Forest Stewardship Council

FSC reflected in scientific and professional literature

Literature study on the outcomes and impacts of FSC certification




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The Forest Stewardship Council (FSC) is an independent, non-governmental, not for profit organization established to promote the responsible management of the world's forests. It provides standard setting, trademark assurance and accreditation services for companies and organizations interested in responsible forestry.

Products carrying the FSC label are independently certified to assure consumers that they come from forests that are managed to meet the social, economic and ecological needs of present and future generations.

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FSC welcomes comments on this report, which can be made at the FSC website: www.fsc.org.

FSC’S VISION

The world’s forests meet the social, ecological and economic rights and needs of the present generation without compromising those of future generations.

FSC’S MISSION

The FSC shall promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

- Environmentally appropriate forest management ensures that the harvest of timber and non-timber products maintains the forest's biodiversity, productivity and ecological processes.

- Socially beneficial forest management helps both local people and society at large to enjoy long term benefits and also provides strong incentives to local people to sustain the forest resources and adhere to long-term management plans.

- Economically viable forest management means that forest operations are structured and managed so as to be sufficiently profitable, without generating financial profit at the expense of the forest resources, the ecosystem or affected communities. The tension between the need to generate adequate financial returns and the principles of responsible forest operations can be reduced through efforts to market forest products for their best value.”[1]

[1] FSC Global Strategy (2007): Strengthening Forest Conservation, Communities and Markets. http://www.fsc.org/global_strategy.html

TABLE OF CONTENTS

1. INTRODUCING FSC

1.1 Why FSC

Since the 1980s the community of scientific researchers has pointed out clearly and precisely that the world's forests are drastically under stress. The complex relationship between the natural functioning of forest ecosystems, forest utilization, and the people involved is challenged. Research on the forest area and the biodiversity of forest dependent flora and fauna indicates prevalent deterioration of forest ecosystems, their functions and structures, for multiple, complex reasons, and that the destruction of the tropical forests proceeds at a frightening rate. In many countries political and economic basic conditions lead to a fragmenting of resources instead of favoring and supporting a sustainable use of resources. Data collected on social and socio-economic conditions demonstrate that in many cases traditionally forest dependent people (e.g. communities, indigenous people, and marginalized populations) are facing serious challenges to their reliance on forests for their livelihoods, often due to the change of management of the forest areas.

The research group of the Yale School of Forestry & Environmental Studies around B.Cashore et al. (2006)[2] summarizes these alarming research findings:

> "In the face of this body of knowledge and the consensus that many problems are intensifying, domes-tic and international governmental responses have been strongly criticized as woefully inadequate and far too slow to address the myriad problems facing global forest management. As a result of this frustration, some of the world's leading environmental groups and their allies decided to sidestep governments and in 1993 created the Forest Stewardship Council (FSC). FSC and its supporters turned to the marketplace to generate incentives for forest businesses to conform to environmentally and socially responsible forest practices. The solution put forward by FSC was relatively simple: develop a set of global sustainable forestry principles and criteria, have national and sub-national multi-stakeholder committees develop regionally appropriate standards, have third [independent – the editor] parties audit forestry operations for compliance, and certify those who pass the test - providing a badge of honor that, the hope was, would allow certified operations to

[2] Cashore, B.; Gale, F.; Meidinger, E.; Newsom, D. (2006): Confronting Sustainability: Forest Certification in developing and transitioning countries. In: Environment. Vol 48, Nr 9, Nov 2006, p 6 - 25. http://www.heldref.org/env.php

http://environment.yale.edu/publication-series /natural_resource_management /2538/confronting_ sustainability_forest/ (as of June 2008)

gain some type of market advantage vis-à-vis their competitors (such as market access, price premiums, and the more abstract notion of a "social license to operate")."[3]

Different from other social and environmental initiatives, the FSC developed a new kind of certification system that evaluates the practices by which timber and other products from the forests are produced, rather than the environmental performance of the products themselves, based on standards developed jointly by a broad range of stake-holders that usually do not work on joint consensus. Since the beginning of the experiment in 1993, the FSC has evolved and grown tremendously, both in scope and in breadth, and has also led to a number of competing forest certification and other stewardship council schemes. The World Fund for Nature WWF summarizes this in 2002 as:

"FSC implements what the Rio Process is still talking about"[4].

One of the best sources of information on the early history and development of the FSC is a set of notes developed by the first Executive Director of the FSC (1993-2000) and Head of FSC Policy and Standards (2000 – 2003), Dr. Timothy Synnott. His "Some notes of the early years of the FSC" can be found on www.fsc.org [5].

[3] ibid.

[4] WWF (2002): Forest Stewardship Council: Political instrument, implementation and concrete results for sustainability since 1993. WWF Germany, http://www.wwf.se/source.php/1117004/wwf-1018248.pdf

[5] Synnott, Timothy (1995): Some notes of the early years of the FSC, http://www.fsc.org/history.html

1.2 FSC in figures

15 years later, in mid-2008, FSC is actively promoting responsible forest stewardship in more than 80 countries worldwide through both forest management and chain of custody certification. Through joint efforts of different FSC supporters and constituencies, today more than 100 million ha of forest are managed and certified according to the high standards of FSC (roughly 10 % of the world's managed forests) (FSC Data base April 2008). Around the globe 18 FSC accredited certification bodies are working with committed forest managers and forest product purchasers. Consumers, often organized through powerful environmental and social NGOs, are pushing for responsibly managed products.

In 46 countries around the world FSC National Initiatives - "FSC's voice in the regions" are bringing people from different positions together to elaborate jointly national or sub-national forest management standards. The FSC National Initiatives are providing information about FSC to forest managers, forest product markets and end users, they are running marketing campaigns, and they are offering different types of services to using the FSC tool.

Apart from the groups mentioned above, a diverse array of additional people and organizations is involved in supporting the goals of FSC and using FSC as a tool to implement their policies: The recognition and endorsement that FSC receives from environmental groups, social stakeholders and forest industries alike underscores FSC's impact on the global forest debate and forest stewardship worldwide. And undoubtedly there is a strong impact of FSC on the world of small forest holders as well, often initiated through government aid agencies, philanthropic organizations and environmental NGOs, which appreciate FSC's participatory approach to reach consensus with all stakeholders involved in forest management. Therefore several organizations use FSC as a tool to implement their own strategic or business goals.

And the area of forest management certified against FSC standards is continuing to grow at an unprecedented rate. By forest type, more than 50% of FSC certified forests are natural, only around 8% are pure plantation forests. About half of all FSC certified forests are in boreal regions; around 13% are in tropical / subtropical eco-zones (FSC certificate database, April 2008[6]). Especially within large traditional wood and paper producing industries and in the global market place generally FSC has steadily gained more acceptances. The UNECE/FAO Forest Products Annual Market Review of the United Nations, Economic Commission for Europe (2007)[7] confirms FSC to be the fastest growing forest certification scheme in the world.

[6] FSC certificate database, http://www.fsc-info.org

[7] UNECE (2007): United Nations, Economic Commission for Europe / FAO Forest Products Annual Market Review 2006-2007. UNECE Geneva Timber and Forest Study Papers, No.22; 172 pp; ISBN13: 9789211169713. http://unp.un.org (July 2008)

Globally, FSC certified forests represent in early 2008 the equivalent of 7% of production forests.

Table 1: FSC in figures (from FSC certificate database)

FSC in figures			
	end 2000	**end 2006**	**Sept. 2008**
Number of FSC members	357	647	811
Number of FSC National Initiatives	19	39	53
Regional offices	0	4	1 + 2 National Offices + 1 Network Manager
Number of certification bodies	5	16	19
Forest area certified (million ha.)	24.4	82.6	105.4
FSC Global South*	6.1	41.4	52.6
FSC Global North*	18.3	41.2	52.8
Number of forest management certificates	284	860	944
FSC Global South	94	432	483
FSC Global North	190	428	461
Number of chain-of-custody certificates	1'138	5'178	11'111
FSC Global South	323	1'554	2'582
FSC Global North	815	3'624	8'529
No. of countries where FSC certificates are issued	49	73	97
No. of approved forest management standards	5	26	29

* FSC Global North and Global South refers to the OECD categories: FSC Global South includes not only all the OECD developing countries, but also the countries in transition from the former Soviet Union, while countries like Australia and New Zealand, situated geographically in the South are economically part of the "FSC Global North".

FSC has led the way in defining responsible forest stewardship and in cutting across historic barriers to create new levels of collaboration and shared commitment to forest conservation across social, environmental and economic interests. An extensive body of scientific literature has been developed over the years, which examines the impacts of certification in general. A smaller number of papers focus more explicitly on cases of FSC's impact on forest management and on markets dealing with FSC certified products. The literature covers a broad range of issues including influence of certification on community forestry, impacts on workers, impacts on health and safety, and stakeholder involvement, why operations certify, impacts on accessing markets, certification as a policy tool and the creation and effectiveness of non-government regulatory systems. This paper tries to make FSC's impact on the global forest debate and forest stewardship worldwide more visible, through highlighting the findings of researchers conducting FSC-related studies all over the world.

1.3 FSC's scope

FSC's scope is broad. To be able to describe FSC's direct and indirect outcomes and intended and not-intended impacts, the mandate of FSC needs to be clear. Errol Meidinger, who studied FSC's impact since years jointly with international researcher teams, stated in 2003:

> "From the perspective of legal theory, forest certification, particularly as exemplified by the FSC, is a stunningly ambitious undertaking. It seeks to create a set of rules and institutions for forest certification that
>
> 1 integrate environmental, social, and economic goals and
>
> 2 apply them consistently across boreal, temperate and tropical forests
>
> 3 in developed and developing regions with vastly different institutional arrangements and cultural traditions.
>
> One may pause simply to wonder whether any rational actor would undertake such a profoundly difficult task. (…)"[8].

Phil Guillery (2007) adds to this with one of the four key findings of an external evaluation of FSC's impact:

> "FSC staff and key stakeholders have high expectations for FSC in regards to social issues. (…) A consistent theme throughout the evaluation was that many stakeholders expressed specific "hopes and dreams" that they want addressed by the FSC. (…) Chief among these concerns are that they want more accomplished on community forestry issues in the Global South, more emphasis on addressing indigenous people rights, and more done to strengthen the social chamber.[9]"

(The external evaluation of FSC's impact by Guillery et al. will be published in the FSC publication series.)

FSC's impact on the complex social realities is indeed often very critically measured against these high expectations. At the same time internal FSC Working Groups and external observers are demanding that FSC "raise the social bar". These expectations are usually not ad-

[8] Meidinger, Errol (2003): Forest Certification as Environmental Law Making. In: Meidinger, E., C. Elliott, and G. Oesten (eds.) Social and political dimensions of forest certification. Remagen-Oberwinter, Germany: Dr. Kessel. pp.219-233.

[9] Guillery, Phil; Haslett Marroquin, Reginaldo and Hampton, Maree (2007): Ford Foundation Funding to the Forest Stewardship Council: A Qualitative Review of External Impacts. A confidential report to the FSC International Center.

dressed to other forest certification schemes with less prominent criteria for social impact. However, often FSC is measured against standards which were not set by FSC and which are not within the scope of FSC's mission and responsibility. There are a number of topics, where the FSC – groups of its members and groups of stakeholders, the FSC Board of Directors and the Secretariat – are still debating to define where FSC's scope starts and ends.

1.3.1 The three-chamber system and the concept of outsiders

One of the reasons that there are so many different ideas about what FSC should do and what it should not, and that it takes FSC often years to come to a decision on where in specific cases its mandate lies, is based on one of FSC specialties, the three-chamber system.

James E. Quinn, President, CEO of The Collins Companies explains the origin of the three-chamber system with "the concept of outsiders":

> That these outsiders are "inspecting the activities of forestry professionals has been controversial in the economic and governmental sectors from day one. It was this concern that led the founders of the Forest Stewardship Council to develop a three-chambered organization: Environmental, Social, and Economic. It is also the reason that the certification process is divided into three overview categories: renewability, biological diversity, and socio-economic benefits. Although this trilateral certification process is designed to achieve the best possible balance, it will never be perfect from the solitary perspectives of any of the three disciplines." (James E. Quinn, CEO Collins Company, 2000)[10].

There are some diverse – and hot – discussed topics on FSC's open agenda:

1.3.2 Equitable access to certification – North/South

FSC's observers are asking the critical poverty-related question: To what extent does FSC provide positive impact on poverty alleviation in the Global South, compared to the stronger distribution of FSC-certified areas in the Global North, where social and environmental forest management standards as well as the socio-economic conditions are already higher than in global average? One of the broadest critiques of FSC was that its greatest success occurs not in the tropical regions, but rather in the Global North with its temperate and boreal forests (Philipp Pattberg 2006[11], Michael Conroy, 2007[12]).

[10] Quinn, James E. (2000): Foreword of "Forest Certification in Sustainable Development: Healing the Landscape", by Walter Smith and Chris Maser, CRC Press.

[11] Pattberg, Philipp H. (2006): Private governance and the South: lessons from global forest politics. Vrije Universiteit Amsterdam - Institute for Environmental Studies

Other research papers provide evidence that FSC is recognized as a policy tool that addresses many ecological and economical forestry issues as well as labor issues, but that the progress of certification and FSC's impact is in some geographical and socio-economical areas not as wide as was hoped. Although it is the fastest growing forest certification scheme in the world, yet FSC has not made as much impact on tropical forest management, small forest owners, community forests, or low intensity managed forests as was initially hoped (van Kooten 2005[13], Stone 2003[14]).

In fact, at the beginning of 2002 less than 20 % of the total area certified by FSC was located in the FSC equivalent of the South (Richard Eba'a Atyi & Markku Simula, 2002[15]).

The recent trend shows that FSC does make clear progress also in the tropical forest regions: Michael Conroy analyzed that

> "the early success with certification was heavily concentrated in the FSC North, effectively the more developed OECD countries (other than Mexico). A total of 75% of the hectares certified, 67% of the forest management certificated issued, and 72% of the CoC certificates were located in the FSC North. By late 2006, however, a major change can be seen. (…) By 2006, the FSC South had taken the lead by a small margin in total hectares and total forest management certificates. This is clearly a result of the rapid growth in certification in Brazil, Bolivia and Russia. And it occurred despite the increased certification of forests in the US and Canada. Given the strongest markets for FSC-certified products remain the relatively more developed FSC North, and that it is often more efficient to ship logs, rather than finished products, (…) it is less surprising to find little change in the distribution of CoC certificates (70% in the North)" (Michael Conroy, 2007[16]).

Today in mid 2008 the figures show that the certified areas in the FSC Global North and FSC South are balanced: 52 million hectares are certified in 59 countries in the FSC South, and 22 countries in the FSC North also sum up to 52 million hectare managed according to FSC's principles. The distribution of CoC certificates similar to what Michael Conroy described for

[12] Conroy, Michael E. (2007): Branded! - How the 'certification revolution' is transforming global corporations. New Society Publishers ISBN: 9780865715790

[13] van Kooten, G. Cornelis; Nelson, Harry W. and Vertinsky, Ilan (2005): Certification of sustainable forest management practices: a global perspective on why countries certify. Forest Policy and Economics 7 (2005) 857– 867, Elsevier

[14] Stone, S. 2003. From Tapping to Cutting Trees: Participation and agency in two community-based timber management projects in Acre, Brazil. PhD Dissertation. Gainesville, Florida, University of Florida.

[15] Eba'a Atyi, Richard and Simula, Markku (2002): Forest Certification: Pending Challenges for tropical timber. Yokohama, Japan : International Tropical Timber Organization, 2002. Series: ITTO technical series, no. 19

[16] Conroy, Michael E. (2007): Branded! - How the 'certification revolution' is transforming global corporations. New Society Publishers ISBN: 9780865715790

2006: 2'582 CoC certificates are coming from 64 countries in the FSC Global South, while 8'529 CoC certificates are coming from 27 countries in the FSC North (see also Table 1).

Cashore (2005)[17] demonstrates that the effectiveness of FSC certification on different sectors varies and the momentum behind certification has been weak in developing countries. Additionally Hayward & Vertinsky (1999)[18] stated what many others assumed before:

> "Everything else being equal, the most progressive firms are most likely the first ones to pursue certification - those operations whose practices could most be improved by certification may be the least likely to join certification. In many cases it is therefore difficult to verify if a certain change in the forest management was done in preparation of applying for an FSC certificate or because the forest management anyhow thought that this change would be useful for the operation."

1.3.3 Equitable access to certification – benefit for communities

FSC's high poverty alleviation potential is also seen for community managed forests. Again, it is evident, that in the early years of FSC, community forestry enterprises have been certified at slower rates than other operation types (Humphries 2006)[19]. While such operations own an estimated 25% of the global forests, as of 2007 they account for less than 5% of FSC certified forests (FSC Global Strategy 2007)[20]. Concrete comparative data on developments in the proportion of certificates held by community-based or indigenous groups, or certified under the SLIMFS scheme could not be provided by FSC (with the introduction of a new data base, FSC is changing the data base menu in 2008 accordingly). Still, many researchers with a focus on tropical forests point out the slow growth of FSC in the Global South, and those with a focus on social forestry are raising concerns about the minor proportion of community-managed forests certified.

Some authors explained that the FSC concept was not originally designed for community operations, not in the South, nor in the North. Many community forest products do not enter the

[17] Glück, Peter; Rayner, Jeremy and Cashore, Benjamin (2005): Change in the Governance of Forest Resources. In: Mery, Gerardo; Alfaro, Rene; Kanninen, Markku and Labovikov, Maxim (eds.) (2005): Forests in the Global Balance – Changing Paradigms. IUFRO World Series, Vol. 17. Helsinki, 51-74. http://www.yale.edu/forestcertification/pdfs/2005/2005%20%20Change%20in%20the%20Governance%20of%20Forest%20Resources.pdf (as of June 2008)

[18] Hayward, J., Vertinsky, I., 1999. What managers and owners think of certification. Journal of Forestry 97 (2), 13–17

[19] Humphries, Shoana S. and Kainer, Karen A (2006): Local perceptions of forest certification for community based enterprises. Forest Ecology and Management, Elsevier 235: 30-43.

[20] FSC Global Strategy (2007): Strengthening Forest Conservation, Communities and Markets. http://www.fsc.org/global_strategy.html

wider markets, especially international markets, or enter them illegally. (See Laschefski 2002[21], Butterfield 2005[22]).

In a report for FERN, a major umbrella organization of environmental NGOs, Saskia Ozinga in 2000 wrote:

> "(…) Within the concept of this paper it is particularly relevant to look at the impact of certification processes on forest peoples and local communities. Although there are some positive impacts, as in the case of the Sami, the overall picture is gloomier. When the FSC was created, there were hopes that it would favor community based forest management initiatives run by forest owners and forest peoples on their own land. However the high overheads of managing forests to certifiable standards and the demand from large companies for big quantities favor economies of scale. Some small scale operations do not have the skills or cannot afford the technical inputs required to develop and implement well documented forest management systems. Although costs have not found to be daunting by small forest owners in Western Europe - if they use the group certification scheme provided - costs might be daunting for some Southern producers. The combination of these obstacles has meant that less than 10% of FSC certified forests are community managed. Concerns have been expressed that FSC certification may actually be squeezing local communities out of the marketplace as it fails to compete with large-scale certified forests, more in demand by big industry. FSC is seriously addressing this issue, by its group certification scheme, its annual conference and support for small forest owners (…)."[23]

The case of the Sami mentioned by Saskia Ozinga will be explained in 2.3. Many other concerns addressed by her were taken up by FSC over the years, and appropriate policies and certification schemes were developed (see findings about SLIMFS and Group certification scheme, Fairtrade and the benefits for communities and indigenous peoples' rights in 2.3).

The FSC was and is well aware of the bias of forest certification towards large companies, and in response, in 2002/2003 FSC introduced specially designed programs for groups of small forest holders (group certification scheme) and for small and low intensity managed forests (SLIMFS) with streamlined procedures. Therefore, not surprisingly, more recent publications find that:

[21] Laschefski, Klemens (2002): Nachhaltige Entwicklung durch Forstwirtschaft in Amazonien? Geographische Evaluierungen des Forest Stewardship Council. Dissertation Univ. Heidelberg. Reference: http://www.ub.uni-heidelberg.de/archiv/2975/ (as of June 2008)

[22] Butterfield, Rebecca; Hansen, Eric; Fletcher, Richard and Nikinmaa, Hanna (2005): La certificación forestal y las pequeñas empresas forestales: Key Trends and Impacts - Benefits and Barriers. In Forest Certification and Small Forest Enterprises, Forest Trends and Rainforest Alliance: Forest Trends.

[23] Ozinga, Saskia (2000): The limits of forest certification. Published by FERN 24.11.00 http://www.fern.org/pubs/articles/limits.htm (as of June 2008)

1 There is a difference in the pattern of the early success in the forest management certification movement and the current trends. The pattern has changed significantly between 2000 and 2006, where the proportion of forest certificates in the FSC South has grown disproportionally.

2 A growing body of evidence suggests that low-income forest communities derive considerable benefits from engaging in FSC certification efforts, even if their aspirations for premium prices and greater market access are not fully met (Michael Conroy, 2007[24]) (e.g. greater attention to forest tenure and livelihood rights, working and employment conditions; greater voice to indigenous groups; new partnerships and new business models developed – see more in chapter 2).

Today the imperative to address the needs of these communities is even higher on the list of priorities for FSC: the FSC Global Strategy 2007 “Strengthening forest conservation, communities and markets”[25] expects for example to complement the SLIMFS program through additional fair trade certification. Nonetheless, the challenges for the certification and improvement of community managed forests remain striking[26].

1.3.4 Certification of plantations – reason for hot discussions

From the very beginning of the FSC the issue of certifying plantations has been controversial. Already at the founding Assembly, members of the World Rainforest Movement and others argued against including plantations in FSC's system. At the General Assembly in 2002 a motion passed, calling for a working group to review the FSC plantation policy to give input to the Board of Directors to decide whether the FSC should continue to certify plantations. Since 2004 FSC has been in the process of reviewing the policies for the certification of plantations. Together with expert teams representing the broad scope of FSC stakeholders, heated debate are ongoing on how FSC should deal with the certification of plantations. There is even a small, but loud group of voices that prefer not to see FSC certified plantations at all, while others strongly demand for support through FSC to improve plantation forest management. Similar comments apply to the management and consequent certification of forests in the Congo Basin.

[24] Conroy, Michael E. (2007): Branded! - How the ‘certification revolution’ is transforming global corporations. New Society Publishers ISBN: 9780865715790

[25] FSC Global Strategy (2007): Strengthening Forest Conservation, Communities and Markets. http://www.fsc.org/global_strategy.html

[26] Rickenbach, Mark (2002): Forest Certification of small ownerships: Some practical challenges. Journal of Forestry 100:6. In: Conroy, Michael E. (2007): Branded! - How the ‘certification revolution’ is transforming global corporations. New Society Publishers ISBN: 9780865715790

1.3.5 Carbon credits

There are voices recommending that FSC get into the carbon-business as soon as possible, other voices are warning not to get involved. Also the FSC Global Strategy 2007 does make reference to the climate change context. Although not designed for forest carbon projects per se, the FSC certification system is included in a study from WWF International (2008) on elements (standards and methodologies) to build a Meta Standard Framework (MSF) for Carbon Offset. WWF explains and compares three standards tailored for carbon offset projects and FSC,

> "as it is the most widely applied and credible system for ensuring responsible forest management and embodies many of the key concepts and principles of relevance to the MSF".

