
10.8	O	O	O	O	O	O	O	O					O	O	O		O						X					
Total	6	6	6	5	5	9	2	5	0	0	0	3	3	4	6	1	5	3	0	2	4	3	1	0	3	0	3	4

X Positive impact on poverty expected,
 O Information in relation to poverty factor obtained and recorded
 * Possible negative impact on poverty

Appendix 1B Cross reference of NEW FSC forest management P&C (October 2011) to poverty needs

Poverty experience group	Subsistence needs						Self-realisation Needs						Risk exposure						Social inclusion										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
Poverty experience need	Food Quantity	Food Quality	Water	Cash Income	Non Cash Income	Access to Common Resources	Electricity	Education	Access to Media	Access to Roads and Transport	Access to Markets	Recognition of Individual Land Rights	Crop failure	Food Security	Loss of Employment	Violence	Access to Health Care	Work Related Risks	Political Instability	Corruption	Participation in Decision Making	Heritage Assets	Gender Equity	Intergenerational Equity	Ethnic Equity	Resource Governance	Access to Legal System	Land Use Allocation System	
FSC standard criterion																													
1.2												X																	
1.3																X				X									
1.4	*	*				*									*											*			
1.6						X					X																X	X	
1.7																				X									
2.1															X			X										X	
2.2																							X						
2.3																	X	X											
2.4				X	X																	X							
2.5								X																					
2.6															X		X	X			X							X	
3.1						X																		X				X	
3.2						X					X										X	X				X			
3.3																												X	
3.4														X									X		X				
3.5																							X						
4.1						X					X																	X	X
4.2						X					X											X							
4.3				X				X							X														
4.4	X	X	X				X	X	X	X	X			X			X												
4.5			X			X					X		X	X	X	X	X	X		X							X	X	X
4.6																												X	
4.7																							X						
5.1				X							X				X														
5.3	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5.4				X												X													
6.6	*	*																											
6.7			X																										
7.1	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7.2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7.3	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7.6																					X						X		
8.1	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
8.2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
9.1	O	O	O			O									O										O				
9.2	O	O	O			O									O										O				
10.7																			X										
10.10																													
Total	11	11	11	10	7	15	7	9	7	7	9	11	7	12	12	8	10	11	5	8	10	12	7	6	10	9	12	9	

X Positive impact on poverty expected,
 O Information in relation to poverty factor obtained and recorded
 * Possible negative impact on poverty

The Forest Initiative is a strategic partnership between Sida, the Swedish Forest Agency and the Swedish Forestry Association. The overall objective of the Initiative is to contribute to poverty reduction through the promotion of sustainable management of forest resources within Swedish development cooperation. Sida is the main donor of the Forest Initiative, which is based on the belief that forests play an important role for poor people and that forests have the potential to contribute to economic and social development as well as a better environment.