WWF reconfirms that

> "FSC certification is one of several such systems for inspecting forest management and tracking timber and paper through a 'chain of custody' to ensure that the products have come from sustainably managed forests. The FSC certification system is currently the only one that meets all of WWF's criteria for environmental, social and economic sustainability."[27]

Currently (in 2008) FSC FM certification is used as the minimum threshold by some of the FSC accredited certification bodies to add on the verification of carbon credits and to enable the certificate holders' access to Carbon Credit Markets. The FSC AC is developing a position paper on certification of carbon offsets.

1.3.6 FSC's chain of custody

Although FSC has a clear mandate under its principles to ensure that ILO core conventions and best ecological practices are adhered to in certified forest management units, this does not apply outside the forest. The question of giving adequate treatment to social issues, including working conditions, throughout the chain of custody for FSC certified products was raised as long ago as at the FSC Social Conference in Mexico in 2000. Specific activities relating to this were included in the FSC Social Strategy, the final version of which was approved in 2003. However the issue has not yet been resolved because of questions relating to the scope of FSC's remit, of uncertainty in relation to the costs and practical implications such as training and audit, and of the effect on demand overall for FSC certification. While FSC accredited certification bodies usually do have an eye on maintaining minimum social, ecological and economical standards in the chain of custody of timber processing to exclude

[27] WWF International; Rietbergen-McCracken, Jennifer (Ed) (2008): Green Carbon Guideline. http://assets.panda.org/downloads/green_carbon_guidebook.pdf (as of August 2008)

worst cases of mismanagement, there are no minimum standards defined by FSC, nor are the certification bodies contractually obliged to control that the working conditions and the environmental awareness are on a responsible level. While it has been argued that chain of custody ecological and social issues are not within FSC's primary mission of forestry management, the ethical case for treating this has been made. Moreover, there is also a convincing argument that FSC's brand credibility is at risk to a 'Nike' style expose of dreadful environmental and/or working conditions in factories manufacturing products which carry FSC chain of custody certificates. As a result, the FSC General Assembly in 2005 passed an amended motion on the subject as follows:

> "FSC is requested to carry out a feasibility study on options for incorporating compliance with ILO conventions in the requirements for chain of custody certificate holders, fully evaluating economic and operational impacts and market up-take. Consideration should also be given to implications for and conditions affecting small family and community chain of custody certificate holders in developing countries".

The results of this study are expected to be published in late 2008.

1.3.7 Expectations FSC does not promise to meet

FSC's goal is to define and to promote responsible forest management, but not directly to correct national legal regulations, or to prohibit degradation of forests or deforestation.

While FSC cannot directly enforce national regulations on land use rights, the requirement for FSC certification in some cases has empowered communities to insist on the acknowledgement of their rights (see chapter 2.3).

The FSC International Center and many National Initiatives are frequently receiving two types of questions, which are definitely outside the mandate of FSC, and which are also reflect that the scope of FSC certification is often misunderstood:

1 The physical quality of FSC certified timber and timber products: FSC's logo guarantees the quality of the forest management, but not of the physical qualities of the wood products. Complaints received from time to time are indicating that the consumers expect much more than the guarantee for good forest management: "…the six rolls of wallpaper with your certificate I purchased for my decorators to put up for me. After all the painting they started to put it up and firstly noticed it varied in shade so we checked to see if all the rolls came from the same batch No, which they did. …" "I invested a lot of money in a very beautiful spade for my garden. But after using it only for a short while, the brass palm broke. I will never again…".

2 Guarantees for financial investment: Investment companies in the forest area are often promoting their products, investment certificates, with the information, that their forests and plantations are managed according to the FSC standard (frequent cases are related to Central American teak plantations). But the FSC certificate cannot and will not give any indication for the final turnover of the plantation or for the interest rate earned on the investment certificate. FSC certification does not cover non-forest management activities

> performed by affiliated companies, such as financial investment activities. FSC and the accredited certification bodies are not responsible for any financial claims on returns on investments. FSC’s lawyers are permanently checking the advertisements of investment companies to prevent them from making false claims.

The FSC is not without detractors: Dedicated environmentalists have set up the “FSC-Watch” website. In their words their work is “dedicated to encouraging scrutiny of the FSC's activities. By doing so it aims to increase the integrity of the FSC's forest certification scheme.” According to Michael Conroy (2007) this is

> “ultimately healthy as it provides new public scrutiny and contributes to transparency. Unfortunately, these critiques of the FSC are dedicating less attention to the much-less transparent processes of FSC competitors. (...)[28]”

[28] Conroy, Michael E. (2007): Branded! - How the ‘certification revolution’ is transforming global corporations. New Society Publishers ISBN: 9780865715790

1.4 Measuring FSC's impact

Ruth Nussbaum and Markku Simula (2004)[29] note:

> "There is no question that certification has had a range of impacts on forests and the forest products sector. Most people working with forestry could easily list a number of areas where certification has had an impact on the management of a particular forest, a group of forest-dependent people or a particular forest products market. (…) The current evidence on the impacts of certification can mainly be derived from individual case studies on certified forest management units and countries where they are found or where national processes to develop certification standards and processes have been active. This evidence, supported by expert opinions, suggests that, by and large, the impacts have been positive and in many cases significant."

However, such assessments, including the one carried out in this paper, are based on secondary information which is not consistent and often compiled for other uses than impact assessment. To demonstrate and/or to measure the impact of FSC certification on forest management, we have to clarify some terms:

1.4.1 What are impacts, what are outcomes?

Impacts are defined by Blankenburg (1995)[30] as

> "...long-term and sustainable changes introduced by a given intervention in the lives of beneficiaries. Impact can be related either to the specific objectives of an intervention or to unanticipated changes caused by an intervention; such unanticipated changes may also occur in the lives of people not belonging to the beneficiary group. Impact can be either positive or negative."

"FSC's Impact" is therefore any change resulting from FSC related activities, or FSC projects (conducted by FSC IC, National Initiatives, FSC partner organizations or those organizations using FSC as a tool to implement their management goals). This can include intended as well as unintended effects, negative as well as positive, and long-term as well as short-term impacts.

[29] Nussbaum, Ruth & Simula, Markku (2004): Forest Certification. A Review of Impacts and Assessment Frameworks. Research Paper September 2004 A TFD Publication. The Forests Dialogue. Yale University School of Forestry & Environmental Studies. http://www.theforestsdialogue.org (as of July 2008)

[30] Blankenburg, F. (1995): Methods of Impact Assessment Research Programme: Resource pack and discussion. The Hague: Oxfam UK/I and Novib

Outputs are countable units (e.g. hectares, cubic meters, certified forest management units, number of threatened species, number of avoided accidents), and are the direct products of a program or organization's activities. Outcomes are the benefits or changes for participants, or intended beneficiaries – in our case forests and people. Impact can be categorized according to the level at which it is being measured (within and/or be-yond the forest management unit, within one country, region etc.). Impact can also be categorized according into broad types of impact (as chosen here: environmental, political, social and economic), with sub-categories considering the types of beneficiaries, such as communities, local businesses or impact on plantation forestry versus natural forests). Impact can be achieved with intention or unintended (this would be another option for sub-categories.) In most cases of program evaluation it is too complex to measure the full spectrum of impacts: It is important therefore, to be selective and realistic about the types of impact that they want to measure, and to find an approach that meets its particular needs.

The FSC standards, as well as the FSC Mission statement and the FSC Global Strategy, describe the levels of outcome that FSC aims to achieve in particular. Indicators, as defined in the FSC Global Strategy, are used in forest management and chain of custody (CoC) certification processes and also in the audits of certification bodies conducted by Accreditation Services International (ASI). (ASI is FSC's Accreditation Program which provides accreditation services to certification bodies, based on international standards). They point out, more or less specifically, data that can be measured to determine whether FSC / (the certification body) have met its outcomes. Benchmarks are data that act as a baseline and are used for before-and-after comparison. Evaluation is a general term for the process of determining what has been achieved during or after a particular activity.

1.4.2 What is the intended impact of FSC forest management certification?

The goal of FSC is to promote environmentally responsible, socially beneficial and economically viable management of the world's forests, by establishing a worldwide standard of recognized and respected Principles of Forest Stewardship. In 1993 the FSC introduced the set of FSC's Principles and Criteria (P&C) together with an international certification and labeling scheme for products from forest management. With this certification and labeling scheme FSC commits itself to a challenging mission, as reconfirmed in the FSC Global Strategy (2007)[31]. The intended impact of changed forest management practices based on FSC standards has therefore to be regarded as in principle limited to the three areas mentioned in the FSC Mission statement (see "FSC Mission" on page 3).

[31] FSC Global Strategy (2007): Strengthening Forest Conservation, Communities and Markets. http://www.fsc.org/global_strategy.html

Box 1. FSC certification process

FSC operates an Accreditation Program which provides accreditation services to certification bodies. Accreditation Services International (ASI) runs this Accreditation Program based on international standards, in order to guarantee the authenticity of their claims. Forest management certification is the process of evaluating forest management against the agreed set of P&C, set by FSC. This process involves an on-site audit of the forest management unit by a team of experts from an independent FSC-accredited certification body. If forest management complies with the FSC standards, the certification body issues a FSC certificate for a 5 year period, subject to annual monitoring to verify continued compliance of the operation with FSC standards. The findings of each audit (pre-audit with stake-holder consultation, main audit with office and on-site inspections, and annual monitoring) are de-scribed in a detailed certification report. A summary of these reports is publicly available on the web-site of the responsible certification body.

In all cases the process of certification will be initiated voluntarily by forest owners or forest managers by requesting the services from an accredited certification body.

Certified forest operations can claim that the forest products they are producing are coming from a responsibly managed forest according to international standards. The issuance of a FSC certificate allows certified forest operations to sell their products as FSC certified and to label them with the FSC trademark.

In addition to forest management (FM), the FSC offers the following types of certification:

1 Chain of custody (CoC) certification for companies processing and trading certified material from the forest to the end consumer, and

2 FSC Controlled Wood (CW) certification for forest management enterprises that do not fully comply with the FSC P&C, but at least comply with the criteria of the five FSC Controlled Wood categories.

To summarize the information above:

The larger the forest area certified to FSC standards, the larger the forest area that is managed socially and environmentally responsibly. The underlying assumption of the FSC con-

cept is that each additional hectare certified to FSC standards brings us closer to achieving FSC's mission: to improve forest management world wide.

This assumption is based on the fact that the certification bodies are visiting each certified forest management unit at least once a year to check that the operation continues to comply with all the requirements of the standards. FSC and FSC-accredited certification organizations will not insist on perfection in satisfying the P&C. Failures, non-conformities of the forest management with the FSC standard, are described in the certification reports as conditions or "Corrective Actions Requested" (CAR). These non-conformities have to be rectified within a certain timeframe. Decisions on CARs will be taken by individual certifiers, and guided by the extent to which each Criterion is satisfied, and by the importance and consequences of failures. Some flexibility will be allowed to cope with local circumstances. There are minor CARs (conditions) and major CARs (preconditions). Major CARs, also called "preconditions" have to be complied with before a certificate can be issued. Major failures detected during the monitoring process may lead to decertification if not rectified within a short time. A FSC Forest Management (FM) certificate issued by independent third party auditors can therefore be regarded as a proof of responsible forest management according to the standards.

But in conducting forest audits, FSC-accredited certification companies do not certify that a forest management unit has 'achieved sustainability', nor do they require or imply the implementation of uniform sets of forest management prescriptions: they certify that FSC-approved standards of forest management have been met.

1.4.4 How can FSC's impact be demonstrated and/or measured?

Who is doing what?

Research on FSC's impact on communities in the South, as well as on changed governance processes globally and on economical and ecological conditions have been conducted since the early years of FSC. Several researchers and other experts – individuals, organizations, networks - are measuring the among others impact of forest management on forests and societies, the impact of (FSC) certification on forest management and beyond, the impact of forestry related programs on societies and vice versa.

Different organizations, such as certified companies, research institutes, development aid agencies, members of the Consultative Group on International Agricultural Research (CGIAR) like CIFOR and ICRAF, and also the World Bank, environmental NGOs, investment banks and philanthropic organizations are working to demonstrate the impact of FSC on the ground and are initiating or conducting research about FSC.

Some scientists are working on FSC for the sake of basic research and interest in market dynamics and because they are fascinated by the energies triggered by FSC and other certification scheme. They often devote their time to the broader dynamics of forest policies and certification, describing the interaction between and within governments, societies and, markets. Geographically, the majority of the papers studying changes that occurred due to FSC certification were concentrated on economic aspects and markets in various countries, such as

Brazil, Bolivia, Mexico and the USA. In these countries certification has provided a better market access and/or higher prices, mainly for further processed products made with high quality wood (Humphries and Kainer[32]; see also Cashore et al. 2006[33]; Ebeling 2005[34]; Nebel, Quevedo et al. 2005[35]).

Apart from forest owners and managers, also some of the organizations mentioned above are using FSC certification as a tool to implement their own forest management related strategic goals, or only to measure the success of their forestry related projects. They have a certain interest in analyzing the impact of FSC and to confirm that FSC's assumptions are correct (e.g. a German development investment bank (DEG) regards FSC certification at the end of the project time as one indicator for a successful investment in the forest management project.) These organizations are conducting evaluations themselves or through other professional evaluators. The research papers are usually broadly focusing on forest management and its impacts for direct stakeholders.

Additionally there are institutes focused on training and further education (NGOs, universities) both focusing their research on FSC's impact, also giving more or less practical training on certification of forest management to their students, and analyzing the results of their training. They are often describing the impact on the ground which FSC certified forest management operations are having compared to the time before they achieved certification or compared to non-certified operations.

In a few cases are evaluations based on an indirect assessment against the certification reports. The Corrective Actions Requested (CARs) listed in the reports are used as indicators to show where a change or adaption of management practices was required as necessary to comply with the FSC standard. CARs are therefore monitored (over certain time frames, e.g. focused on selected Principles or Criteria). This approach is an indirect method to evaluate the effects of FSC certification processes, based on the evaluation done by the certification bodies. Already in 1999, Kirsti Thornber[36] reviewed CARs of 156 certificates; in 2003 R.E.

[32] Humphries, Shoana S. & Kainer, Karen A. (2006): Local perceptions of forest certification for community-based enterprises. Forest Ecology and Management 235 (2006) 30–43, Elsevier

[33] Cashore, B.; Gale, F.; Meidinger, E.; & Newsom, D. (2006): Confronting Sustainability: Forest Certification in developing and transitioning countries. In: Environment. Vol 48, Nr 9, Nov 2006, p 6 - 25. http://www.heldref.org/env.php (as of July 2008) © Benjamin Cashore, Fred Gale, Errol Meidinger, and Deanna Newsom, 2006.)

[34] Ebeling, Joachim (2005): The Effectiveness of Market-based Conservation: Can forest certification compensate for poor environmental regulation in the tropics? Paper prepared for the 2005 Berlin Conference on the Human Dimensions of Global Environmental Change "International Organizations and Global Environmental Governance", Berlin, Germany, 2-3 December 2005

[35] Nebel, G.; Quevedo, Lincoln; Jacobsen, J.B. and Helles, F. (2005): Development and economics significance of forest certification: the case of FSC in Bolivia. Forest Policy and Econ., Santa Cruz-Bolivia.

[36] Thornber, Kirsten (1999): Overview of global trends in FSC certificates. Instruments for Sustainable Private Sector Forestry Series. International Institute of Environment and Development, London, UK.

Gullison[37] analyzed 30 certificate holders CARs with the focus on biodiversity and conservation values. Another example of these papers is Peter Hirschberger's series of studies conducted for the WWF European Forest Programme in 2005[38] in six European countries. He analyzed in total 2,817 CARs, covering 18 million hectares of forest. Another example for an analysis of CARs is "Does Forest Certification Matter? An Analysis of Operation-Level Changes Required during the SmartWood Certification Process in the United States", by Deanna Newsom et al. (2005)[39]. The researchers systematically assessed the changes that 80 FSC-certified forestry operations certified by SmartWood (SW) were required to make. Including the outcomes of this study, Newsom & Hewitt conducted in 2005 for the TREES Program of the Rainforest Alliance a broader study on "Global Impacts of SmartWood Certification"[40]: They examined a representative sample of 129 forest management operations certified by SmartWood, a program of the Rainforest Alliance in 21 countries. The results will be presented in the following Chapter 2.

Only a few examples where found were FSC forest certification impact was assessed in an ideal research setting including comparisons with control groups (not certified or before certification) and with repetitions of the research design. One prominent example is Ana Carolina de Lima's et al. comprehensive study for Imaflora (2008)[41] on "Impact of FSC certification on agroextractive communities of the State of Acre / Brazil" with an analysis of the main output variables: environmental preservation, quality of the administration of the association, the workers' use of appropriate protection equipment, and income from wood sales. (Results of the study are shown in the following chapters). They compared FSC certified and uncertified communities in a comparable environment. At the same time they recognized that the results of their study could have been influenced by seasonal effects, since there was no repetition in data collection. (In impact assessment studies it is usual to adopt panels whereby the collection of field data is carried out in three different moments in order to minimize transitional ef-

[37] Gullison, R. E. (2003): Does forest certification conserve biodiversity? Oryx Vol 37 No 2 April 2003; http://www.yale.edu/forestcertification/pdfs/03_oryx_certification.pdf (as of June 2008)

[38] WWF European Forest Programme (2005): The Effects of FSC-certification in Estonia, Germany, Latvia, Russia, Sweden and the United Kingdom: An analysis of Corrective Action Requests (by Peter Hirschberger). Summary report. http://assets.panda.org/downloads/fscsummaryanalysisallcountries.pdf (as of June 2008)

[39] Newsom, Deanna; Bahn, V. & Cashore, Ben (2005): Does Forest Certification Matter? An Analysis of Operation-Level Changes Required During the SmartWood Certification Process in the United States; ScienceDirect, Forest Policy and Economics 9 (2006) 197– 208, Elsevier. http://www.yale.edu/forestcertification/pdfs/2006/2006newsombahncashoreFORPOL394.pdf (as of June 2008)

[40] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

[41] IMAFLORA (ed.) (2008): Impact of FSC Forest Certification on Agroextractive Communities of the State of Acre, Brazil. By Ana Carolina B. de Lima, André Luiz Novaes Keppe, Marcelo Corrêa Alves, Rodrigo Fernando Maule and Gerd Sparovek; University of São Paulo and Entropix Engineering Company. http://www.rainforest-alliance.org/resources/documents/san_coffee_acre.pdf (as of September 2008)

fects). Another study was done by Foster, Wang and Keeton in 2008[42], with a much more narrow focus on timber values, carbon storage values, tree structure and residual coarse woody debris.

The findings of a multidisciplinary researcher team from different institutes at Clemson University, South Carolina (2004)[43] show that much of the research on impacts of certification can be improved, when approached more systematically. They reviewed sustainable forestry certification programs and the literature to identify metrics relevant to biodiversity considerations. A common theme in the literature was concern with the criteria for selecting metrics rather than recommendations of specific metrics. Biodiversity conservation plans and metrics should reflect landowner goals and address societal concerns as well as ecological considerations. They compared eleven standards and their focus on items in process-oriented metrics, on stand-level and on landscape-level (for details please study their tables 1-3) and concluded four recommendations for improved information and processes to allow development of meaningful biodiversity metrics:

> "Development of regional conservation goals is needed before meaningful biodiversity goals can be defined at the landscape or ownership level. (…) Establishment of cause-and-effect relationships between forestry practices and biodiversity metrics: Manipulative studies with replication and pre- and post-treatment experimental design will be necessary to establish and validate biodiversity metrics. Data for periods of at least five years are needed, which suggests an adaptive management strategy for participants of certification programs." (…) "

Those recommendations are made with the recognition that sustainable forestry and biodiversity are concepts shaped by social and biological factors. There are no "silver bullets" by which to define or measure these concepts. Landowners first need to set goals and objectives that are appropriate for their context and then identify measures appropriate to assess progress toward achievement of these goals.

[42] Keeton, William S.; Foster, Bryan C. & Wang, Deane (2008): An Exploratory Post-Harvest Comparison of Ecological and Economic Characteristics of Forest Stewardship Council Certified and Uncertified Northern Hardwood Stands. Journal of Sustainable Forestry, Vol. 26(3) 2008. http://jsf.haworthpress.com (as of July 2008)

[43] Guynn, David C. Jr.; Guynn, Susan T.; Layton, Patricia A. and T. Bently Wigley (2004): Biodiversity Metrics in Sustainable Forestry Certification Programs. Journal of Forestry, April/May 2004 p. 46-52

In summary

To benefit from this body of knowledge we are extracting here research papers (reduced meta-analysis of research papers) from various organizations and individuals with a focus on FSC certification and other FSC processes. The following chapters will highlight excerpts from these papers, demonstrating FSC's impacts grouped according to the main areas:

Chapter 2 starts with institutions' and individual researchers' broader assessments of diverse ranges of outcomes and impacts of FSC, and their findings on FSC's credibility, on good business practices fostered by FSC. Then the three areas environmental, social and economic effects of changed forest management practices will each be illustrated with quotations.

Chapter 3 is dealing with FSC's effects on and interaction with governance systems and policies, including examples for FSC's standing in Corporate Social Responsibility programs and how development aid agencies see FSC.

Chapter 4 reflects some voices on FSC's current and potential role regarding certification and payment of environmental services and combating illegal logging. It concludes with an insight how researchers from NGOs and academies see the differences between the values of different forest management certification schemes.

Chapter 5 concludes with findings.

The list of references concludes with an Annex I on recommendations how to implement the "Free Prior and Informed Consent" concept in FSC. ANNEX II explains the governmental use of voluntary standards, as evaluated by ISEAL.

2. IMPACT IN AND BEYOND THE FOREST

2.1 The broader view

With reference to forest certification in general, in the past observers (Bass 2001[44]; Ebaa Atyi and Simula 2002[45]; Markopoulos 2002[46]) mentioned repeatedly that there has been little impact on unsustainable logging practices, partly because many of the certified forest operations already had comparatively high management standards, so that there was not much to improve. At the same time those companies with a low forest management standard did not apply for certification, because especially the FSC standard seemed to be difficult to reach without investing considerable resources. The following chapter will give some ideas from research papers, where FSC's influence in improved forest management is obvious.

Below are some summarized statements about FSC's impacts in general, partly in comparison with other forest certification schemes, by large internationally active organizations:

2.1.1 CIFOR's findings

With the aim of assessing the impact of the Center for International Forestry Research (CIFOR) Criteria and Indicator research, which was itself partly aimed to enhance the legitimacy and credibility of the certification standards set by the FSC, Spilsbury for CIFOR analyzed in 2005, FSC public certification assessment reports coupled with a review of findings published in recent literature. Spilsbury found that FSC certification in developing countries is reflected in several outcomes, e.g. in changes of the certified forest management, in better communication between forest management and stakeholders affected by the forest management. The study attributes the influence on forest management practices to the use of CIFOR research on Criteria and Indicators for Sustainable Forest Management. In doing so, the study assesses a broad range of impact pathways, including forest certification requirements and various national regulations. He summarizes that

[44] Bass, Stephen; Thornber, Kristi; Markopoulos, Matthew; Roberts, Sarah & Grieg-Gran, Maryanne (2001): Certification's Impacts on Forests, Stakeholders and Supply Chains. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/9013IIED.pdf (as of July 2008)

[45] Eba'a Atyi, Richard and Simula, Markku (2002): Forest Certification: Pending Challenges for tropical timber. Yokohama, Japan : International Tropical Timber Organization, 2002. Series: ITTO technical series, no. 19

[46] Markopoulos, Matthew D. (2002): Role of Certification in Community Based Enterprises. In: In Meidinger, E., Elliott, C. and Oesten, G.(eds). Social and political dimensions of forest certification, http://www.forstbuch.de.

"the impact of FSC certification in developing countries has

1 helped to secure or improve environmental services in certified forests;

2 improved worker conditions within certified forests;

3 acted to reduce social conflict in and around certified forests;

4 helped in securing land tenure and usufruct rights (in certified community forests);

5 improved the image of the forest management enterprise locally and in associated markets;

6 provided greater access to premium timber markets (where they exist); and

7 helped promote sustainable forest management more generally through dialogue between the private sector, government bodies, non-governmental organizations and civil society" (M.J Spilsbury 2005)[47].

2.1.2 WWF – World Bank coalition

For WWF, Margaret Renström's (2007)[48] "Position paper on Forest certification" summarizes WWF's conclusions from analyzing a series of studies which were conducted based on a methodology developed in collaboration with the World Bank. This methodology, "The Forest Certification Assessment Guide (FCAG)[49]" was used to evaluate various certification schemes.

"These assessments, as well as other evaluations demonstrate that, while there is considerable room for improvement in all schemes, FSC certification best meets WWF's key requirements. Thus, while WWF acknowledges that several schemes may contribute to improve forest management, the organization will continue to focus its active efforts on improving the FSC system, on adapting FSC certification to different scales and national contexts, and on promoting the FSC logo as an internationally recognized hallmark of responsible forest management."

[47] Spilsbury, M.J. (2005): The sustainability of forest management: assessing the impact of CIFOR criteria and indicators research. Impact Assessment Papers no. 4. Bogor, Indonesia: CIFOR. http://www.cifor.cgiar.org/publications/pdf_files/Books/BSpilsbury0503.pdf (as of June 2007)

[48] Renström, Margaret for Worldwide Fund for Nature WWF (2007): Position paper on Forest certification. http://assets.panda.org/downloads/wwf_forest_certification_pp_oct07.pdf (as of June 2007)

[49] WWF – Weltbank –Global Forest Alliance (2006): The Forest Certification Assessment Guide (FCAG). A framework for assessing credible forest certification systems / schemes. http://assets.panda.org/downloads/fcagfinal.pdf (as of June 2008)

2.1.3 Greenpeace's findings

Also Greenpeace released an assessment, highlighting the trust in the FSC system: Early in 2008 the "Wood products legality verification systems - An assessment"[50] graded seven legal verification systems against six minimum requirements for credibility. Greenpeace states that

> "legality can only be seen as a starting point in meeting the end goal of ensuring that wood products come from environmentally and socially responsible forest management (…) Greenpeace currently recognizes FSC as the most credible certification scheme in this respect",

and would only accept Smartwood's Verification of Legal Compliance (VLC) and Tropical Forest Trust (TFT) as providing credible legality verification, because these are the only schemes requiring full commitment to FSC certification as part of their legality verification system.

2.1.4 Findings from an international congress

Mirjam Ros-Tonen (2004)[51] summarizes in the findings of an international congress on "Globalization, Localization and Tropical Forest Management in the 21st Century" that:

> "Certification has had many effects that cannot be measured in hectares or premiums. It has given a greater voice to indigenous groups who have been historically left out of the forest debate. Certification has made a tremendous contribution to creating space for broad participation and continuous adaptation in forest management and conservation efforts. Regional standard-setting groups have brought together industry, the environmental community and local communities in an unprecedented way. Hundreds of companies, communities and forest landowners have reinvented their businesses, enhanced their products and established new partnerships on the coattails of the certification movement. Several strategic issues need to be dealt with if this new tool is to be developed effectively in the future. Originally designed to respond to unsustainable logging in the tropics, certification has been much more successful in the temperate forest areas."[52]

[50] Greenpeace International (2008): Wood products legality verification systems - An assessment. Technical Report. http://www.greenpeace.org/international/press/reports/lvs-assessment (as of June 2008)

[51] Ros-Tonen, Mirjam A.F. (2004): Final Report: Congress on Globalisation, Localisation and Tropical Forest Management in the 21st Century. Amsterdam Research Institute for Metropolitan and Int. Development Studies, Amsterdam, Netherlands.

[52] Ros-Tonen, Mirjam A.F. (2004): Final Report: Congress on Globalisation, Localisation and Tropical Forest Management in the 21st Century. Amsterdam Research Institute for Metropolitan and Int. Development Studies, Amsterdam, Netherlands

While she is summarizing this for all the forest management certification schemes jointly, it was often stressed that FSC is the scheme that respects much more than the other schemes the rights of forest depending communities, also of those, which are only indirectly involved in the forest management or its impacts.

While the summative statements of CIFOR, WWF, Greenpeace and international conference participants above are highlighting how broad FSC's scope of impacts is, the following quotations are more specifically assessing FSC's certification outcomes and impacts on singular aspects of forest management, based on the analysis of FSC certification reports.

2.1.5 Improvements in European forestry

Commissioned by the WWF European Forest Program, Peter Hirschberger (2005) conducted a series of six studies based upon the publicly available information from audit reports prepared by independent assessors. The Corrective Action Requests (CARs), listed in the audit reports, provide a summary of the changes that forest managers have had to make to achieve or maintain the forest certification standard. It is important to note however, that improvements made in preparation of the certification audits are not captured in this analysis, so the summary provided almost certainly underestimates the benefits provided. The analysis was carried out for six countries: Estonia[53], Germany[54], Latvia[55], Russia[56], Sweden[57] and the United Kingdom[58]. In total 2,817 CARs were reviewed, covering 18 million hectares of forest. The conclusions presented by WWF (2005)[59] are those based on results from at least three countries, with the majority of observations valid for five or six countries. They therefore present

[53] Hirschberger, Peter (2005): The Effects of FSC-certification in Estonia: an analysis of CARs. WWF Forest Programme. 18 p. http://www.panda.org/downloads/forests/finalanalysisestonia.pdf (as of June 2008)

[54] Hirschberger, Peter (2005): The Effects of FSC-certification in Germany: an analysis of CARs. WWF Forest Programme. 48 p. http://www.panda.org/downloads/forests/fscanalysisgermany.pdf (as of June 2008)

[55] Hirschberger, Peter (2005): The Effects of FSC-certification in Latvia: an analysis of CARs. WWF Forest Programme. 29 p. http://www.panda.org/downloads/forests/fscanalysislatvia.pdf (as of June 2008)

[56] Hirschberger, Peter (2005): The Effects of FSC-certification in Russia: an analysis of CARs. WWF Forest Programme. 25 p. http://www.panda.org/downloads/forests/fscanalysisrussia.pdf (as of June 2008)

[57] Hirschberger, Peter (2005): The Effects of FSC-certification in Sweden: an analysis of CARs. WWF Forest Programme. 25 p. http://www.panda.org/downloads/forests/fscanalysissweden.pdf (as of June 2008)

[58] Hirschberger, Peter (2005): The Effects of FSC-certification in the United Kingdom – benefits of FSC Quantified-Abstract by WWF. http://assets.panda.org/downloads/caranalysisuk.pdf (as of June 2008)

[59] WWF European Forest Programme (2005): The Effects of FSC-certification in Estonia, Germany, Latvia, Russia, Sweden & the United Kingdom: An analysis of Corrective Action Requests (by Peter Hirschberger). Summary report. http://assets.panda.org/downloads/fscsummaryanalysisallcountries.pdf (as of June 2008)

evidence of fundamental system-wide improvements to the management of Europe's forests. It was determined that FSC certification was credited with:

"**Significant Ecological improvements**: In all six countries surveyed, FSC certification improves the conservation status and enhanced biodiversity levels in forests. The most significant improvements were found to be:

- consistent implementation of Environmental Impact Assessments
- identification, mapping and management/protection of long term retentions, natural reserves, key habitats and biotopes
- increase in deadwood level
- favoring species diversity through natural regeneration, care & thinnings
- restoring of threatened forest types such as deciduous and wet forests.

In forests with man-made character, FSC certification has led a move towards a restoration of more natural processes, including lower impact silviculture.

Across all surveyed countries forest certification has ensured that operations cause less soil **cultivation** and have improved water management in general through improved soil cultivation, pollution control and strategies for the reduction of pesticides use.

Significant Economic improvements: In locations where there is a conflict between deer numbers and forest management objectives, FSC certification has led managers to develop game management strategies to minimize economic damage. A common benefit of FSC certification has been the improvement in management planning (maps & management plans), and specifically the preparation of management objectives, long term forest plans and long-term sustainable harvest planning. Consultation with neighboring forests managers on harvesting has improved local planning and coordination. Formal monitoring of objectives has been implemented, allowing feedback mechanisms. FSC certification has improved the marketing of forest products as well as income by matching production better to market requirements. The need to implement wood tracing systems has also improved the ability to prevent illegal logging. The recreational benefits of forests have been improved, through the conservation of sites of historical and cultural significance. This was complemented by better and safer public access.

Significant Social improvements: FSC certification has led to an improvement across all six countries in the implementation of health and safety legislation, including the provision of better equipment and training, the use of safety procedures, and the reliance on properly qualified forest workers. Public safety has also improved through the implementation of risk assessments and better signage of work zones. FSC certification has improved the social conditions for forest workers. The employment of the local people has been favored, formal job training has increased and it has also led to better compliance with social & legal requirements. It has avoided the evasion of social contributions and employment rights are complied with. Finally, rural development has been strengthened through the involvement and participation of neighbors, local stakeholders & communities in forest planning

and decision making." (WWF 2005 summary based on Hirschberger's analysis of audit reports in Europe).

The WWF summary report of Hirschberger's series of studies presents the results of his analysis, comparing the trends across all six countries whilst drawing important conclusions for key audiences and stakeholders in the debate on certification. It is important to note that in addition to the generic results presented in this report, significant country specific improvements were also recorded in all countries[60]:

> "This analysis across six countries shows that FSC certification is delivering a number of benefits for a wide range of stakeholders in the forest industry, and provides hard evidence of tangible improvements that the voluntary mechanism of credible certification delivers for society, the environment and the economy. Certification has improved the social conditions for forest workers through the implementation of health and safety legislation and favoring employment of local people. In all six countries surveyed, FSC certification improved the conservation status and enhanced biodiversity levels in forests." [61]

2.1.6 Improvements in US American forestry

Deanna Newsom, Volker Bahn and Ben Cashore (2005)[62] systematically assessed the changes that 80 FSC-certified forestry operations certified by SmartWood (SW) were required to make and published the results in the "Analysis of Operation-Level Changes Required during the SmartWood Certification Process in the United States":

> "Systems elements such as Management Plans, Monitoring and Inventory most frequently required change (by 94%, 79% and 71% of certified operations, respectively), followed by ecological elements such as High Conservation Value Forests, woody debris and legacy trees (by 71% and 63% of operations, respectively). Small and large operations were given roughly the same number and type of conditions and preconditions. Even the early adopters of certification were required to make important changes as a result of the certification process. The finding that these FSC-certified operations in the US were required to address an average of 14 different thematic areas as a condition of achieving and main-

[60] WWF European Forest Programme (2005): The Effects of FSC-certification in Estonia, Germany, Latvia, Russia, Sweden & the United Kingdom: An analysis of Corrective Action Requests (by Peter Hirschberger). Summary report. http://assets.panda.org/downloads/fscsummaryanalysisallcountries.pdf (as of July 2008)

[61] Ibid.

[62] Newsom, Deanna; Bahn, V. & Cashore, Ben (2005): Does Forest Certification Matter? An Analysis of Operation-Level Changes Required During the SmartWood Certification Process in the United States; ScienceDirect, Forest Policy and Economics 9 (2006) 197– 208, Elsevier.
http://www.yale.edu/forestcertification/pdfs/2006/2006newsombahncashoreFORPOL394.pdf (as of June 2008)

taining certification is a strong indicator that certification helps prompt forestry operations to make important changes in their forest practices and provides practical evidence that forest certification does have quantifiable on-the-ground impacts, assuming all conditions (= CARs) are implemented."[63]

2.1.7 Example from Guatemala

Dietmar Stoian, Carrera, Campos, Morales & Pinelo (2006)[64] have studied the impacts of "Forest certification in Guatemala".

> "The forest certification process in Guatemala has largely been confined to the forest concessions in the Maya Biosphere Reserve (MBR), representing 95% of the country's certified forest area. Forest certification in Guatemala is unique in that certification in accordance with the scheme of the FSC is mandatory for both communities and industrial groups to obtain and maintain forest concessions in the MBR. Unlike other countries where forest certification has almost exclusively been advanced in a joint effort between non-governmental organizations, development projects and the private sector, the case of Guatemala shows the important role state agencies can play as agents backing the process."

They summarize the impacts of FSC certification as follows:

> "The principal **positive impacts** brought about by certification include:
>
> 1 Prestige and security in the process of concession granting in the MBR and forest management in general (e.g. national and international prizes awarded);
>
> 2 Improvement in the organization and administration of forest resources by community groups and private owners;
>
> 3 Improvements in safety aspects and general well-being of forest workers;
>
> 4 Improvements in the conservation of forest resources;
>
> 5 Greater understanding of good management through the standards development process;

[63] Ibid.

[64] Carrera, Fernando; Stoian, Dietmar; Campos, J.J.; Morales, J. & Pinelo, Gustavo (2006): Forest certification in Guatemala. In B. Cashore, F. Gale, E. Meidinger and D. Newsom, eds. Confronting sustainability: forest certification in developing and transitioning countries, PP. 363-406. New Haven, Connecticut, USA. Yale School of Forestry and Environmental Studies.
http://www.yale.edu/forestcertification/symposium/pdfs/guatemala_symposium.pdf (as of June 2008)

6 Access to certified product markets for some certified enterprises; and

7 Increased understanding of good management by technical and professional personnel.

The chief **negative impacts** include:

1 Increased indirect costs of certification, as new conditions imposed by the certification bodies require higher investments in sustainable forest management;

2 Disappointment among some community groups as a result of false expectations regarding price premiums for certified timber;

3 Sense of abandonment by community groups with low returns from forest management once they no longer receive subsidies from support organizations - they do not have the financial resources to pay for re-assessments, audits and compliance with conditions in order to maintain their certificates;

4 Sense of exclusion among members of community groups as there is a general lack of awareness and understanding of what is certification. As a result, many certification requirements are not fully internalized;

5 Subjective assessments. There is a clear variation in the assessment criteria between different assessment teams, who often lack an understanding of the local conditions;

6 Excessively demanding standards. With dwindling support from NGOs, many conditions are difficult to comply with. In some cases, conditions are not practical. In other cases, technically appropriate conditions elevate costs and alienate those who consider entering the certification process;

7 Weak audits that place their focus on complying with outcomes as opposed to processes;

8 The mistaken notion that only certified management stands for sound forest management.

9 Certification should not be seen as an end in itself, as the target of 200 million hectares of certified forests by 2005 suggests (see World Bank and WWF 1997). Rather, it is a means to promote sustainable forest management, provided that a cost-benefit analysis for each particular case results favorably."[65]

[65] Ibid.

Commissioned by the ISEAL Alliance, 'The case of Guatemala' is also described by Christine Carey (2008/2)[66]:

> "In 1990 the government of Guatemala decided to adopt new legislation mandating sustainable forest management certification in the protected areas of El Petén. By associating the concepts of 'protection' and 'sustainable use' by local communities, the Guatemalan government adopted a relatively new approach to protected areas management, and one quite unique for a government. (…) Today, Guatemala's Maya Biosphere Reserve (MBR) contains the second largest number of community FSC certificate holders in the world. It is considered one of the most successful Central American examples of the management of natural resources jointly by a national government and local communities[67]. The uptake of FSC certification is also testament to the economic benefits this has brought to some 1800 people living in MBR[68] forest communities, and who have been able to diversify and generate incomes from both timber related industries (for example, harvesting FSC certified wood; producing a range of value-added wood products; working in FSC chain of custody certified sawmills) and through the sustainable collection of FSC certified non-timber forest products (NTFPs)."

A number of Carey's findings are confirming the findings of Hughell & Butterfield (2008). Carey additionally highlights in the "lessons learned" for the Guatemala case:

> **"Multiplier effect"**
>
> The case of Guatemala demonstrates the important role government agencies can play in the uptake of voluntary forest certification by backing the process. The government of Guatemala is satisfied with its experience of using voluntary certification in the MBR and has begun to promote the model of forest concessions based on FSC certification out-side protected areas on National Forest Lands in other regions of Guatemala. Similarly, the Rainforest Alliance, SmartWood's parent organization and members of MBR community owned enterprises are beginning to work with the governments of Honduras, Panama, Peru and Nicaragua to reproduce Guatemala's experience with sustainable forest manage-

[66] Carey, Christine (2008/2): E049 Governmental Use of Voluntary Standards Case Study 4: The Guatemalan Maya Biosphere Reserve and Forest Stewardship Council Standards. ISEAL Alliance. http://www.isealalliance.org/_data/n_0001/resources/live/E049_Guatemala_FSC.pdf (as of Sept 2008)

[67] Macqueen, D., Dufey, A., Gomes, A.P.C., Nouer, M.R., Suárez, L.A.A., Subendranathan, V., Trujillo, Z.H.G., Vermeulen, S., Voivodic, M. de A. & Wilson, E. (2008): Distinguishing community forest products in the market: Industrial demand for a mechanism that brings together forest certification and fair trade. IIED Small and Medium Forestry Enterprise Series No. 22. IIED, Edinburgh, UK.

[68] Hughell, D. & Butterfield, Rebecca (2008): Impact of FSC Certification on Deforestation and the Incidence of Wildfires in the Maya Biosphere Reserve. Rainforest Alliance, USA.

ment certification of forest concessions[69]. To conclude, in the case of the MBR, the theory behind UNESCO's Man and the Biosphere Programme has been facilitated by forest certification. CONAP's[70] forest concession programme and FSC certification have created a reality whereby communities have a legal title to live and work in the forest and are therefore better able to monitor and protect the forests because they now have a vested interest in sustainable management and legally harvesting the timber. A great deal has been written about the forest communities in the Maya Biosphere Reserve and however challenging the road has been so far, by many accounts, it was a difficult decision to take but the government of Guatemala has been proven right." (Carey 2008/2).

2.1.8 Example from Bolivia

For ISEAL Christine Carey (2008/1)[71] also describes "The case of Bolivia":

"In October 1994 key senior staff and advisors with the BOLFOR I[72] Initiative convened a series of open consultations to develop strategies to promote voluntary forest certification in Bolivia. (…) "Whilst FSC is not explicitly referenced in the legislation, both BOLFOR I and the Government have actively supported voluntary forest certification under the FSC system (Personal communication between E. Guttenstein and Antonio Andaluz 12 May 2008). At the time of the New Law (adopted on 12 July 1996), FSC was the only third party verified voluntary sustainable forest management standard with annual audits. (…) FSC certification was establishing a presence in the region through the development of a FSC National Initiative and locally adapted standard. For these reasons, amongst others, FSC became the de facto standard used by the Bolivian government. It continues to be the only forest certification system used in Bolivia today.

The New Forest Law has indirectly facilitated certification by, among other things, changing the formula for the taxation of timber concessions to a per area basis rather than a per

[69] World Resources Institute (WRI) in collaboration with UN Development Programme, UN EnvironmentProgramme, and World Bank (2008): World Resources: 2008: Roots of Resilience – Growing the Wealth of the Poor. Washington, DC.

[70] In 1989, the government of Guatemala adopted new legislation on protected areas, Government Decree No. 4-89 of 1989, mandating the creation of an extensive (10 percent of total area) national system of conservation areas, the Guatemalan System of Protected Areas (SIGAP) and the creation of a National Council on Protected Areas (CONAP). CONAP is responsible for the administration, supervision and coordination of Guatemala's national system of protected areas in partnership with three institutions

[71] Carey, Christine (2008): E047 Governmental Use of Voluntary Standards Case Study 2: Bolivia and Forest Stewardship Council Standards. ISEAL Alliance.
http://www.isealalliance.org/_data/n_0001/resources/live/E047_Bolivia_FSC.pdf (as of Sept 2008)

[72] BOLFOR I stands for the USAID supported Sustainable Forest Management Project – Proyecto de Manejo Forestal Sostenible.

harvested volume basis, thus discouraging 'high-grading' of valuable but threatened species such as mahogany [included on CITES Appendix II]. (…)

The FSC system allows stakeholders to adapt FSC's Principles and Criteria to the unique and complex situation of their own country and develop national standards. In Bolivia this happened in parallel with the reform of the forest sector, with a national FSC Working Group established in 1997 to develop a FSC National Standard for Bolivia. The development of a FSC National Standard for Bolivia transformed certification from being something imposed from outside to something developed in Bolivia, by Bolivians. The development of the Bolivian national standard cultivated support from private forestry firms as well as indigenous forest communities." (Carey 2008/1)

Carey describes the impacts in Bolivia:

"The government's recognition of voluntary SFM has led to increased international FSC certified wood product exports worth USD 16 million (2005). As a result of the government's recognition of voluntary SFM, the Bolivian forest sector now successfully markets more than 70 'lesser known species' alongside its traditional outputs." (…) "The Bolivian forest sector has also diversified its range of tree species as a result of FSC certification. Studies showed that in 1998, only three to five tree species were harvested for export. Today companies market more than 70 'lesser known species' and thus are no longer solely dependent on mahogany and cedar (Camara Forestal de Bolivia (2008) pg 2). Despite the significant area under FSC certification, the impact of the Government policy's recognition of voluntary certification goes beyond numbers. FSC certification has had a positive impact on social benefits. The Rainforest Alliance reports improvements in working conditions: "workers now receive on the job training; are issued with appropriate protective gear; receive written legal employment contracts, and have the right to negotiate collectively, making workers feel more secure in their jobs."[73]

The Rainforest Alliance also believes FSC certification has provided "a good mechanism (and possibly the only one to date) to improve communication between the government, BOLFOR, CFV, the business community and local communities". In 2002, the Government of Bolivia's sustainable forest management reform efforts were internationally acknowledged as it received the "Gift to the Earth" award from WWF, in recognition of the first million hectares of FSC certified forest, bolstering Bolivia's international reputation and brand:

[73] SmartWood /Rainforest Alliance (2005): http://rainforestalliance.org/news/2005/bolivia.html

> "Bolivia certified"[74]. Today Bolivia has the second largest area of FSC certified natural tropical forest in the world, covering 1.9 million hectares." (Carey 2008/1)[75]

2.1.9 Example from Brazil – donors evaluating FSC impact

Commissioned by the Dutch FSC-supporting donor organization HIVOS Biodiversity Fund BDF, Peter De Koning (2008)[76] analyzed the effects of FSC and of organic agriculture (IFOAM) related quality systems in poverty reduction and biodiversity conservation in Brazil, based on projects covered by the donors. De Koning demonstrates that

> "the influence of certification in Brazil is growing. Large areas have forest certification and the export market for timber is dominated by certified wood (78%). The domestic market remains a challenge with a fierce competition of wood from illegal logging. FSC proved to be an economically attractive option for many companies. Small-holder forest managers found the costs of certification compliance high (between 5,000 – 8,000 USD). This critique led amongst others to the SLIMF project. It should be noted though that in most situations the costs for certification are borne by third parties such as WWF Brasil, PRO-MANEJO and for example environmental authority of the state of Pará. Costs for forest management companies are higher but in the light of their (large-scale) operations are feasible (around 22,000 – 30,000 USD).

Table2: Strengths and challenges of FSC certification[77]

Level	Strengths	Challenges
Micro	• Increased production and an increase in income. • Reduction of ecological impacts. • Availability of financial support for the certification process. • Formalizing access and tenure rights of communities.	• No price-premium, i.e. no compensation on FSC certification by internal market. • Inequality of benefits and impacts of certification between small producers and large companies. • Difficulties in balancing interests of

[74] "Bolivia Certified" was a slogan that BOLFOR I used to promote Bolivia's forestry sector in overseas markets.

[75] Carey, Christine (2008/1): E047 Governmental Use of Voluntary Standards Case Study 2: Bolivia and Forest Stewardship Council Standards. ISEAL Alliance. http://www.isealalliance.org/_data/n_0001/resources/live/E047_Bolivia_FSC.pdf (as of Sept 2008)

[76] De Koning, Peter C. (2008): Quality systems in Brazil: the role of FSC and IFOAM related quality systemsin poverty reduction and biodiversity conservation. Mekon Ecology (in progress)

[77] Note by De Koning 2008: "Based upon the GTZ workshop on quality systems, 18 Sept 2008."

	• Enhanced organization during certification process. • Enhanced social participation and cohesion of community.	community members. • Re-confirming traditional hierarchy and patronage system.
Meso	• Good quality national certifying body (one = Imaflora). • Enhanced dialogue between stakeholders. • Exchange of expertise and experience and positive collaboration in Private Public Partnership projects.	• Capacity of intermediary organizations. • Integration of small producers and communities in new market developments (e.g. CDM). • Competition of illegal forest products. • Competition of agricultural expansion.
Macro	• Good example of sustainable forest management to be recognized in forest and development policies.	• Regulation and enforcement on forest-related issues inadequate.

BDF's findings – outcomes of FSC certification process

"The most important outcome of a FSC certification process for natural forests and SLIMF is that access and tenure rights are formalized (Interviews and article by Humphries). The strategic value for conservation organizations is that this forms a barrier for deforestation and local communities become partners in development and conversation. Imaflora has conducted one of the few impact studies on FSC certification in Brazil comparing certified and non-certified communities (IMAFLORA 2008). Communities that sell their Non Timber Forest Products (NTFP) on the local market do normally not get a higher price for the product as such. But they often can produce more NTFPs, from a diversity of sources with a higher quality and therefore the household income increases.[78] Hence, the **process** is more important than the certificate itself. Because there are other development initiatives supporting communities to get organized and enhance production, the added value of the FSC certificate is less. Many initiatives by NGOs try to link products to a higher value (export) market by processing and adding value to the basic product. Large companies, such as PreciousWoods often export their product and get a higher price. They often have higher profits with the same volume of production. For them, the **certificate** has a direct commercial value.

The main outcome of FSC in relation to plantations seems to be that certified plantations pay their employees according to Brazilian law and often above the minimum salary[79]. As

[78] Note by De Koning 2008: This assessment is based on interviews and literature. Exact data on the before-and-after situation is however lacking or circumstantial.

[79] Note by De Koning 2008: Estimated at around 30% above the minimum salary, which is very low (415 Rs in 2008). Again it is difficult to get exact figures. Interviewed staff are in general content with salaries they receive in comparison to others. Long-term employment and job security is very important to them.

important is the longer term employment and contracts the employees have as well as health and other social benefits (e.g. health care). This is not always the case in non-certified forest plantations and certainly not the case in the illegal operations. Non-certified plantations take less care of their employees. Gender issues are not really visible in FSC related discussions although the social standards do include gender specific issues and a company such a Klabin seems to have sufficient provisions for women in order for them to participate on an equal level (although mechanical labor in the forest is dominated by men, such as in Europe).

Therefore, areas under FSC certification, do contribute to poverty alleviation and biodiversity conservation. In most cases certification by FSC does not lead to a price premium on the product. With the new SLIMF procedures in place accessibility for small-holders has increased."

(De Koning continues:)

BDF's findings – impact of FSC certification

"FSC does not seem to have an impact on larger scale developments, especially the illegal deforestation. FSC seems to hamper a negative development: where a FSC-certificate has been issued the forest is yet still standing. However, there is in the Amazon still ample space to expand. (…) The domestic market is not yet seeking certified forests products. FSC Brazil is aware of this and is currently working to promote the use of FSC certified wood by construction companies.

Forest protection and certification of forests is growing in Brazil thanks to the efforts of non-governmental organizations and responsible companies. These positive developments can be attributed to organizations such as FSC Brazil, WWF Brazil, Greenpeace, TNC, Imazon, IPAM, ISA, ISPN and many others. With the small amount of money available – to oppose the large commercial developments – it is probably best to continue investing in lobby & advocacy and institutional capacities. As yet, it has not been sufficient to stop negative trends and really implement a process of sustainable development (as presented in the federal policies) with a proper ecological-economic zoning. Especially, the Amazon, where enforcement is weak, and the Cerrado, where the awareness is lacking, are under pressure. International market pressure including negative media attention triggered by NGOs, seem to work best to influence certification. But this reaches only companies that produce for the export market."

BDF's findings – validity of FSC's assumptions

"So far, FSC's mission - to promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests – seems successful in Brazil. Given the critique on some plantations, prudent certification processes are needed to ensure

credibility. The two supported projects by BDF contribute to this process. FSC Brazil and partner organizations dedicate much time to lobby & advocacy. With the limited budget and staff – and the economic forces promoting further forest conversion – they assume influencing national policies has more impact. Research[80] on expansion along roads in the Amazon has shown that defining protected areas and indigenous reserves has been effective in guiding and decreasing illegal encroachment and deforestation. The longer term developments in Brazil show that (i) policies and regulations related to forests have changed and are by many NGOs regarded as 'sound'; (ii) more forest areas are protected and conserved or under an SFM-regime; (iii) more companies are becoming involved; and (iv) deforestation continues.

BDF's findings – in relation to the other FSC assumptions:

- Environmentally appropriate forest management ensures that the harvest of timber and non-timber products maintains the forest's biodiversity, productivity, and ecological processes: Operations in natural forests and well-managed forests show that this assumption is correct.
- Socially beneficial forest management helps both local people and society at large to enjoy long term benefits and also provides strong incentives to local people to sustain the forest resources and adhere to long-term management plans: FSC certification is beneficial to local people and plantations workers. Certified plantations are significant for rural employment and the local/regional economy (taxes). Klabin proves it can also be beneficial to a larger civil society (e.g. health care) but this does not have to be the case with other companies. 'Society at large' does profit from the fact that forests remain and biodiversity is preserved and social benefits are more linked to well-being and culture.
- Economically viable forest management means that forest operations are structured and managed so as to be sufficiently profitable, without generating financial profit at the expense of the forest resource, the ecosystem, or affected communities. The tension between the need to generate adequate financial returns and the principles of responsible forest operations can be reduced through efforts to market the full range of forest products and services for their best value: In general, FSC forest operations are viable and sustainable. In the case of Klabin commerce is linked to planted Eucalyptus and Pinus. The NTFP operations are insignificant in commercial terms. This will probably be true for all plantations. In natural forests, logging and NTFP can be complementary and provide small communities (i.e. the forest managers) with an income from diverse sources.
- An important assumption regarding plantations is that plantations can reduce pressures and promote the restoration and conservation of natural forests (principle 10):

[80] Note by De Koning 2008: Various articles by a.o. Nepstad, D. IPAM and ISA (2001)

Yes and no. Deforestation continues as before and is sold on the domestic market. But without the plantations the wood and paper have to come from other wood sources because the market demand is still there. So, in that sense, without the plantations the situation would be worse."[81]

2.1.10 Improvements in forestry worldwide through FSC certification

Using partly findings of the study mentioned above, in 2005 the TREES Program of the Rainforest Alliance[82] examined a representative sample of forest management operations certified by the FSC accredited certification body SmartWood (SW), a program of the Rainforest Alliance (129 operations out of 234 SW certified operations in 2003: 10 operations from South America, 10 from Central America and Mexico; 5 from Asia, 5 from New Zealand and Australia and 89 from US and Canada).

Both certified plantations and certified natural/semi-natural forests are reflected in the analysis, both in more and in less developed countries. As a means of describing the impacts of forest certification, the changes that forestry operations were required to make during the assessment process (preconditions and conditions to fulfill) were examined. The issues addressing these conditions (see Table 3) were chosen through consultation with the SmartWood staff, with the aim of covering a broad array of aspects relevant to sustainable forestry:

Table 3: Environmental, social, economic, forest management and systems themes examined in conditions analysis (Newsom & Hewitt 2005)*.

Environmental Issues	Aquatic and riparian areas
	Sensitive sites and high conservation value forests
	Threatened and endangered species
	Landscape-level considerations
	Woody debris, snags and legacy trees
	Soil and erosion
Social issues	Communication & conflict resolution with stakeholders, neighbors, commu-
	Training
	Worker safety

[81] De Koning, Peter C. (2008): Quality systems in Brazil: the role of FSC and IFOAM related quality systems in poverty reduction and biodiversity conservation. Mekon Ecology (in progress)

[82] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

	Non-timber forest products
	Worker wages and living conditions
	Special cultural sites
Economic & legal issues	Profitability of operation
	Compliance with state, federal and international laws
	Illegal activities and trespassing
	Long term tenure
Forest manage-ment issues	Roads and skid trails
	Regeneration and reforestation
	Chemical use and disposal
	Exotic species and pests
	Conversion to non-forest uses
System issues	Management plan
	Monitoring
	Inventory
	Chain of custody

* Table from Newsom & Hewitt (2005)[83]

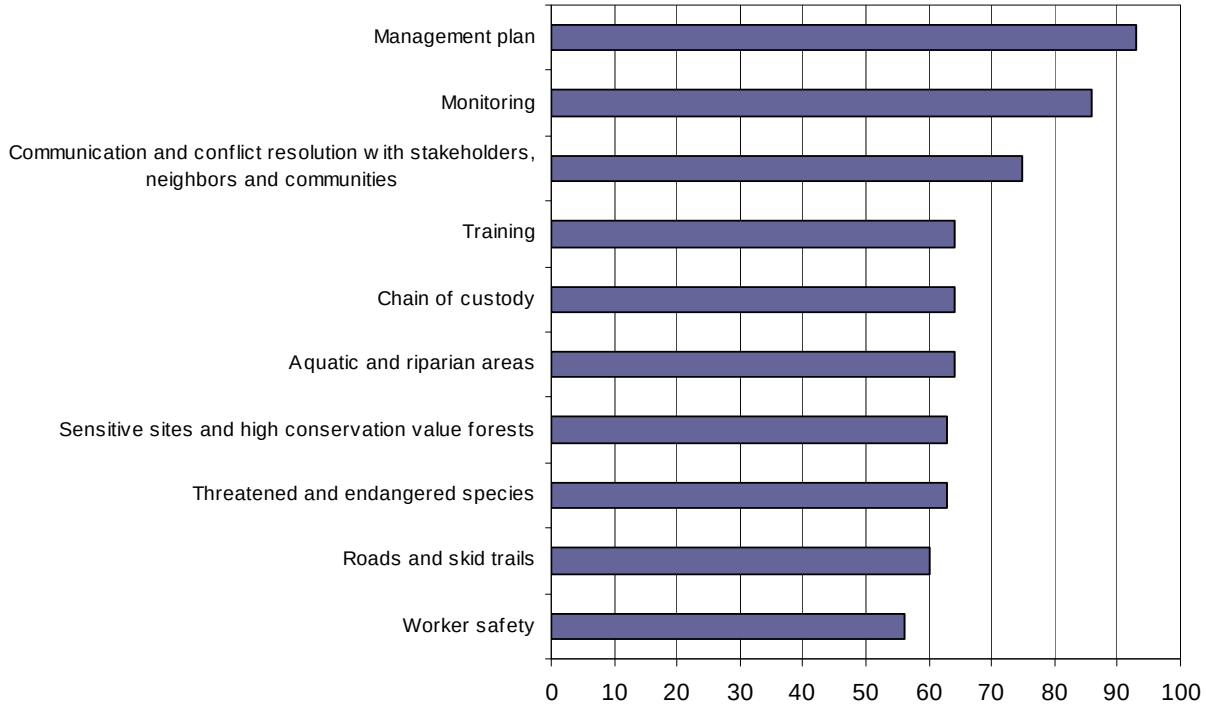
In the study, 2099 preconditions and conditions were given to the 129 operations in 21 countries and analyzed by the researchers.

> "Systems issues were addressed most often (by 98% of certified operations); however, even the category addressed least frequently – social issues – was addressed by 83% of certified operations. An examination of the top ten issues addressed during certification assessments lends support to the statement that the impacts of certification are very diverse and not skewed in any one direction (see diagram 1 below). The top ten list contains all four systems issues, three social issues, and three environmental issues. The percentages of operations that were required to address these issues range from 56% at the lowest to 93% at the highest. This means, for example, that 93% of certified operation had to either create a management plan or make improvements to their existing plan.[84]"

[83] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. (as of June 2008:) http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf

[84] Ibid.

Diagram 1: Top ten issues addressed during FSC FM certification assessments by SW



Percentage of the certified operations required to make changes by SmartWood[85]

Some of the main findings of the condition (CAR) analysis through the TREES Program of the Rainforest Alliance were:

- "To receive or maintain the FSC certificate, forest management operations were required on average to make changes affecting fifteen different forestry issues, to address adequately environmental, social, economic, forest management and systems issues. The impacts of FSC forest management certification through SW are not disproportionately focused in any one area, but cover a broad array of forest management issues. The ten issues that certified operations were required to address most often included three social issues (worker safety, training, and communication and conflict resolution with stakeholders), three environmental issues (aquatic and riparian areas, sensitive sites and high conservation value forests, and threatened and endangered species), and four systems issues (management plans, monitoring, chain of custody and inventory).

[85] ibid.

- Tropical forestry operations, often located in regions with weaker workers' rights laws and operating on slimmer economic margins than their temperate counterparts, experienced significantly higher social impacts than temperate operations. Environmental, economic, legal, forest management and systems impacts were, however, roughly equal.

  The specific wording of over half of (the 2099) conditions (given by SW to the 129 operations) required substantive, on-the-ground change to occur (versus changes in procedures and processes). When conditions involving environmental and forest management issue were examined alone, the percentage of conditions requiring on-the-ground change increased to 76%."[86]

More details about the findings of this research by Deanna Newsom and Daphne Hewitt, TREES Program for the Rainforest Alliance (2005) will be shown in the following related subchapters.

2.1.11 Example from Russia

The Priluzye Model Forest in the Komi Republic of Russia provides an example of FSC certification in which benefits for ecological and economical aspects in forest management and the wider policy benefits are clear, while livelihood and economic benefits appear to be considerably further down the line. Michal Karpachevskiy (2003)[87] describes:

> "While there has been "some improvement" in forest management, "practical changes in forestry practices were not so significant." Welfare benefits have so far been limited. They depend on processors making the necessary investments; but currently there is a lack of market interest in certification. Short-term concessions reduce investment incentives, local companies do not produce end products, and demand for certified round wood is low. In spite of this, two logging companies have expressed interest in obtaining a chain of custody certificate. Another constraint is the instability of local forestry authorities. The Forest Service originally opposed voluntary certification in Russia, rather proposing a mandatory system. Although this was disbanded and the Ministry of Natural Resources assumed authority, the certification process in Russia currently (2003) lacks a strong institutional basis."

[86] ibid.

[87] Karpachevskiy, Michal (2003): Priluzye Model Forest, Russia. Case study In: Michael Richards (2004): Certification in Complex Socio-Political Settings. Washington, D.C. © 2004 Forest Trends. http://www.forest-trends.org

2.2 Change in management

The “Broader view” section scopes the improvements required in forest management to receive the FSC certificate. In this and the following sections, the detailed conditions with regard to environmental aspects of forest management will be addressed. This describes the outcomes and impacts revealed after forest management units changed their practices to comply with FSC standards. The outcomes and impacts of these management changes become visible in different degrees. The following pages will present changes in forest management planning, monitoring and the introduction of / or improved inventories. Because the quotations are given within their context, they are often addressing more than one single issue.

2.2.1 Wide variety of improvements

Ruth Nussbaum and Markku Simula (2004)[88] found that

> “Detailed case studies made of certifications on a global scale have demonstrated a wide variety of improvements made in certified forests, sometimes minor, but sometimes involving radical departures from the previous management style in a region. (…) For example, some certified tropical forests in parts of the Amazon Basin and South East Asia* are conspicuous examples of management that complies with national and international standards in striking contrast to many neighboring operations [* at that time FSC was the only international certification scheme applied in tropical countries]. Some of these forest management units have a long history of systematic efforts to build up adequate forest management practices and systems. However, based on a review of corrective action requests summarized in public summary reports of certification, many of the improvements undertaken as a result of certification relate to the management processes of organizations, especially in planning and monitoring (Thornber 1999[89]; Rametsteiner 2000[90]). In almost one in two certification assessments corrective action requests were raised which concerned

[88] Nussbaum, Ruth & Simula, Markku (2004): Forest Certification. A Review of Impacts and Assessment Frameworks. Research Paper September 2004 A TFD Publication. The Forests Dialogue. Yale University School of Forestry & Environmental Studies. http://www.theforestsdialogue.org (as of July 2009)

[89] Thornber, Kirsti (1999): Overview of global trends in FSC certificates. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/G00411.pdf (as of June 2008)

[90] Rametsteiner, Ewald (2000): "Sustainable Forest Management Certification: Frame Conditions, System Designs and Impact Assessments"; Min. Conf. on the Protection of Forests in Europe, Liaison Unit Vienna

management plans. An interesting question is whether this is because many organizations improved their practice on the ground in preparation for certification, but did not document all the changes made. Several changes in forest management practices are induced by certification. These include measures to ensure future flow of forest produce, reduced impact logging techniques, road construction standards to minimize impacts on soil and water, regeneration of marginal unproductive lands, etc. In the tropics creaming of valuable species has been replaced by a more rational approach including utilization of a broader range of species and ensuring the reconstitution of valuable species stock in the forest. These are just examples of changes induced by certification. Even more significant, however, may be the impacts on management systems through improved mapping, inventories, planning, monitoring and evaluation, recording and documentation in certified forests. This has been observed particularly in forest management units where such elements were informal or inadequate. On the other hand, changes have brought a rather heavy bureaucracy for small-sized forest management units and other situations where simplified approaches would be sufficient to ensure the quality of forest management."

2.2.2 Long-term impacts likely to increase management quality

Describing the impact of certification on forest management, Rametsteiner and Simula (2003)[91] summarize that

"It can be safely said that forest certification has brought along improvements in internal auditing and monitoring in forest organizations. It also provides an impartial external view to forest owners on the management status of their forests. This is particularly important for those owners who are not themselves managing their forests (Baharuddin & Simula, 2001)." (…) "The long-term impacts on forests are likely to increase the level of management quality towards improved conservation of the forest ecosystem. While the actual effects related to production techniques remain to be seen, it is likely that decision makers on operational forest management become more sensitive to issues related to natural regeneration/ afforestation, thinning operations, reduced impact harvesting, road construction, the use of fertilizers and pesticides, and relations with society. The impacts on forest

[91] Rametsteiner, Ewald & Simula, Markku (2003): Forest certification—an instrument to promote sustainable forest management? Journal of Environmental Management 67 (2003) 87–98, Elsevier. http://www.elsevier.com/locate/jenvman (as of June 2008)

management will likely differ between regions, due to different forest management regimes and ownership patterns." [92]

2.2.3 Plantations management

FSC's definition of Plantations is "Forest areas lacking most of the principal characteristics and key elements of native ecosystems as defined by FSC-approved national and regional standards of forest stewardship, which result from the human activities of either planting, sowing or intensive silvicultural treatments." There are basically two types of plantations: in the Northern hemisphere the management of the original natural forest has been so selectively streamlined and simplified that it has become more similar to a plantation than to a natural forest. In the Southern hemisphere the natural forest is replaced by exotic species, mostly established by artificial regeneration (with seeds, seedlings or cuttings). Both plantation types are partly managed with highly invasive species (e.g. Acacia mearnsii (Black Wattle) in the South, Douglas fir (Pseudotsuga menziesi) in the North; pine and eucalypt species in both hemispheres). [From Cossalter & Pye-Smith 2004[93]; for a sound overview please see Cossalter & Pye-Smith 2004.] FSC states that: "Diversity in the composition of plantations is preferred, so as to enhance the economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes & structure"[94].

Where there is resistance against FSC certification for plantation management, it is generally against plantations as such, as summarized in the World Rainforest Movement's (WRM) slogan "Plantations are not forests"[95], based on the fact that plantations develop monoculture forests rather than promote biodiversity in silviculture – if not managed according to FSC Principle and Criteria. Because FSC's impact on forest management processes usually needs a certain timeframe to become visible – due to the nature of forestry – WRM and other environmental NGOs state that the FSC certificate legitimizes plantation forestry. Other FSC stake-

[92] Baharuddin, H.G., Simula, Markku (2001): Framework for an Auditing System for ITTO's Criteria and Indicators for Sustainable Forest Management.

[93] Cossalter, Christian & Pye-Smith, Charlie (2004): Fast-Wood Forestry. Myths and Realities.CIFOR (Center for International Forestry Research), Forest Perspectives.

[94] FSC (2000): FSC Principles and Criteria Document 1.2, Forest Stewardship Council, A.C., rev. Feb. 2000

[95] http://www.wrm.org.uy/plantations/material/book.html (as of July 2008)

holders accept plantations as a “must”, because the demand for wood and pulp is ever growing and plantation forestry can reduce pressures on natural forests, as well as promote the restoration and conservation of natural forests. These FSC stakeholders appreciate the fact that FSC offers the tools to improve plantation forest management. Only when the critique against FSC plantation certification is directly built on concrete examples of certified plantations, FSC and the certification bodies and plantation managers can react accordingly.

Some of the plantation certificates are being opposed by individuals and organizations for example in South American countries and in South Africa, because of their environmental and social impacts. South Africa is perhaps the country where the diverse perspectives about FSC-certified plantations stand out most clearly. Unclear land rights, influence on the water regime and on biodiversity, are the main topics critically discussed. Some of the organizations are campaigning that “plantations are not forests”, and therefore lobby FSC to reconsider the certification of large-scale monoculture tree plantations (e.g. Timberwatch Coalition[96] with a focus on South African plantations; the Rainforest Foundations US, UK and Norway, and the World Rainforest Movement (with a focus on Latin America) and more recently the Global Forest Coalition.

Newsom and Hewitt (2005) found

> “the issue of exotic species and pests was addressed with requirements for changed management in significantly more FSC-certified operations in more developed countries than less developed ones (40% and 9%, of the 129 forest management units respectively). Many conditions regarding exotic species and pests required operations to implement policies that encouraged the use of native species over exotics. Addressing potential insect outbreaks featured prominently in conditions; often operations were required to document and monitor insect outbreaks, or to incorporate integrated pest management techniques into their management plans. The higher percentage of operations in more developed countries required to address exotic species and pests may be because temperate forests tend to be less diverse than tropical ones, making them more susceptible to insect outbreaks.”[97]

Improvements in South African plantations

[96] http://www.timberwatch.org.za/certification.htm (as of July 2008)

[97] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. (as of June 2008:) http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf

Bob Frost et al (2003) finds regarding the impact of forest certification (FSC and ISO):

> "Improvements to the physical management of plantations cannot all be attributed to certification. In 1995, the sector produced a set of "Forest Industry Environmental Guidelines" that outlined best practice management to mitigate the environmental impacts of plantation forestry. The guidelines were supported, developed and welcomed by the industry; however, their implementation was voluntary and at best ad hoc across the whole sector. The introduction of certification was seen to provide an incentive to formalize their adoption ensuring that the former disparate initiatives were better coordinated.
>
> Certification audits also raised the profile of a number of management issues that needed to be addressed to comply with standards and achieve certification. The result has been the development of internal checklists for company operations to assess acceptable practices. The raised profile of environmental issues has led to the improvement of checks and balances in management systems. This includes formalizing the once ad hoc adherence to company policies and the systematization of existing systems to ensure consistency in their implementation. The result has been an increase in the number of environmental management staff within the large companies and raising of the profile of internal environmental impact auditing systems." Bob Frost et al (2003)[98]

Bob Frost et al (2003) quote and summarize Hamman's and Clarke's papers (2000)[99] prepared as part of the "South Africa Country Study for IIED on the Social and Environmental Aspects of the Forest Management Certification Process". The following issues are focused on plantation forestry of the four major companies in South Africa:

> "The certification process highlighted a number of common issues companies had to address including:
>
> Water monitoring. The main environmental issue associated with forestry in South Africa is its impact on water sources. Despite having been working on practical means to monitor ground water quality and catchments for some years, SAFCOL did not have a firm system in place at the time of the audit and CARs were issued on water monitoring. Eventually the three big companies, SAFCOL, Mondi and Sappi realized that this was a common issue

[98] Frost, Bob; Mayers, James & Roberts, Sarah (2003): Growing credibility? The impact of certification on forests and people in South Africa. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/G00412.pdf (as of July 2008)

[99] Scott, D (2000). Environmental Aspects of the Forest Management Certification Process, IIED, London; Clarke, J. (2000) Social and Environmental Aspects of the Forest Management Certification Process: A Discussion of Social Assessment Components in South Africa, IIED, London

and established a joint water monitoring and strategy and shared methodology. This system is beginning to show results.

Riparian zones. Mondi managers in particular highlighted river course management as an area, which benefited from certifications scrutiny. A delineation protocol has now been developed with stakeholders, which defines the location of wetlands in the landscape. Several industry representatives agree that the most significant physical impact on plantations of the improved practices encouraged by certification is due to the criteria relating to watercourse management. This includes the felling of trees along water-courses and the rehabilitation of wetlands and riparian zones. Under the ISO system Sappi estimates it has cleared about 15,000 hectares over the last three years in these areas. One medium sized grower suggested this 'horizontal contraction of plantation area has been off set by the gains in improved yields in more favorable areas'.

Road building and maintenance. Forestry roads are often neglected and serve as a continuing source of erosion and pollution of watercourses. When one company was issued with a CAR on road maintenance it responded by appointing a 'roads champion' who developed revised road building and maintenance guidelines and ran a training course for company employees. Another recognized in the certification process that on average it had too many roads in its plantations (1 km per 12 ha in some areas) and is now managing a program of grassing over some roads (aiming for about 1 km per 30-40 ha).

Clonal material and genetically modified organisms. SAFCOL managers note that certification has influenced their priorities and practices of research. Clones are being investigated in particular for their water efficiency and drought tolerance. Genetically Modified Organisms (GMOs) are being avoided by SAFCOL (another company is however involved in GMO trials)."[100]

Improvements in Brazilian plantations

[100] Frost, Bob; Mayers, James & Roberts, Sarah (2003): Growing credibility? The impact of certification on forests and people in South Africa. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/G00412.pdf

Tasso Rezende de Azevedo, and André Giacini de Freitas (2003) describe for IMAFLORA the direct impacts of certification on forest management planning and on working conditions in plantation forestry in Brazil: The introduction of FSC forest certification has

> ”had significant impact on the working conditions of companies that manage plantations in southern Brazil. In 1997 Klabin do Paraná had excellent working conditions for its workers in all departments, and not so good for subcontractors’ workers. In order to ameliorate this situation, a series of indicators were established, such as the use of Personnel Protection Equipment, quality of food and transportation, work contract papers, quality of logging camps, and availability of medical assistance. These indicators were very useful in bringing subcontractors in full compliance with the requirements specified in certification P&C with respect to working conditions. The results obtained through these indicators are presented to the labor union and to the certifier. In 2000 the differences in treatment between the two types of workers had decreased considerably.”[101]

[101] Rezende de Azevedo, Tasso & Giacini de Freitas, André (2003): Forest certification in Brazil: The parallel evolution of community forest management in the Brazilian Amazon and FSC certification. AND: Direct Impacts of certification on working conditions: the case of Brazil. IMAFLORA

2.3 Environmental effects

This describes the outcomes and impacts revealed after forest management units changed their practices to comply with FSC standards. The outcomes and impacts of these management changes become visible in different degrees. The following pages will present:

- Impacts on biodiversity through Reduced Impact Logging; and
- Effects on Biodiversity and special cases, such as:
  - on threatened species,
  - on use and disposal of chemicals,
  - in wet forest sites, and
  - on forest conservation.

The chapter also looks at a special case: certification of non-timber forest products.

2.3.1 Impacts on Biodiversity

Reduced impact logging as required by FSC in Amazonia and Acre, Brazil

An example of a positive impact on biodiversity due to changed forest management practices required by FSC auditors is given in the paper “Short-term effects of reduced-impact logging on eastern Amazon fauna”, by the Instituto de Pesquisa Ambiental da Amazônia (IPAM), 2006. The researchers evaluated the short-term effect of reduced-impact logging (RIL) on species richness, abundance and composition of native Amazonian fauna six months after logging and found that all sites in the study area certified by the FSC have implemented reduced-impact logging since 2000.[102]

Similarly to this finding, Cara Rockwell, Karen Kainer et al. (2007) studied the impact on the forest in a FSC certified agroextractive community localized in the State of Acre, at the Projeto de Assentamento Agroextrativista Porto Dias. When compared with conventional logging op-

[102] Instituto de Pesquisa Ambiental da Amazônia (IPAM) (2006): Short-term effects of reduced-impact logging on eastern Amazon fauna. Forest Ecology and Management 232 (2006) 26–35

erations, the disturbed areas in managed forests decreased from 26% - 75% to 15% of the logged area.[103]

But, as Ros-Tonen titled one of her papers: “There is more to sustainable forest management than reduced impact logging.”[104] While Ros-Tonen summarizes that “partnerships between multiple actors (e.g. the FSC) are needed in order to create the institutional context for good forest governance and sustainable forest management and stimulate the necessary local community involvement, (...).” we will here list some examples of RIL success and other forest management improvements triggered by requirements from FSC certification. Several of these examples are drawn from certification reports:

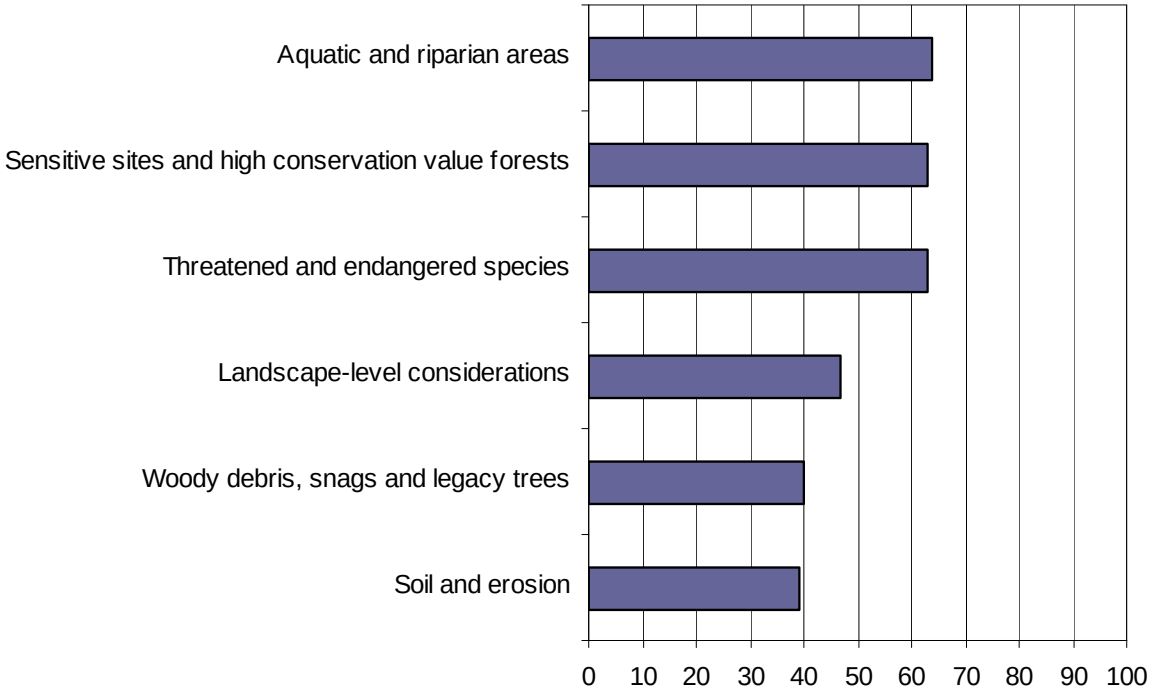
In 2005 the TREES Program of the Rainforest Alliance[105] examined the 2099 conditions (changes that forestry operations were required to make during the assessment process) given to 129 forest management operations in 21 countries certified by the FSC accredited certification body SmartWood (SW), (see 1.0 General). The most prevalent environmental impacts of FSC forest management certification were improved riparian and aquatic management (required of 63% of operations), improved treatment of sensitive sites and high conservation value forests (62%) and improved treatment of threatened and endangered species (62%).

[103] Rockwell, Cara A.; Kainer, Karen A.; Staudhammer, Christina L. and Baraloto, C. (2007): Future crop tree damage in a certified community forest in southwestern Amazonia. Forest Ecology and Management 242, Elsevier

[104] Ros-Tonen, Mirjam A.F. et al. (2008): Forest-related partnerships in Brazilian Amazonia: There is more to sustainable forest management than reduced impact logging, Forest Ecology and Management, Elsevier. doi:10.1016/j.foreco.2008.02.044

[105] Newsom, Deanna & Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

Diagram 2: Most common environmental impacts of FSC FM certification by SW



Percentage of the certified operations required to make changes by SmartWood[106]

Aquatic and riparian areas: "Given the importance of riparian habitat to wildlife species and water quality, it is not surprising that this issue would be prominent during assessments. Most often, conditions addressing (… this issue) are centered on the definition and delineation of buffer zones and "no management zones" around streams, lakes and vernal pools. The approaches that assessors required certified operations to follow varied: in some cases, operations were required to better enforce their own company-level guidelines; in others they were required to develop policies with input from stakeholders and the scientific community; in yet others, certification assessors made reference to governmental guidelines, such as Forestry Best Management Practices, or specific riparian guidelines created by FSC regional working groups. Rarely did assessors include specific buffer zone

[106] ibid.

widths in conditions (e.g. “Appropriate buffers must be set to conform to 25 foot no harvest zones around 3rd order and higher order streams…”). In addition to defining and delineating zones around aquatic and riparian areas, operations undergoing certification were often required to establish or improve upon systems to monitor the effects of forest management activities on aquatic habitats, especially when endangered species or anadromous fish were known to be present.” In South Africa for example, certified companies have gone beyond the static, minimum government monitoring standards to create their own dynamic systems to monitor their operations’ impacts on water resources.

Sensitive sites and high conservation value forests (HCVFs) and their treatment and conservation is a prominent topic in the FSC. (In 2005 work on the definition and management of HCVFs in the FSC system was in its early stages, therefore the issues “sensitive sites” and “high conservation value forests” are grouped into a single category.) (Newsom and Hewitt’s analysis revealed that) “62% of certified operations were required to address sensitive sites and HCVFs. The identification, conservation and protection of these areas were the central focus of the conditions. A typical condition might read “ensure that sensitive, or potentially important sites, and high conservation value forest, are evaluated, considered for protection and described in the property’s management plan.” Consultation of stakeholders about sensitive sites and HCVFs was required of many operations, as was the expansion of inventory, monitoring and mapping activities to include these features.” In Indonesia for example, the PT Sumalindo Lestari Jaya II has classified about 50,000 hectares as HCVF. And the Ndola Pine Plantations Limited in Zambia has set aside HCVF areas as conservation corridors in which non-commercial tree species have been allowed to regenerate.

The issue of **threatened and endangered species** was also addressed by 62% of operations. “Operations were most often required to identify, conserve and protect endangered species. Often, assessors required that actions be species-specific and also focus on the species’ habitat; for example, “expand on existing procedures to include a process for the development of species-specific strategies for the protection, conservation or restoration of critical habitat elements on each tract found to support sensitive or rare, threatened and endangered species.” In general, operations dealing with threatened and **endangered** species were required to ensure species protection, but details such as particular protection strategies were chosen by the operation and assessed by SW auditors in the annual audit. Operations were often directed to consult local experts and international guidelines for assistance in developing protocols.” In Guatemala for example, certification has required that defective trees not be harvested, and that fauna be protected through habitat conservation, hunting regulations and listing prohibited species, among others.

Newsom & Hewitt point out that

“Interestingly, our results do not support the claim that certified operations in more developed countries are required to make environmental changes more frequently than those in

> **less** developed countries. For the majority of environmental is-sues we examined, roughly the same percentage of operations in more developed and less developed countries were required to make changes. The exception was the issue of woody debris, snags and legacy trees (53% of operations in more developed countries required to address this issue versus 14% in less developed countries). One explanation for this difference is that the higher proportion of plantations in our sample from less developed countries made this issue less relevant there. Another (…) that certification indicators in less developed countries tend to focus less on downed wood than those in more developed countries. "[107]

Keeton, Foster and Wang (2008)[108] measured forest structure on three FSC-certified stands, three uncertified stands, and six adjacent unharvested reference stands (12 stands total) composed primarily of sugar maple (Acer saccharum) on non-industrial private properties in central Vermont, USA, to compare their economic and ecological conditions. Their data suggest that FSC-certified harvested stands in northern hardwood forests have similar sugar maple timber value, aboveground live tree carbon storage value, similar live tree structure, and greater residual coarse woody debris than uncertified harvested stands. A follow-up comparison of two management plans from certified and uncertified stands in their study re-enforced these findings. Both plans aimed for "long-term production of high-quality hardwood sawn timber" by reducing total stand basal area by one-third, removing first the lowest grade trees, and retaining an acceptable growing stock of sugar maple. However, only the plan for the certified property contained pre- and post-harvest data on standing and downed woody debris volume.

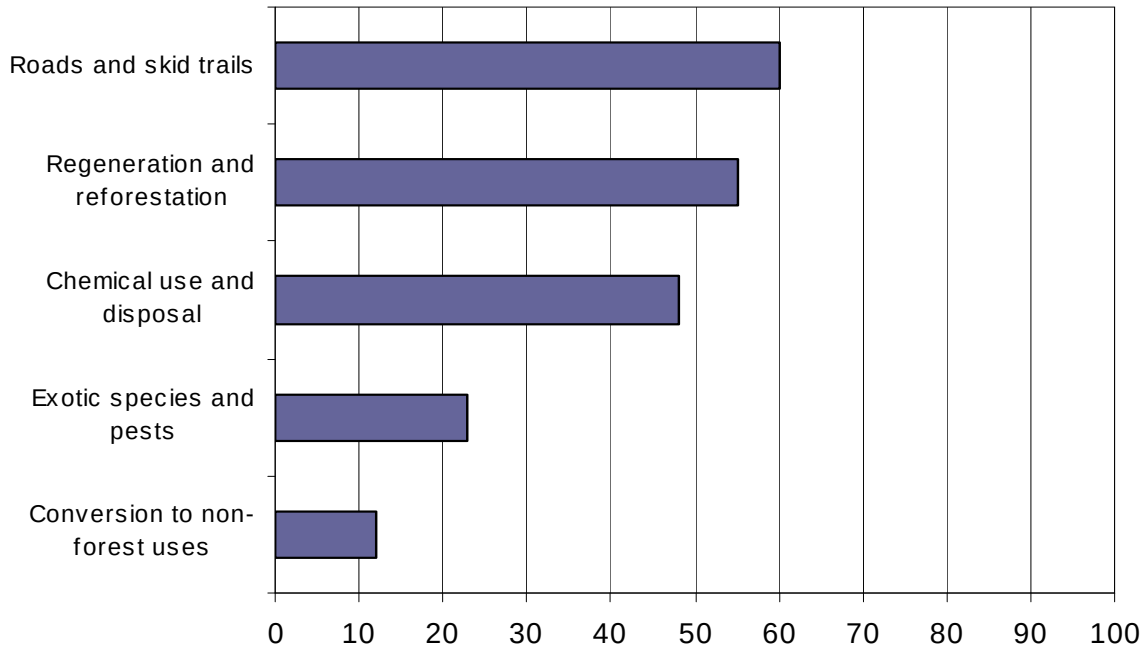
Biodiversity and forest management planning

Newsom & Hewitt further found in analyzing the 2099 conditions given to the 129 FSC forest management certificate holders in 21 countries that the most prevalent forest management impacts of SW certification were improved roads and skid trails (required of 60% of operations), improved regeneration and reforestation activities (55%) and reduced use of toxic chemicals (48%).

[107] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. (As of June 2008: http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf) (as of July 2008)

[108] Keeton, William S.; Foster, Bryan C. & Wang, Deane (2008): An Exploratory Post-Harvest Comparison of Ecological and Economic Characteristics of Forest Stewardship Council Certified and Uncertified Northern Hardwood Stands. Journal of Sustainable Forestry, Vol. 26(3) 2008. http://jsf.haworthpress.com (as of July 2008)

Diagram 3: Most common impacts of FSC FM certification by SW addressing forest management issues.



Percentage of the certified operations required to make changes by SmartWood[109]

Issues regarding **roads and skid trails** were addressed in 60% of the 129 certified operations. Specific actions that operations were required to make regarding roads and skid trails were very diverse, but most often related to minimizing their impact on water quality. This was achieved through, for example, reducing the number of stream crossings and ensuring the appropriate use of culverts and bridges. Operations were also required to use the minimum possible number of skid trails and roads, to ensure that they could be used

[109] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. (As of June 2008: http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf) (as of July 2008)

for multiple entries into the stand, and to minimize ground disturbance. Formalizing the planning of roads and skid trails also featured prominently in conditions. This involved not only the location of roads and skid trails, but also plans for their maintenance. In some cases, specific “road plans” were required, which included “proposed access road construction or road up-grading/maintenance, proposed water crossing locations, and any bridge construction.”

The **monitoring and mapping of roads and skid trails** were also often required. For example, one condition stated that road monitoring “must evaluate the impacts of road construction and logging on water quality, stream and riparian buffer zones and the adequacy of cur-rent guide-lines to protect these resources.” Often, operations were required to map out the locations of road and skid trails, sometimes being required to identify areas suitable only for dry weather and/or frozen conditions.”[110]

Regeneration and reforestation of certified operations were addressed with conditions in the certification processes of 55% of the 129 FSC-certified operations. According to Newsom and Hewitt (2005) “Most of these conditions dealt with the creation of post-harvest regeneration strategies, the minimization of regeneration threats, such as residual stand damage during logging, and the monitoring of regeneration success. Only a handful of conditions addressed reforestation of previously-degraded areas, such as pasture lands. Perhaps even more significant than the specific actions regarding regeneration and reforestation is the frequent requirement that staff of certified operations articulate a vision of the forest’s “desired future condition” (this vision would then be achieved through appropriate regeneration and reforestation activities). For example, the following wording was fairly common: “harvesting plans will include stand level objectives (including regeneration and target structure) in relation to the desired future condition of the stand and ownership.” SW assessors and forest owners and managers alike agree that creating a vision of the forest’s desired future condition is a major benefit of certification, which has positive effects beyond simply reforestation and regeneration strategies.”[111]

Chemical use and disposal related conditions were given to 48% of FSC-certified operations. While the FSC standards prohibit the use of certain chemicals, the standards do not

[110] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

[111] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

require outright elimination of all synthetic pesticides and herbicides but do have expectations for their safe use. Therefore, the conditions focused on developing strategies to reduce and minimize the use of chemicals, and to ensure that, when their use is necessary, chemicals are applied appropriately. This involved safety precautions for those workers applying the chemicals, as well as measures to ensure the chemicals do not enter waterways or other sensitive areas. In rare cases, assessors did find evidence that banned chemicals were being used, and specifically prohibited their use by name. Depending on the approach taken in regional standards, some conditions required operations to research alternatives to chemicals. For example: “Use of any synthetic pesticide, fungicide, and herbicide must be preceded by a plan that identifies and evaluates non-chemical alternatives…”. In some cases, specific ideas for alternatives were given. One operation was required to determine the feasibility of using “bio-degradable oil for chain saws and as hydraulic oil in machinery working in the forest, and pro-duce a plan for switching to or increasing the use of biodegradable oil.” (Newsom & Hewitt 2005).

Reduced use of pesticides in Germany

Hirschberger’s study (2005) of German FSC certification reports found:

> “FSC certification also banned the avoidable use of toxics in the forest. A key issue is the precautionary treatment of timber stored in the forest with insecticides. This could be solved by the accurately timed evacuation of the wood. The restraint of the regeneration by graminaceous species is combated with forest management measures like a reduced harvesting level in vulnerable stands. The reduced growth of grass is also less attractive for voles and allows therefore again the reduction of the use of pesticides.”[112]

Conservation and biodiversity

Some conservationists are challenging the FSC. In a debate in 2001 Brown et al. found that

> “Connections between forest certification and biodiversity conservation are well established conceptually, but on-the-ground results have not been consistent. For example, regional working groups of FSC have taken disparate decisions on issues such as plantation forestry, pesticides use, logging in old-growth forests, and management for landscape pat-

[112] Hirschberger, Peter (2005): The Effects of FSC-certification in Germany: an analysis of CARs. WWF Forest Programme. 48 p. http://www.panda.org/downloads/forests/fscanalysisgermany.pdf (as of June 2008)

> terns. FSC standards, thus far, generally reflect the longstanding emphasis on stand-level managers that forest managers have employed, to the near total exclusion of landscape-level management issues." (…) "Conservation biology and landscape ecology offer concepts and tools to improve measurement and management of biodiversity at spatial scales ranging from the stand to the eco-region. The challenge now is for forest management and certification bodies to apply these concepts and tools in specific cases, taking into account the immense variety in forest conditions across regions."[113]

A debate in Conservationist Biology in 2001 illustrates the high expectations in FSC, and also the options for active participation in FSC to develop meaningful instruments for conservation. Elizabeth Bennett (2001)[114] feels that biodiversity and conservation are poorly represented and undefined among the principles of certification schemes "that they are meaningless". She requests the broadening of certification standards to include logging effects on ecology.

Ghazoul (2001)[115] responds to Bennett

> "Biologists themselves seem unable to agree on which criteria or indicators to use to assess biodiversity conservation, even in local contexts, so it is not realistic to expect forest managers in industry to adopt them. Preserving rare species is not important to a forest manager, who is trying to maintain a sustainable resource base and save money."

Putz and Romero (2001)[116] added to the ongoing debate that

> "More biologists should be involved in timber certification, but pessimism about tropical forestry in general or the contributions of certification efforts is not justified. Many good changes come from a desire for certification by the FSC."

[113] Brown, Nicholas R.; Noss, Reed F.; Diamond, David D. & Myers, Mariah N. (2001): Conservation Biology and Forest Certification: working together towards ecological sustainability. Journal of Forestry. August 2001; 99; 8; Career and technical education.

[114] Bennett, Elizabeth L. (2001): The joint effort of timber certification. Conservation Biology, Vol. 15. No.2. Blackwell Publishing for Society for Conservation Biology

[115] Ghazoul, Jaboury (2001): Barriers to Biodiversity Conservation in Forest Certification. Conservation Biology, Vol. 15.. No.2. Blackwell Publishing for Society for Conservation Biology .

[116] Putz, Francis E. & Romero, Claudia (2001): Biologists and timber certification. Conservation Biology, Vol. 15. No.2. Blackwell Publishing for Society for Conservation Biology.

Elizabeth Bennett (2000)[117] refers for example to FSC criterion 3.2 ("forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous people.") and assumes that "it is unlikely that "resources" is being read to mean major loss of bushmeat."

Cauley, Peters, Donovan and O'Connor respond that

> "in the context of criterion 3.2 the term 'resources' intended to mean all natural resources, including bushmeat, wildlife and biodiversity (…) and does not intend to exclude any resource. (…) These principles and criteria [3.2, 6., 7. etc. – the editor] broadly address species that are both directly and indirectly affected by harvesting operations and the resulting increased access to forest environment. In keeping with the FSC modus operandi, these principles do not provide specific prescriptions but provide a starting point for more detailed standards of responsible forest management prepared at the regional level and for specific guidelines and checklists used by certifiers around the globe." Cauley et al. continue, also responding to Brown's concerns: "Regional standards are under development in many areas, and there are differences, as one would expect, from region to region. (…) these differences are reconciled. (…) The FSC is attempting to improve communication between conservation biologists, ecologists, foresters, and loggers to ensure that the best guidelines are constructed and the scientific components of the certification process are strengthened; inputs from scientists are welcome."[118]

Gullison's review (2003)[119] has shown that the

> "FSC certification of timber production forests can potentially contribute to biodiversity conservation in at least three ways:
>
> 1 The process of certification may improve the value of certified forests for biodiversity,

[117] Bennett, Elizabeth (2000): Timber certification: where is the voice of the conservationists? Conservation Biology 14: 921-923.

[118] Cauley, Henry A.; Peters, Charles M.; Donovan, Richard Z. & O'Connor, Jennifer M. (2001): Forest Stewardship Council Certification. Conservation Biology, Vol. 15. No.2. Blackwell Publishing for Society for Conservation Biology .

[119] Gullison R. E. (2003): Does forest certification conserve biodiversity? Oryx Vol 37 No 2 April 2003; http://www.yale.edu/forestcertification/pdfs/03_oryx_certification.pdf (as of June 2008)

2 Certification may be sufficiently profitable that landowners choose to manage their forests for the production of certified timber, rather than clearing their forests for agricultural uses.

3 Certification may reduce logging pressure on HCVF if it offers consumers the option of purchasing forest products that come from well-managed forests of lower conservation value."

Gullison (2003)[120] analyzed corrective actions requested by 30 certificate holders (10 each from plantation, natural and mixed forest categories). His results reinforce those of Thornber 1999 (see below) in that they clearly demonstrate that the process of FSC certification requires companies to make a wide variety of significant changes to management that would benefit biodiversity. They also show that most FSC-certified companies have established significant protected set-asides within their borders. He found that there is

> "only clear evidence that certification produces biodiversity benefits by improving management of existing timber production forests during the auditing process ("the process of [FSC]-certification generates improvements to management with respect to the value of managed forests for biodiversity"). In contrast, the incentives offered by certification are insufficient to prevent deforestation, and the volume of certified forest products [in 2003] on the market is too small to significantly reduce logging pressure on HCVF. FSC has made modest inroads in temperate countries, but very little progress in certifying tropical natural forests. The extent to which additional forest managers will seek FSC-certification based on the current cost/ benefit structure offered by FSC is uncertain but, at least for tropical countries, it seems unlikely that there will be rapid large increases in the area of FSC-certified forests in the near future." (…) "In conclusion, there is no doubt that FSC certification has generated biodiversity benefits for those forests that have been certified, and all other things being equal, it is better from a conservation perspective to have existing forestry operations FSC-certified rather than not. The issue is not whether certification is a good thing when considered in isolation, but rather, in deciding to what extent limited conservation dollars should be invested in promoting certification and sustainable forestry, particularly if this funding comes at the expense of funding other approaches to conservation. (…)"[121]

[120] Gullison, R. E. (2003): Does forest certification conserve biodiversity? Oryx Vol 37 No 2 April 2003; http://www.yale.edu/forestcertification/pdfs/03_oryx_certification.pdf (as of June 2008)
[121] Gullison R. E. (2003): ibid.

In the analysis of "global trends in FSC certificates" Kirsti Thornber (1999)[122] reviewed 156 FSC certificates to quantify the type of corrective actions that were required of companies as they underwent audits prior to certification. She found clear evidence that

> "companies were required to make corrections to management during the certification process that would benefit biodiversity. For example, 38% of companies were required to improve the protection of representative ecosystems within their borders, 37% of companies had to improve their management of rare, threatened or endangered species, and 24% were required to conduct an Environmental Impact Assessments."

Biodiversity in Latvia

Hirschberger studied in 2005[123] the 114 CARs given to the FSC certified forest units in Latvia, both to huge state forest areas and to small private holdings organized in management groups. The certified area covered in 2005 60% of the total Latvian forest area, and changes in forest management due to FSC certification have therefore an enormous impact on Latvia's nature. Hirschberger states in the summary:

> "FSC certification reduced the risk of soil damage and compaction through the increased use of heavy machinery like harvesters. Driving is now limited to forest roads and skidding trails. The appropriate weather conditions are taking into consideration when conducting forest operations like harvesting and thinning. Certification raised also the awareness of forestry staff regarding chemical substances and the protection of water resources. (…) The conclusion can be drawn that certification according to FSC (criteria) has conserved and improved biodiversity in large parts of Latvia, especially at a time when these issues were still debated on a national level and were legal stipulations were unclear or weak."

Ecologically valuable wet forest site types in Estonia

[122] Thornber, Kirsten (1999): Overview of global trends in FSC certificates. Instruments for Sustainable Private Sector Forestry Series. International Institute of Environment and Development, London, UK.

[123] Hirschberger, Peter (2005): The Effects of FSC-certification in Latvia: an analysis of CARs. WWF Forest Programme. 29 p. http://www.panda.org/downloads/forests/fscanalysislatvia.pdf (as of June 2008)

Hirschberger's study (2005)[124] of the only two certification reports existing from Estonia states in the summary:

> "Ecologically valuable wet forest site types and ecosystems in natural water bodies will be conserved and restored, as the FSC certification bans the construction of new drainage systems and limits the reconstruction of new ones. This is an important improvement, as wetlands cover about fifths of the country and an extensive network has been established in the forest during the Soviet time."

Biodiversity in Sweden

Hirschberger (2005)[125] analyzed audit reports of 22 FSC certified forest management units (covering a more than 10 Million ha) with 473 Corrective Action Requests raised since 1997. He found that

> "in Sweden, which started from a relatively high level of forest management, FSC certification has led to improved planning and use of forest residues for biomass in order not to compromise biodiversity management, (and on social issues the rights of the Sami people are now formally respected and addressed in forest management)".

Illegal logging and certification of conservation in Germany

The certification of the forests of the National Park units Boddenlandschaft and Jasmund in Mecklenburg-Vorpommern, Germany had been suspended in 2007 because the certification bodies had revealed illegal timber harvesting and bad wildlife management. The certificate was re-issued in July 2008 after the implementation of the corrective actions: prosecution of the illegal logging companies and, establishment of a working group on wildlife management, studies on wildlife and on their impact on forests, and implementation of the study results into the planning of hunting strategies. The responsible Minister for Agriculture, Environment and Consumer Protection Dr. Till Backhaus summarized on July 2nd, 2008 that after the successful implementation of the corrective actions suggested within the FSC certification process,

[124] Hirschberger, Peter (2005): The Effects of FSC-certification in Estonia: an analysis of CARs. WWF Forest Programme. 18 p. http://www.panda.org/downloads/forests/finalanalysisestonia.pdf (as of June 2008)

[125] Hirschberger, Peter (2005): The Effects of FSC-certification in Sweden: an analysis of CARs. WWF Forest Programme. 25 p. http://www.panda.org/downloads/forests/fscanalysissweden.pdf (as of June 2008)

the certification confirms that the country is on the way towards transforming the forests in the national parks into self-regulating natural forests.[126]

Conservation in Bolivia

Markopoulos (2002)[127] describes the Lomerío Community Forest Management Project in Santa Cruz, Bolivia comprising 25 Chiquitano indigenous people's communities with an estimated population of 5,300. He summarizes as one of the impacts of the certification (more in chapters 1b and 1c):

> "(…) as part of a more general emphasis on conservation management, certification has obliged the project to prepare a protected forest area plan and take steps to reduce human disturbances such as setting and hunting."

Pennsylvania/USA: Wildlife, regeneration & higher timber prices

To get empirical data on (economical) benefits through FSC certification, Bensel, Newsom and Bahn (2008)[128] examined six years of timber sale data provided by the FSC-certified US American Pennsylvania Bureau of Forestry (BoF). Pennsylvania's state forest system comprises over 2.1 million acres and accounts for 12 % of the forested area in the state. The state forest system was established in 1898 to generate a steady supply of wood products, protect critical watersheds, and provide opportunities for outdoor recreation. They found that:

> "The Pennsylvania BoF was motivated to pursue FSC certification for a number of reasons (Pinchot Institute, 1998[129]). First, the BoF felt strongly that their forest management prac-

[126] MVregio Landesdienst mv/sn (04.07.2008): FSC setzt Zertifikat für Nationalparkwälder M-V's wieder ein. http://www.mvregio.de/show/143998.html & http://www.umweltruf.de/news/111/news0.php3?nummer=14365

[127] Markopoulos, Matthew D. (2002): Role of Certification in Community Based Enterprises. In: In Meidinger, E., Elliott, C. and Oesten, G.(eds). Social and political dimensions of forest certification, http://www.forstbuch.de.

[128] Newsom, Deanna; Bensel, Terrence & Bahn, Volker (2008): Are There Economic Benefits from Forest Stewardship Council (FSC) Certification? An Analysis of Pennsylvania State Forest Timber Sales. WORKING PAPER. (as of 8 April 2008). http://www.dovetailinc.org/documents/working_paper.pdf

[129] Pinchot Institute for Conservation (1998): Certification of Pennsylvania State Forest Lands: Exploring Issues and Opportunities. Sum. Rev. Nov. 21, 1997 Workshop, Rachel Carson State Office Building: Harrisburg, PA.

tices measured up with the standards set by the FSC, and that third-party certification would strengthen this claim in terms of public outreach. Second, the BoF welcomed the opportunity that FSC certification provided to strengthen key aspects of their management system, such as the **implementation of a timber harvest allocation model** (DCNR, 2003)[130]. Third, the certification process allowed the BoF to highlight major areas of concern in terms of forest management, such as the impact of a large deer population on regeneration. Lastly, the BoF hoped to serve as a model for other public and private forests in the state and elsewhere." They summarized: "In addition to higher prices (for some FSC-certified species), FSC certification also provides benefits to the BoF in terms of regular provision of feedback on management and improved relations with the public and other stakeholders."[131]

FSC brings threatened Price's Potato Bean back to Lee County, USA

On 7/3/2008 Buster Wolfe reported for NEMS Daily Journal that

"One of the world's most endangered plants is blooming near Tupelo for the first time since 2004.The Price's potato-bean plant, which is listed globally as "imperiled" and federally as "threatened", is beginning to bloom at the Coonewah Creek Chalk Bluffs in Western Lee County. (…) The Nature Conservancy has been working with the University of Mississippi's biology department within the past decade to conserve and recover the Price's potato-bean. Although Price's potato-bean plant was the main reason for the Nature Conservancy's interest in the Coonewah Creek Chalk Bluffs, other plants native to the area include giant Indian plaintain, blue ash, dwarf larkspur, burning bush, lance-leaved buckthorn, bladdernut, American columbo, horse gentian and Moonseed. The Nature Conservancy Web site says, "Coonewah Creek preserves an example of the increasingly rare calcareous bluff forest system, found only in the Northeast Mississippi Black Prairie belt." In 2002 the area received Forest Stewardship Council sustainable forest certification

Quoted in: Newsom, D.; Bensel, T. & Bahn, V. (2008): Are There Economic Benefits from FSC Certification? An Analysis of Pennsylvania State Forest Timber Sales. WORKING PAPER. (as of Apr 2008). http://www.dovetailinc.org/documents/working_paper.pdf (as of July 2008)

[130] Pennsylvania Department of Conservation and Natural Resources (DCNR) – ibid.

[131] Newsom, Deanna; Bensel, Terrence & Bahn, Volker (2008): ibid.

through an innovative pilot project. Northeast Mississippi was selected as one of two national pilot sites for this program."[132]

Conservation and use of wildlife-based resources in Congo Brazzaville

In their book "Conservation and use of wildlife-based resources: the bushmeat crisis." Robert Nasi et. al. (2007) describe the

> "**Private sector co-management of hunting**": In most tropical forests, logging concessions are important sources of hunted animals, with logging being correlated with rapidly escalating and unsustainable levels of hunting. In logging concessions surrounding Nouabalé Ndoki National Park, northern Republic of Congo, a successful collaboration has been established between the Government, an NGO (Wildlife Conservation Society, WCS), the private sector (Congolaise Industrielle des Bois, CIB) [a FSC certified operation – the editor] and local communities. The aim of the project is to design, implement, and monitor wildlife management systems with the timber company and local communities, in the forestry concessions adjacent to the National Park. The project components include: conservation education for logging company managers, employees and their families, and local communities; wildlife regulations in company policy; a strict system of wildlife law enforcement carried out by locally recruited and highly trained ecoguards; development of alternative protein supplies and activities including fish farms and the importing of affordable beef; and an intensive program of socio-economic and ecological monitoring. The presence of abundant populations of large mammals throughout the concession, including gorillas, chimpanzees, forest elephants and bongo, is testimony to the success of the project. **The private sector benefits** from the increased vigilance and law enforcement through a decrease in theft of company property in the concession, improved corporate image, and improved opportunities for timber certification. **The local communities benefit** because the management program sup-ports their traditional land tenure system. They also have employment opportunities as jobs in the project are targeted specifically at local communities, and they have increased food and cultural security. **Wildlife conservation benefits** by a reduction in threats facing the National Park, by some of the management costs being borne by the private sector, and by wildlife being protected outside the

[132] Wolfe, Buster (2008): Northeast Mississippi Daily Journal, 7/3/2008, http://www.djournal.com /pages/story.asp?ID=275696&pub=1&div=News (buster.wolfe@djournal.com)

> Park over an extremely large area. A mutually beneficial system of management is therefore created."[133]

This private sector co-management serves as an example, where a company committed to responsible forest management and participation of local people was successful in applying for the FSC certificate, although the political and social framework was challenging.

Hunting versus biodiversity in Germany

Hirschberger's study (2005) of German FSC certification reports found:

> "The conflict between game and forest is one of the most serious problems of the forest management in Germany. FSC certification reduced the damage caused by game to an ecologically accept-able dimension. Thus the aim of sustainable forest management to build up mixed close to nature forests, stable and rich of biodiversity with a high percentage of deciduous trees can be achieved." [134]

Newsom & Hewitt (2005) for TREES found that

> "Conversion to non-forest uses was ad-dressed with conditions for change management in only 11% of the 129 FSC-certified operations, but in significantly more operations in less developed countries than in more developed ones (27% versus 3%). The higher percentage of operations located in less developed countries required to address conversion of forests to non-forest use is likely explained by the high pressure in many of these regions to convert forestlands to agricultural use. Opening of forest areas through roads can provide access for land conversion and is a danger in operations in less developed countries, where property rights enforcement by the state can be very weak."[135]

[133] Nasi, Robert; Brown, D.; Wilkie, D.; Bennett, E.; Tutin, C.; van Tol, G.; and Christophersen, T. (2007): Conservation and use of wildlife-based resources: the bushmeat crisis. Secretariat of the Convention on Biological Diversity, Montreal, and Center for International Forestry Research (CIFOR), Bogor. Technical Series no.33, 50 pages.

[134] Hirschberger, Peter (2005): The Effects of FSC-certification in Germany: an analysis of CARs. WWF Forest Programme. 48 p. http://www.panda.org/downloads/forests/fscanalysisgermany.pdf (as of June 2008)

[135] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

Significantly less deforestation and incidence of wildfires in Guatemala

David Hughell & Rebecca Butterfield (2008)[136] for the Rainforest Alliance (RA) describe the impacts of forest certification in the Maya Biosphere Reservate (MBR) in Guatemala.

> "Since 2002 RA's TREES program, focused on supporting community forestry, has been active in the Peten, working to improve the economic viability of the forestry concessions through a variety of activities. These include lowering the costs of certification by facilitating a move to group certification, strengthening of an umbrella, for-profit community enterprise (...) to serve as both group certification manager and processor for secondary species, expanding markets for new species and value-added products and raising funds for a group-owned secondary processing plant in the Petén. Seventeen years after the establishment of the MBR and after a decade and a half of concerted efforts by donors and dozens of international and national NGOs there are many accomplishments to be proud of. There is evidence that FSC certification has reduced the risk of poor forest management within the MBR, increased the credibility of forest concessions, and provided both the Guatemala government agencies and environmental NGOs assurances that sustainable forest practices are verified on an annual basis (Carrera et al, 2006)[137]. The study found significantly less deforestation and incidence of wildfires within the FSC certified forest concessions than in the remainder of the multiple use zone and the overall MBR. (...)" In areas under FSC management the deforestation rate was 20 times lower than in other concessions; areas devastated by fires decreased steadily from 6,5% (1998) to 0,1% (2007), while in the surrounding forests concessions annually 7 - 20% burned down. "The decision to grant forest concessions within the MBR was contentious in 1990 but has since proven to be strategically astute for the long-term protection of forest cover. If current rates of deforestation continue, the MBR will lose 38% of its 1986 forest cover by 2050, with most of that loss within the western core protected areas and the buffer zone. Of the remaining forest cover, an increasing percentage will be comprised of the FSC certified for-

[136] Hughell, David & Butterfield, Rebecca (2008): Impact of FSC Certification on Deforestation and the Incidence of Wildfires in the Maya Biosphere Reserve. Rainforest Alliance. http://www.rainforest-alliance.org/forestry/documents/peten_study.pdf (as of June 2008)

[137] Carrera, Fernando; Stoian, Dietmar; Campos, J.J.; Morales, J. & Pinelo, Gustavo (2006): Forest certification in Guatemala. In B. Cashore, F. Gale, E. Meidinger and D. Newsom, eds. Confronting sustainability: forest certification in developing and transitioning countries, PP. 363-406. New Haven, Connecticut, USA. Yale School of Forestry and Environmental Studies.
http://www.yale.edu/forestcertification/symposium/pdfs/guatemala_symposium.pdf (as of June 2008)

est concessions. The success of the FSC certified concessions in maintaining forest cover is likely due to the sustainable management practices required by FSC certification as well as continued donor support and the activities of numerous government and non-government organizations to promote environmental awareness, community vigilance programs, and sustainable economic activities. **FSC certification has clearly played a pivotal role in protecting Petén's forest resources and will have an increasingly important role in the future in maintaining forest cover in the MBR.**"[138]

Genetically modified organisms banned by FSC

FSC is the only forest certification scheme to have banned the use of genetically modified organisms' (GMO) material in the forests that they certify. This ban was imposed due to concerns about the environmental safety of GMOs.

However, the application of genetic modifications has been heralded as a great tool in progress towards improved ecological management, alleviating poverty in developing countries and offering financial benefits to industry. Therefore industry and neutral researchers in this sector have been lobbying for years against the majority of FSC members in the social and environment chamber to get GM trees certified. Coventry's paper (2001) [139] as well as the paper from Strauss, Coventry, Campbell, Pryor, and Burley (2001) [140] summarize the ongoing discussion on the industry side of whether there will ever be the certification of plantations that contain genetically modified trees. They review the origin and range of certification systems and genetic modification applications, the biological, economical and silvicultural aspects of GM and summarize the aspects of GM that the FSC find problematical. Finally they suggest that FSC consider "taking a pro-active role in helping to ensure that (GMO) trials, and resulting commercial uses, are developed in an environmentally sound manner"; as long as the FSC membership and the Board of Directors do not change the FSC Principle and Criteria accordingly to those recommendations, FSC will continue to refuse the certification of genetically modified tree plantations.

[138] Hughell, David & Butterfield, Rebecca (2008): ibid.

[139] Coventry, Peter (2001): Forest Certification and Genetically Engineered Trees: Will the two ever be compatible? O.F.I. Occasional Papers No. 53, http://www.plants.ox.ac.uk/ofi/pubs/OP53.pdf (as of June 2008)

[140] Strauss, Steven H.; Coventry, Peter; Campbell, Malcolm M; Pryor, Simon M. and Burley, Jeff (2001): Certification of genetically modified forest plantations. International Forestry Review 3(2), 2001, http://www.cof.orst.edu/coops/tbgrc/publications/Strauss_2001_International_Forestry_Review.pdf (as of June 2008)

Certification for recreational uses – more biodiversity

> "For recreational users of forests, FSC certification has made forests more interesting and a safer place to visit. This has been accomplished through: the development of a more diverse and ecologically rich forest landscape; the protection of rare and endangered habitats such as bird nesting sites; the protection and mapping of sites of cultural and historical importance; and the implementation of safer working practices based on the results of risk assessment." (WWF 2005 summary based on Hirschberger's analysis of audit reports in Europe)[141].

The Gethal Amazonas forest and wood project in Brazil

Rainey & Renström from WWF Sweden (2001) show environmental advantages of FSC certification in Gethal Amazonas:

> "The forest management of Gethal Amazonas has gone from short sighted, economical exploitation to long-term strategies that provide income for the local population. The company's 41,000 ha of natural forest were (…) FSC certified and the new forestry methods that Gethal Amazonas applies and are radically different from the old ones. Now, only 3-4 trees per hectare are harvested per twenty-year period. The trees are cut by hand-operated chainsaws, which minimizes the damage to the forest. This also reduces the costs for road construction and promotes the quick recovery of the forest. Also, felling of non-valuable trees is avoided by removing the creepers before cutting to prevent nearby trees from being inadvertently pulled down. As many as 17 different tree species are logged in the area. Apart from learning new logging methods, workers have also received training in strict safety regulations."[142]

More diverse positive ecological impacts reported from Acre, Brazil

[141] WWF European Forest Programme (2005): The Effects of FSC-certification in Estonia, Germany, Latvia, Russia, Sweden and the United Kingdom: An analysis of CARs (by Peter Hirschberger). Summary report. http://assets.panda.org/downloads/fscsummaryanalysisallcountries.pdf (as of June 2008)

[142] Renström, Margareta and Rainey, Margaret (WWF Sweden) (2001): Social issues and the Forestry Stewardship Council. Sustainable Development International 4, 137–139. http://www.p2pays.org/ref/40/39769.pdf (as of June 2008)

In assessing the impact of socio-environmental certification on community forest management (CFM) in the Brazilian Amazon Region in the State of Acre for wood production, a group of researchers from IMAFLORA (2008)[143] found

> "Despite the rather weak effects of certification, some positive changes related to environmental issues were observed, such as the degree of knowledge about the Management Plan and the Agroextractive Settlement Project's Utilization Plan, execution of the activities prescribed in the Annual Operational Plan, disposal of residues (garbage and sewer), awareness about the use of fire, measures to protect wildlife (hunting) and degree of involvement in environmental complaints."[144]

Japanese cooperative use FSC forest certification as an environmental strategy

Ikuo Ota summarized his research findings (2006) in the abstract:

> "Yusuhara Forest Owners' Cooperative (YFOC) in Kochi Prefecture in Japan received its forest management certification from the FSC in 2000. (…) An interesting effect of increasing economic performance is found to have come from an unexpected direction: It is concluded that the FSC certification system is a possible tool to revitalize Japanese small-scale forestry as well as obtain favorable environmental outcomes."[145]

2.3.2 Planning, monitoring, inventories

Newsom & Hewitt further found in analyzing the 2099 conditions given to the 129 FSC forest management certificate holders in 21 countries that most prevalent systems impacts of SW certification in this study identified were improved management planning (required of 93% of

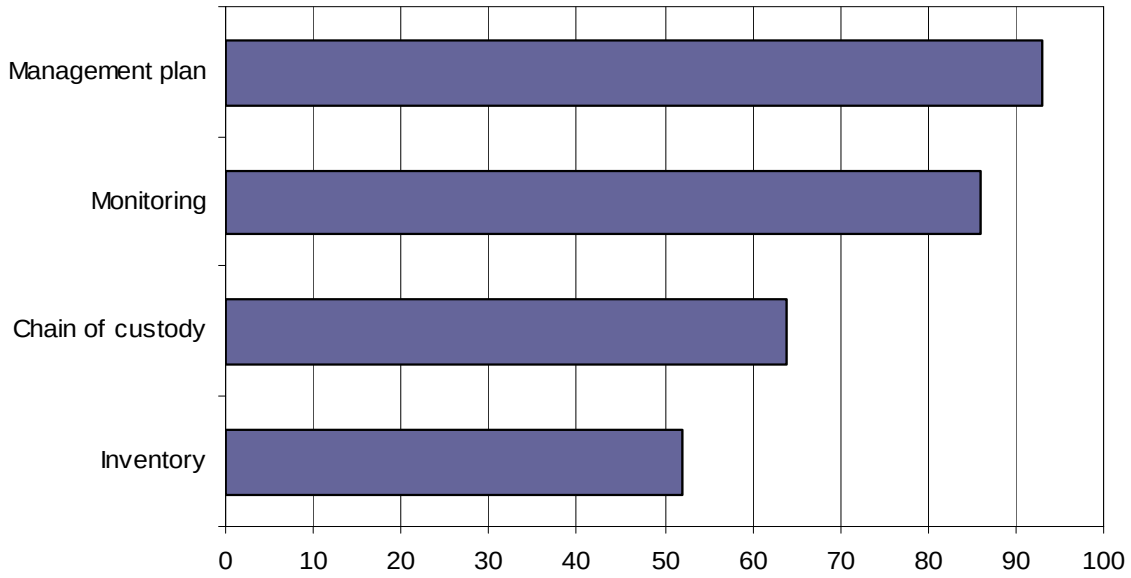
[143] IMAFLORA (ed.) (2008): Impact of FSC Forest Certification on Agroextractive Communities of the State of Acre, Brazil. By Ana Carolina B. de Lima, André Luiz Novaes Keppe, Marcelo Corrêa Alves, Rodrigo Fernando Maule and Gerd Sparovek; University of São Paulo and Entropix Engineering Company. http://www.rainforest-alliance.org/resources/documents/san_coffee_acre.pdf (as of July 2008)

[144] IMAFLORA (ed.) (2008): ibid.

[145] Ota, Ikuo (2006): Experiences of a Forest Owners' Cooperative in using FSC forest certification as an environmental strategy. In: Small-scale Forestry, Volume 5, Number 1, March 2006 , pp. 111-125(15), Springer. http://www.ingentaconnect.com/klu (as of June 2008)

operations), improved monitoring (86%), and improved chain of custody practices (required of 64% of operations). [146]

Diagram 4: Most common system impacts of FSC FM certification by SW



Percentage of SmartWood (SW) certified operations required to make changes

Newsom and Hewitt (2005) found in their study that:

> "Although the FSC is often touted as having more substantive elements in its standards than alternative programs, it nonetheless has a strong focus on systems. FSC Principles 7 and 8 are devoted to management planning and monitoring, respectively, while inventory activities are found throughout the standards.

[146] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. (As of June 2008: http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

Forest management planning issues were addressed in over 90% of the certified operations during their certification assessment. Most often, these conditions dealt with the content of management plans, often requiring operations to develop new policies, incorporate new monitoring and inventory data into existing policies, or better articulate management objectives. Sometimes, conditions required operations to better solicit community and stakeholder feed-back, incorporate it into the management plan, and make copies of those plans available to the public. Group certification operations were often required to develop a management plan template and ensure that it is used by all members.

Monitoring systems of 86% of the certified operations had to be improved. Usually, operations were required to develop a monitoring protocol, or formalize their existing informal proto-cols. The topics that operations were specifically required to monitor ranged from regeneration success to recreational use to insect infestations to riparian buffer conditions. Often, operations were required to use post-harvest monitoring checklists; less often, they were required to monitor the social effects of forest management activities.

Chain of custody issues were required to be addressed in 63% of SW-certified operations. Conditions regarding chain of custody often involved technical details such as log marking, keeping better records of certified wood sales, as well as the proper use of FSC and/or SW logos.

Inventory systems were the topic of corrective actions required in 52% of the operations. Usually, this involved conducting forest cruises to gain data on timber volumes; for example, “stand inventories must include data on all species and sizes of trees including regeneration size, density and species.” Less often, inventory conditions referred to inventories of biological resources such as wildlife. Operations in more developed countries were required to improve on their inventory systems significantly more often than those in more developed countries (64% versus 36%, respectively).”[147]

Newsom and Hewitt (2005) stated that

> “There was no significant difference in the percentage of operations in more developed and less developed countries that were required to make changes to management plans, monitoring or chain of custody. While one might expect that operations in less developed countries would need to improve management plans more often than those in more developed countries, this is not the case. Often, operations that are pursuing certification in less

[147] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. (As of June 2008: http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

developed countries do so with donor funding, and have received assistance with the preparation of management plans prior to the certification assessment. Also, some operations in more developed countries – especially in regions with a predominance of small, family forests and a long history of forest management, such as many in Europe – do not actually have formalized management plans."[148]

Management plans in Bolivian Communities

Also Markopoulos (2002)[149], describes the Lomerío Community Forest Management Project in Santa Cruz, Bolivia

"in 25 Chiquitano communities with an estimated population of 5,300. Since 1986 these communities, (…) have participated in the development of a vertically integrated sawmill enterprise designed both to generate material benefits and to secure legal recognition for long-standing territorial claims. Financial and technical support for this undertaking has been provided (…)"

In 1996 the project was FSC certified. Marcopoulos summarizes the impacts of the certification on the indigenous peoples' communities' forest management:

"High standards of management within the project, as well as new forest legislation that has imposed strict standards for inventories, plans and other tools of management, have limited the impact of certification on forest management practices. (…)"

Broadened scope of management plans in Russia

Hirschberger's study (2005)[150] of certification reports from 12 Russian forest companies says in the summary: "Certification under FSC introduced new or uncommon approaches like ecological landscape planning or thinning." (…) Among others Hirschberger reports about changes in forest management regarding the protection of endangered species listed in the

[148] Newsom, Deanna and Hewitt, Daphne (2005): ibid.

[149] Markopoulos, Matthew D. (2002): Role of Certification in Community Based Enterprises. In: In Meidinger, E., Elliott, C. and Oesten, G.(eds). Social and political dimensions of forest certification, http://www.forstbuch.de (as of June 2008)

[150] Hirschberger, Peter (2005): The Effects of FSC-certification in Russia: an analysis of CARs. WWF Forest Programme. 25 p. http://www.panda.org/downloads/forests/fscanalysisrussia.pdf (as of June 2008)

red book, conservation of old growth forests, introduction of environmental impact assessment and of a new landscape planning approach, precautious use of mineral oil, limitations of the damages by harvesting operations, monitoring of composition and changes of flora and fauna.

2.3.3 Certification of Non-Timber Forest Products

Direct economic benefits of conservation efforts may be attained when forest products can be harvested for commercial purposes while at the same time maintaining the ecological integrity of the forest. In many cases Non-Timber Forest Products (NTFP) / Non Wood Forest Products (NWFP) or Minor Forest Products[151] can be harvested in such a way.

> "Still today, hundreds of millions of people, mostly in developing countries, but also in developed countries, derive a significant part of their subsistence needs through the use of NWFP such as medicinal plants, construction materials or edible products. Income from plant and animal products gathered from forests is generated through local, national, trans-national and international trade. The international trade in NWFP involves high potentials and risks. The main benefit of the international trade in NWFP is the high market value the products achieve compared to local or national markets. However, high market values combined with high demands may also cause unsustainable use since they might lead to the overexploitation of species providing NWFP. In addition, higher product values might not be equally shared among all stakeholders involved in the collection, processing, manufacturing, trade and marketing of NWFP." (Vantomme & Walter 2002)[152]

The harvest of NTFPs plays a key role in the sustainable management of community agriculture and forest resources worldwide, and, in some cases, they are promoted on international markets. Certification of NTFPs is presenting many new challenges (lack of ecological knowledge about individual species; possible negative impacts of certification on small producers and subsistence users; difficulties in assessing markets and lack of quality control; lack of overall experience with NTFP certification and with integrating timber and NTFP certification) and opportunities in certification due to the wide range of management practices and difficulty

[151] The use of the terms non-timber forest products (NTFPs) and non-wood forest products (NWFPs) is topic of endless academic discussions. The term NTFP is slightly broader than NWFP, including e.g. charcoal.

[152] Vantomme, Paul and Walter, Sven (2002): Opportunities and Challenges for Non-Wood Forest Products Certification. FAO, Forestry Department, Wood and Non-Wood Products Utilization Branch, Rome, Italy. http://www.fao.org/DOCREP/ARTICLE/WFC/XII/0366-A1.HTM#fn1 (as of June 2008)

in monitoring their harvest and processing.[153] The number of FSC certificates for NTFPs only or for forest management with integrated NTFP is growing less slowly than expected, although FSC is stipulating the responsible use of NTFP, as part of the diverse utilization of forests as required in Principle 5 and in the FSC Global Strategy.

Klemens Laschefski illustrates in his PhD thesis (2002)[154] that FSC's success is based on the support from consumer campaigns of ENGOs and the competition with other certification schemes. Therefore FSC (as the pars pro toto for demand for certification against FSC standards) "is responding pragmatically to the needs of the international timber traders, while the support of local forests users is marginalized". Laschefski reminds that "the promotion of non timber forest products and the support of local forest dwelling communities was an important goal since the founding of FSC."

> "**Brazil is the current global leader in the certification of NTFPs** within forest management certification systems. Here the largest number of NTFP species certified under the FSC system can be found, and Brazil has the world's largest area certified exclusively for NTFP extraction. The FSC accredited certification body SmartWood's (…) national affiliate, the Brazilian NGO IMAFLORA (Institute for Agricultural and Forestry Management and Certification) has broken new ground with its work on community certification, including NTFP certification (…). (…) To date, the most successful NTFP certifications have been subsidized by donors, NGOs, governments or by sales of certified timber. (…) IMAFLORA's policy is to subsidize the direct costs of audits to communities and small operations through the use of resources from donors and the creation of an internal Social Certification Fund. Money to support the fund is drawn from a 3–5% mark up to the fees for their certification of private companies. The Social Fund has helped to decrease the cost of certification for communities by up to 40%." (Patricia Gomes – Community and NTFP Certification Coordinator at Imaflora – personal communication)[155]

[153] Mallet, Patrick and Karmann, Marion (2000): Certification of NTFPs: An emerging field, ETFRN 32. Also available at http://www.etfrn.org/etfrn/newsletter/pdf/etfrnnews32.pdf (as of June 2008)

[154] Laschefski, Klemens (2002): Nachhaltige Entwicklung durch Forstwirtschaft in Amazonien? Geographische Evaluierungen des Forest Stewardship Council. Dissertation Univ. Heidelberg. Reference: http://www.ub.uni-heidelberg.de/archiv/2975/

[155] Guedes Pinto, Luis Fernando; Stanley, Patricia; Cota Gomes, Ana Patricia; Robinson, Dawn (2008): Experience with NTFP certification in Brazil. Forest, Trees and Livelihoods, Vol 18, pp 37-54

“Successful NTFP certification in Brazil: FSC is bringing people together”

“One key factor that has contributed to IMAFLORA’s success in promoting NTFP certification has been their substantial investment of time in educating and informing forest communities and the private sector about the potential of certification. An example of communication and information exchange around the topic of NTFP certification was a workshop entitled “NTFPs and Cosmetic and Phytotherapeutic Industries” during which industry leaders and NTFP harvesters from forest communities came together to discuss raw material needs, marketing strategies, access issues and the opportunities and obstacles that they face. This August 2002 workshop in the small Amazonian town of Alter do Chão was a key event in raising the awareness of both producers and industries about the market and certification potential for NTFPs (Souza 2004, pers. communication). Events such as this led directly to several companies that process NTFPs – mainly those producing cosmetics and beauty products – to seek and obtain Forest Stewardship Council ‘chain of custody’ certificates. (…) Products labeled as containing ingredients made with FSC-certified NTFPs have helped to raise awareness among both corporations and consumers. (…) The Forest Stewardship Council certification has opened possibilities to promote forest management of timber and NTFPs for communities and add value to forests (Veríssimo and Smeraldi 1999)[156]. It has also provided access to markets for community forest products.”[157]

Marajó’s palm heart project: A tasty start with a bitter end

The fruit juice and hearts of the multi-stemmed Euterpe oleracea Mart. (acaí) palm are among the major commercial NTFPs of the Amazon region (van Andel et al., 2003[158]).

“The Marajó people have traditionally collected the shoots and fruits of the acaízeiro palm tree. Exchange of these products for manufactured goods has made the local population dependent on the outside world. Educational opportunities for the Marajós have been very

[156] Veríssimo, A., and Smeraldi, R. 1999. Hitting the target: Timber consumption in the Brazilian domestic market and promotion of forest certification. São Paulo, Amigos do Terra – Programa Amazonia, SP, IMAFLORA; Belém, PA; IMAZON.

[157] Guedes Pinto, L. F.; Stanley, P. et al (2008): ibid.

[158] van Andel, Tinde (2003): First FSC-certified NTFP product available from the Brazilian Amazon. ETFRN News 39/40: Globalisation, localisation and tropical forest management Organisations - Institutions – Programs http://www.etfrn.org/ETFRN/newsletter/news39/nl39_oip_3_8.htm (as of June 2008)

limited. Climbing the palms and harvesting the fruit has been the work of children, which prevented them from going to school." (Renstroem & Rainey 2001)[159]

Ros-Tonen (2008) continues: "In 1999 the food company Muaná Alimentos Ltd. entered into a partnership with a labor cooperative on Marajó Island in the Amazon Delta for the sustainable management of 4000 ha of Euterpe swamp and ("with the goal of allowing the harvesters to once again become independent agro-forestry producers"- WWF). The firm also dealt with riverine communities outside this area for the purchase of palm hearts and acaí on a socially equitable basis." (Ros-Tonen 2008)[160]

After meeting the numerous preconditions resulting from the first assessment of the Smart-Wood NTFP guidelines in 1999, the Brazilian certifier IMAFLORA (Institute for Forest and Agricultural Management and Certification) and the SmartWood network of the Rainforest Alliance certified the company's Euterpe forests in 2000. The same year the company produced 540 tons of palm heart with a value of US$ 4 million. The certified products were initially launched onto the domestic market, after which the first 6 tons of frozen fruit pulp were shipped to the US, and later to Europe. Muaná Alimentos was the first company in South America to sell NTFPs with a FSC forest management certificate.

Rainey and Renström highlight:

"The Muaná project involves the local Marajó people in the management of forest operations, raising awareness of the economic and environmental advantages of conservation. One of the objectives is to create a technical forestry school. Employees are hired and organized through a labour co-operative, and training courses in responsible forest management are held periodically. Other technical training courses are made available to the community as a whole. New harvesting methods have been developed that enable adults to gather the fruit and the children now go to school. The newly founded producers' association provides boats and fuel for school transportation. The state government continues to provide support as well since eradication of child labour is high on their agenda. School

[159] Renström, Margareta and Rainey, Margaret (WWF Sweden) (2001): Social issues and the Forestry Stewardship Council. Sustainable Development International 4,137–139. http://www.p2pays.org/ref/40/39769.pdf (as of June 2008)

[160] Ros-Tonen, Mirjam A.F. et al. (2008): Forest-related partnerships in Brazilian Amazonia: There is more to sustainable forest management than reduced impact logging, Forest Ecology and Management, Elsevier. doi:10.1016/j.foreco.2008.02.044

> curriculum includes forest management and the basic concepts of nature conservation. (…) The project in Marajó clearly illustrates the social, environmental, and economic benefits of FSC-certification."[161] But this was not achieved easily: "There is a gap between local reality and the minimum standards of FSC-certification," says (…) Director of Muaná Alimetos, and the driving force behind the project. "In order to bridge this gap the investment of time, money, dedication and education is necessary. Certification must take into consideration local conditions and adapt the criteria in a flexible way. Commitment is the key – to biodiversity, to communities, and to markets."

Muaná´s ultimate goal was the certification of 40,000 ha of natural forest for acaí-production in 5 years, of which 400 ha had to be set aside for permanent forest conservation. Unfortunately, these ambitions were never achieved as the company and the major investor in the partnership (A2R) went bankrupt in 2005. "One of the reasons for this failure was that Muaná's products could not compete on the domestic and international markets with the cheaper acaí products from non-sustainably harvested areas."[162] Although this project ended in a frustrating manner, the success in the first years are still motivating to enter into other projects to-wards responsible forest management which includes benefits for the communities directly or indirectly depending on these forest resources. (And if the children are still going to school, this would be another positive impact!)

NTFP in the Guatemalan Maya Biosphere Reserve and FSC Standards

For ISEAL Christine Carey (2008/2)[163] describes:

> "In 1990 the government of Guatemala decided to adopt new legislation mandating sustainable forest management certification in the protected areas of El Petén. By associating the concepts of 'protection' and 'sustainable use' by local communities, the Guatemalan government adopted a relatively new approach to protected areas management, and one quite unique for a government. (…) Today, Guatemala's Maya Biosphere Reserve (MBR) contains the second largest number of community FSC certificate holders in the world. It is

[161] Renström, Margareta and Rainey, Margaret (WWF Sweden) (2001): ibid.

[162] Ros-Tonen, Mirjam A.F. et al. (2008): Forest-related partnerships in Brazilian Amazonia: There is more to sustainable forest management than reduced impact logging, Forest Ecology and Management, Elsevier. doi:10.1016/j.foreco.2008.02.044

[163] Carey, Christine (2008/2): E049 Governmental Use of Voluntary Standards Case Study 4: The Guatemalan Maya Biosphere Reserve and Forest Stewardship Council Standards. ISEAL Alliance. www.isealalliance.org/_data/n_0001/resources/live/E049_Guatemala_FSC.pdf (as of September 2008)

considered one of the most successful Central American examples of the management of natural resources jointly by a national government and local communities.([164])The uptake of FSC certification is also testament to the economic benefits this has brought to some 1800 people living in MBR forest communities,([165]) and who have been able to diversify and generate incomes from both timber related industries (for example, harvesting FSC certified wood; producing a range of value-added wood products; working in FSC chain of custody certified sawmills) and through the sustainable collection of FSC certified non-timber forest products (NTFPs) such as xate (Chamaedorea elegans, C. oblongata) palm fronds used in the floral industry, allspice (Pimenta dioica), latex from the 'chicozapote' tree (Manilkara zapota), and ramón nuts (Brosimum alicastrum), a traditional forest food, that is ground into flour to make bread or roasted to make a nutritional drink." (Carey 2008/2)[166]

[164] Macqueen, D., Dufey, A., Gomes, A.P.C., Nouer, M.R., Suárez, L.A.A., Subendranathan, V., Trujillo, Z.H.G., Vermeulen, S., Voivodic, M. de A. & Wilson, E. (2008): Distinguishing community forest products in the market: Industrial demand for a mechanism that brings together forest certification and fair trade. IIED Small and Medium Forestry Enterprise Series No. 22. IIED, Edinburgh, UK.

[165] Hughell, D. & Butterfield, Rebecca (2008): Impact of FSC Certification on Deforestation and the Incidence of Wildfires in the Maya Biosphere Reserve. Rainforest Alliance, USA.

[166] Carey, Christine (2008/2): ibid.

2.3 Social effects

This chapter describes the high expectation of FSC members, staff and other stakeholders on FSC's social programs and impacts and gives examples of positive impacts

- on workers' training and safety;
- on local employment;
- on communication, participation and consultation of all people involved;
- empowerment of marginalized groups; and
- on community managed forests.

It also looks at a special case: SLIMFs certification

2.3.1 High expectations for FSC in regards to social issues

In 2006 a team of external evaluators (Phil Guillery et al, 2007)[167] evaluated the impact of five years of financial support by a major on FSC. One of the four key findings of the questions in a survey of FSC staff and key stakeholders, a focus group with FSC staff and in-depth interviews is that "FSC stakeholders have high expectations for FSC in regards to social issues." FSC impact on the complex social realities is indeed often very critically measured against these high expectations, and at the same time internal FSC Working Groups and external observers are demanding from FSC to even "Raise the social bar".

> "FSC has become a credible international body that many look to as a tool to improve livelihoods for people dependent on forests. (…) FSC donors and stakeholders recognize that FSC has proven to be a powerful tool that can benefit communities, workers and Indigenous Peoples. However, there are a number of challenges that remain and are only likely to grow as FSC expands. Key among them is having the resources to ensure that the FSC Social Principles are being implemented on the ground and in a consistent manner. (…) A consistent theme throughout the evaluation was that many stakeholders expressed specific "hopes and dreams" that they want addressed by the FSC. (…) Chief among these

[167] Guillery, Phil; Haslett Marroquin, Reginaldo and Hampton, Maree (2007): Ford Foundation Funding to the Forest Stewardship Council: A Qualitative Review of External Impacts. A confidential report to the FSC International Center.

> concerns are that they want more accomplished on community forestry issues in the Global South, more emphasis on addressing indigenous people rights, and more done to strengthen the social chamber. It is clear from the comments in the survey that stakeholders, while they can see progress and are very committed to the FSC as an organization, clearly have high expectations to see FSC do more on these issues."[168]

Although there are high expectations, and disappointments, because not all of these expectations have been met in time, there are also plenty of positive outcomes and impacts on social issues already achieved through FSC certification. On the following pages we will illustrate some of these positive findings.

Jill Bowling (2003)[169] concluded in her paper on "Community level participation of workers in forest certification" as Director of the Global Wood and Forestry Program of the International Federation of Building and Wood Workers (IFBWW; since 2005: BW International):

> "Experience to date suggests that certification has already had a very positive effect on forest management operations in many countries around the world. For unions certification is one tool and it will never replace the more traditional union approaches of collective agreements or multinational framework agreements and codes of practice. Based on union experience there is room for improvement in forest certification (…)".
>
> "Unionists are very practical people working at a grass roots level to improve the working and living conditions for ordinary working people. Although certification has been a tool that they could use, it is for many a blunt tool. The first major problem is that some of the most exploited workers receive no additional protection through certification. While this is partly because it appears that it is the companies with better management practices that appear to be most actively engaged in certification there is also a problem that within companies there are marginalized workers. This marginalization can be a result of many factors such as migration, sex, age, type of contract or work relationship. (…)
>
> A related issue and one that is very obvious to workers participating at the operations level of certified companies is that monitoring needs to be strictly controlled. Workers can play an important part in this and the training that we have been organizing has involved provid-

[168] Guillery et al (2007): ibid.

[169] Bowling, Jill (2003): Community level participation of workers in forest certification: does it work? In: Meidinger, E., C. Elliott, and G. Oesten (eds.) (2003) "Social and political dimensions of forest certification". Remagen-Oberwinter, Germany: Dr. Kessel. pp.63-82.

ing workers with a better understanding of certification contracts so that they can raise issues of non-compliance if they arise. It can be extremely difficult for an independent certifier who visits an operation only a few times a year (or less) to have access to this information. Finally, certification only deals with the work done in the forest. Workers involved in wood processing and transport of the material are not protected.

Our experience has shown that timber is being sold with a label that has been produced in factories where less than adequate labor standards exist. Similarly there may be no environ-mental accounting of the chemicals used in the production process or of the environmental costs of transport. These issues need to be addressed and ultimately certification needs to be extended to include all stages of the production process."[170]

Jill Bowling has strong points where the cooperation between unions and FSC can be improved for the benefit of forest workers and the communities they are living with. Some of these points are beyond FSC's current core business. Some of them have been taken up in practice or in the FSC Global Strategy 2008. One of her points is

"From a union perspective and particularly at the local level it is obvious that the different players involved in certification have different access to resources. Unions across the world have found it difficult to train the grassroots shop-stewards to be aware of certification and then to actively participate in certification discussions with companies as they become certified. Certification programs need to assure the resources necessary for all stake-holders to be able to participate fully in the certification process, not for just those such as the forest industry with resources. Training sessions for these people could be a useful part of certification initiatives in the future."[171]

FSC is seeking continuously a strong partnership with unions to fulfill these needs. A feasibility study to extend social and environmental issues into the chain of custody certification has been commenced in summer 2008; first results will be presented at the FSC General Assembly in late 2008. Moreover FSC International personnel regularly attend BWI seminars in strategic parts of the world to explain to unionists the value of forest management certification as a tool to enhance workers' conditions.

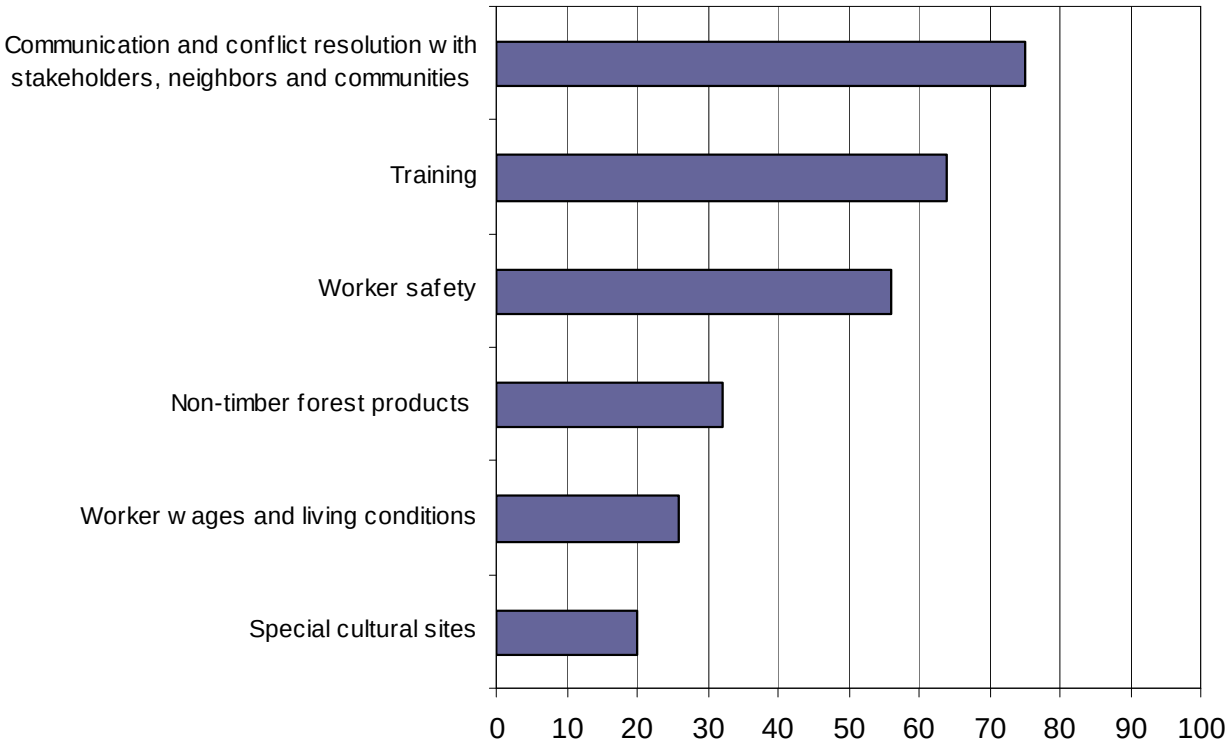
[170] Bowling, Jill (2003): Community level participation of workers in forest certification: does it work? In: Meidinger, E., C. Elliott, and G. Oesten (eds.) (2003) "Social and political dimensions of forest certification". Remagen-Oberwinter, Germany: Dr. Kessel. pp.63-82.

[171] Bowling, Jill (2003): ibid.

2.3.2 Workers' conditions: training, safety, empowerment and motivation

Newsom and Hewitt (2005)[172] in their study for the TREES Program of the Rainforest Alliance give us valuable insight in the social aspects of certification, based on the 2099 conditions examined, in 129 operations into 21 countries. The most prevalent social impacts of SW certification were improved communication and conflict resolution with stakeholders, neighbors and communities (required of 75% of operations), improved worker training (64%) and improved worker safety (56%).

Diagram 5: Most common social impacts of FSC FM certification through SW



Percentage of SmartWood (SW) certified operations required to make changes

[172] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

Newsom & Hewitt (2005) found with respect to social issues:

> "**Staff training** was the second most frequently-addressed social issue during certification assessments, with 64% of operations given conditions in this area. Training here usually involved technical forestry issues, ranging from the identification of vernal pools and endangered species to directional felling techniques to database management to basic "civil rights" training. These conditions often required increased attendance at forestry workshops or the creation of booklets and manuals. In one case, a condition existed that required the translation of company policies and procedures from the dominant language into a minority language spoken by contractors and field staff. Some training activities were also directed toward the local communities, or, in the case of group certification, landowners within a certified group. For example, one group certification operation was required to "educate all members and as many non-members as feasible about the required river buffer zones".
>
> **Requirements to improve worker safety** were requested from 56% of certified companies. This sometimes involved increasing awareness of safety regulations, such as occupational safety and health requirements, the provision of safety equipment (and instruction in its use), or improved accident monitoring for staff and contractors. In places where an existing problem was noted, operations were required to take more direct action; for example, "Implement a system to improve compliance with heath and safety requirements … by employees and con-tractors. System should consider incentives and penalties (e.g. monetary fines or termination of contracts for repeat non compliances)." [173]

Examples from Guatemala

> "Prior to certification, forest workers often had inadequate footwear, clothing and protective headgear, and often had no access to first aid equipment or first aid training. Many work camps were makeshift with combined eating and sleeping areas, and sometimes no separate latrine. After certification, adequate safety and first aid equipment was made available

[173] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

to workers. Work camp layouts were restructured and latrines built." (Newsom & Hewitt (2005)[174]

In 2003 Tasso Rezende de Azevedo and Andre Giacini de Freitas, forestry experts from the Instituto de Manejo e Certificação Florestal e Agrícola (IMAFLORA)[175] describe the:

"Direct impacts of certification on working conditions: the case of Brazil: Logging activities are among the most dangerous and unhealthy in the industrial sector in Brazil. Normally, people that work in this sector are those with low professional qualifications that were unable to find better jobs. Requirements for improving working conditions in order to obtain FSC certification have led to deep changes in the way companies treat their workers. These changes include:

Logging Camps – Usually forest workers sleep in precarious tents built at the site with black polyethylene film, without adequate toilette facilities and a proper place to eat their meals. In certified operations, logging camps are equipped with sleeping quarters, bathrooms, eating places, office, first-aid room, and leisure space, such as TV and a sports court. In Manicoré, the enterprise Gethal Amazonas provided workers with transportable camp structures that could be pulled by a motor vehicle and taken from one area to another, thus shortening the time needed to move the logging crews through the forest and get them ready to work.

Safety of forest operations– Until 1995, the use of personal protective equipment (PPE) in forest activities was limited in Brazil to a few plantation-based industries, as a result of organized pressures from the part of labor unions and the Labor Ministry. In the Amazon region it was almost impossible to find any worker wearing PPE. Forest entrepreneurs argued that there was no use in providing them to the workers because this type of equipment (safety pants and boots, and hard hats) was quite uncomfortable in the tropical cli-

[174] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

[175] Rezende de Azevedo, Tasso & Giacini de Freitas, André (2003): Forest certification in Brazil: The parallel evolution of community forest management in the Brazilian Amazon and FSC certification. AND: Direct Impacts of certification on working conditions: the case of Brazil. IMAFLORA (Instituto de Manejo e Certificação Florestal e Agrícola). IN: Molnar, A. (2003): Forest Certification and Communities: Forward to the Next Decade. Forest Trends. Washington, D.C.http://www.forest-trends.org/documents/publications/Forest%20Certification%20and%20Communities_Annex%201.pdf (as of June 2008)

mate, or because they hindered harvesting operations (ear protectors). So, with the connivance of the workers themselves, things never changed. Worker safety is an indispensable condition to attain certification. All workers must wear PPE supplied by the company in good condition and adequate to their specific activities. Workers must be properly trained to carry out forest activities safely and efficiently. Until 1996 the municipality of Itacoatiara, in the state of Amazon, was considered the place in Latin America with the highest rate of fatal and serious accidents related to forest activities. Every year two or three people died working for Madeireira Itacoatiara Ltd. – MIL, the main local forest company. Since its certification in 1997, this company has had one fatal accident caused by the fall of a dead tree. This fact, which occurred last year, was so unusual that employees mourned for two days. One year later, on the date of the accident, all activities were interrupted for half a day in order to pay tribute to the killed worker and discuss the issue of worker safety. It is common for companies to organize internal safety committees to promote a safe work environment. In addition, they have to offer medical and hospital assistance to their employees and provide workers with regular medical check-ups.

Job Stability and Formal Work Contracts – Forest activities, especially in natural forests, have a seasonal character: work must be interrupted during the rainy season. In the Amazon region, logging takes place from June to December, a period locally known as “summer” because rainfall is lower than in the rest of the year, known as “winter”. This reality normally brings two consequences: employees are overworked during summer and lose their jobs during the winter. Due to the fact that forest companies did not always rehire the same employees every year, there was no incentive to investing in training and capacity building programs. In order to avoid paying overtime, companies ar-ranged to pay according to production and never formalized work papers, leaving employees without most fringe benefits, such as unemployment compensation, paid vacation, and the 13th salary that is mandatory in Brazil.

Since certification requires good working conditions, training programs and formal work contracts, by working with labor unions and representatives of the Ministry of Labor, the companies were able to establish a compensation mechanism called “bank of hours”, something similar to flextime adopted in some offices. According to this mechanism, during the dry season employees work one additional hour everyday. This extra time accrues during the summer and allows for the continuity of the work contract during the months when forest activities stop. All workers are legally hired, with work contracts properly specified in their work papers. In fact, this is a win-win situation: workers have job stability and guaranteed income throughout the year; in turn, employers have lower manpower costs and are able to invest on improving the technical capacity of the employees. Since there is less manpower turnover, the work teams become more skilled as they stay longer periods in the company. As a result, significant gains in efficiency are obtained over the years. A good example of this positive impact of certification is the fact that the productivity of the

work teams of Mil Madeireira and Gethal, the first two enterprises to attain certification in the Amazon region, increased by at least 20% in the first two years after certification.

Another positive impact is the stability brought to the families of the workers that join the bank of hours, as identified by the forest workers' union of Itacoatiara. One indicator of this fact is many workers decide to build a house for their families, an initiative that is encouraged by the forest enterprises. The bank of hours' idea is being adopted by a number of companies operating in the Amazon, and even by agricultural companies that deal with seasonal activities.

Subcontracting – A recent and quite popular trend in plantation forest enterprises in southern Brazil is to subcontract harvesting and maintenance operations with small local companies. In some cases this process improved salaries but, in general, it made forest working conditions worse. The worker ends up losing a number of benefits, especially long-term job stability. The argument normally presented by the companies is that their responsibilities only cover their own employees and that subcontracted workers are the responsibility of the company that provides the services. FSC considers that certification principles and criteria apply equally to all workers carrying out activities in the forest management unit, be they hired directly or through another company. This way, differences in treatment between permanent workers and subcontractor's workers must be minimized. This requirement had a significant impact on the working conditions of companies that manage plantations in southern Brazil. (…)."[176]

[NB: A proposal to treat sub-contract workers not differently from employees of an FMU will be presented to the General Assembly 2008 within the proposals for the revision of the FSC Principle and Criteria – the editor.]

See more under "2.2.3 Plantation management".

Gender sensitive: the Gethal Amazonas forest and wood project in Brazil

Rainey & Renström from WWF Sweden (2001) show some social advantages of FSC certification for workers of local communities in Gethal Amazonas:

[176] Rezende de Azevedo, Tasso & Giacini de Freitas, André (2003): Forest certification in Brazil: The parallel evolution of community forest management in the Brazilian Amazon and FSC certification. AND: Direct Impacts of certification on working conditions: the case of Brazil. IMAFLORA

> "The forest management of Gethal Amazonas has gone from short sighted, economical exploitation to long-term strategies that provide income for the local population. The company's 41,000 ha of natural forest were (…) FSC certified. (...) In the small town of Itacoatiara, Gethal Amazonas has built a sawmill and plywood manufacturing industry. The FSC-labeled plywood is mainly sold to the North American and European markets. Large, single employers in the rural areas of the Amazon are rare, but Gethal Amazonas has 1075 employees, of which about 120 work in the forest. In the factory, 35% of the employees are women. The company has contributed significantly to gender equality, as it is the only employer of women in the area. The women do the physically least demanding work, but are paid the same salary as the men are. Even though few of the workers know very much about the FSC certification of the forests supplying the factory, the local trade union is committed to relying on the social criteria of the FSC in the coming negotiations with the company. Consideration is already being given to the security and health aspects covered by FSC principles. All employees are required to participate in a course on how to avoid accidents, a company physician is available to the workers, and they are given an 80% discount on the price of medicines."[177]

When other companies learn from these positive developments and replicating the exercises, this would be a clear impact of FSC certification on the dissemination responsible forest and timber processing management.

Another case study on forest enterprise located in the state of Minas Gerais, Brazil, found positive changes in aspects related to health, nutrition, safety, infrastructure, and to the type of contract for hiring employees (Castral, 2004)[178].

The observation that operations undergoing FSC certification in less developed countries require more social improvements than those in more developed countries (Ros-Tonen 2004[179]) is supported by this study.

[177] Renström, Margareta and Rainey, Margaret (WWF Sweden) (2001): Social issues and the Forestry Stewardship Council. Sustainable Development International 4,137–139. http://www.p2pays.org/ref/40/39769.pdf (as of June 2008)

[178] Castral, A. P. (2004): Impacto da Certificação Florestal nas Condições de Trabalho no Complexo Florestal. Dissertação (Mestrado em Engenharia de Produção) – Univ. Federal de São Carlos, Mexico.

[179] Ros-Tonen, Mirjam A.F. (2004): Final Report: Congress on Globalisation, Localisation and Tropical Forest Management in the 21st Century. Amsterdam Research Institute for Metropolitan and Int. Development Studies, Amsterdam, Netherlands.

Newsom & Hewitt's results (2005)

> "also showed that 91% of certified operations in less developed countries were required to improve their worker training, 82% were required to improve safety, and 64% were required to improve worker wages and living conditions (in more developed countries 38%, 31% and 0%, respectively). These differences are likely explained by the lower economic margins of operations in less developed countries, which lead to fewer resources to devote to these issues. Also likely playing a role in these differences are the weaker labor and safety laws and enforcement found in many developing countries, a lower awareness of safety issues and differing norms about acceptable levels of risk. The shorter history of forest management in many less developed compared to more developed countries may also partially explain the increased need for worker training in these regions."[180]

But also forest workers in the North benefit from FSC certification in several respects:

FSC improves working conditions for European forest workers

WWF (2005)[181] summarizes the findings related to forest work in Hirschberger's studies of CARs in six European countries:

> "Those employed in forest industry have been some of the biggest beneficiaries of FSC certification through the improvement in the implementation of legislation and guidelines of health and safety. A reliance on properly trained staff, backed by improved training and the compliance with social taxation requirements have all led to im-proved working conditions for those working in FSC certified forests."

[180] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

[181] WWF European Forest Programme (2005): The Effects of FSC-certification in Estonia, Germany, Latvia, Russia, Sweden and the United Kingdom: An analysis of Corrective Action Requests (by Peter Hirschberger). Summary report. http://assets.panda.org/downloads/fscsummaryanalysisallcountries.pdf (as of June 2008

Increased morale and motivation of Japanese cooperative members

Ikuo Ota (2007)[182] researched the Japanese Forest Owners Cooperative in Japan:

> "Yusuhara Forest Owners' Cooperative (YFOC) was established in 1956. It currently has 1 245 member households and about 40 full-time employees, as well as 30 contracted forest workers. The organizational structure comprises four sections: general affairs, forest production, forest management and timber processing. (…) In October 2000, YFOC successfully received forest certification by FSC through SmartWood. It was the second forest in Japan to obtain FSC certification, and the first to do so with a forest owners' cooperative as the resource manager. At the time of the assessment, about ten conditions had to be met on a one- to five-year horizon, but the overall performance of the cooperative's forest management is high. The high score can be attributed mainly to two factors: a long tradition of good forest practices in Japan, and the great efforts made by YFOC to cope with new international environmental standards over many years. (…) FSC certification brought several changes to YFOC. Forestry journals and local media often reported on the splendid achievement of this small forest owners' cooperative. Yusuhara and YFOC suddenly became well-known, which improved the morale of the cooperative's staff and workers and in turn increased the motivation of forest owners. As forestry usually is a low paid, rough and dangerous job, workers tend to lack pride in their occupation. FSC certification seems to be helping to change this situation."

Strengthened employment rights for forest workers in Russia

Hirschberger's study (2005)[183] of certification reports from 12 Russian forest companies covering a total area of more than 3.5 million ha found that FSC certification has led to in Russia to strengthened employment rights for forest workers with workers now paid on time.

> "The main improvements by FSC certification were the implementation of health and safety guidelines at site level (…) enforced by systematic controls of compliance. At one forest company FSC certification improved significantly the social conditions of forest

[182] Ota, Ikuo (2007): A forest owners' cooperative in Japan: obtaining benefits of certification for small-scale forests. Faculty of Agriculture, Ehime University, Matsuyama, Japan. In: Small-scale forestry. Unasylva No. 228 Vol. 58, 2007/3 FAO Rome. FAO Corporate document Repository. http://www.fao.org/docrep/010/a1346e/a1346e17.htm (as of June 2008)

[183] Hirschberger, Peter (2005): The Effects of FSC-certification in Russia: an analysis of CARS. WWF Forest Programme. 25 p. http://www.panda.org/downloads/forests/fscanalysisrussia.pdf (as of June 2008)

workers, including a fair wage payment. The cooperation with the labor union was enforced too."

Distribution of power in the Russian Arghangelsk area

In her study about forest certification in Russia Maria Tysiachniouk (2005) summarizes:

> "In most other certified territories, worker protections increased and salary delays decreased. Workers came to understand that certification can be used as a social protection tool. For example, in Malashuika Les, the public received information about certification through newspapers and radio. Forest workers there were traditionally disempowered and did not know how to request better working conditions and salaries. FSC brought them benefits, which they would never request themselves. Currently they strongly appreciate their benefits."[184]

2.3.3 Empowering people by giving value to the forest

Local employment in rural areas Latvia's offered by large forest enterprises

Hirschberger studied in 2005 the huge FSC certified state forest area in Latvia, and gave in the summary an example for the positive impact of FSC certification on rural development:

> "Local employment in rural areas was ensured by assessing the negative impact of the increased use of expensive machinery like harvesters, which small local enterprises cannot afford. The state forest (authorities) had to develop a policy to provide local communities with opportunities for employment."[185]

[184] Tysiachniouk, Maria (2005): Forest Certification in Russia. (Center for Independent Social Research St. Petersburg, Russia); Paper presented at Yale Forest Certification Symposium. published by Yale school of forestry & environmental studies.
http://www.yale.edu/forestcertification/symposium/pdfs/Book%20Chapters/12%20Russia.pdf (as of June 2008)

[185] Hirschberger, Peter (2005): The Effects of FSC-certification in Latvia: an analysis of CARs. WWF Forest Programme. 29 p. http://www.panda.org/downloads/forests/fscanalysislatvia.pdf (as of June 2008)

Benefits for local, indigenous communities of the Marajó Islands in the Amazon

Another example, given by Rainey and Renström from WWF Sweden (2001), already quoted under “environmental impacts / NTFP certification”, shows how FSC certification has provided at least for a couple of years (1999-2005) benefits for local, indigenous communities of the Marajó Islands in the Amazon River Delta:

> “The project involves the local people in the management of forest operations, raising awareness of the economic and environmental advantages of conservation. One of the objectives is to create a technical forestry school. (…) Other technical training courses are made available to the community as a whole. New harvesting methods have been developed that enable adults to gather the fruit and the children now go to school. The newly founded producers’ association provides boats and fuel for school transportation. The state government continues to provide support as well since eradication of child labour is high on their agenda. School curriculum includes forest management and the basic concepts of nature conservation. (...) The project in Marajó clearly illustrates the social, environmental, and economic benefits of FSC-certification.”[186]

Local employment by certified saw mill in Oregon

In September 2008 the FSC certified Upper Colombia Mill (UCM) started to hire 80 new staff to join the team that will operate the new UCM. Opening a new mill in that region and time is an unusual event, and the fact that they announce the employment of the “Natural Step Principles” in their manufacturing process (see more at http://www.ortns.org/), “which empowers the employees to make a real difference on the mill’s and their own our triple bottom line, and theirs!” might also be partly due to the drive of the FSC spirit. [This is not from a research paper – still interesting to note though - the editor.]

[186] Renström, Margareta and Rainey, Margaret (WWF Sweden) (2001): Social issues and the Forestry Stewardship Council. Sustainable Development International 4, 137–139.

2.3.4 Communication, consultation – participation and empowerment

One of the seven main findings of an external evaluation of FSC's impacts by Guillery et al (2007)[187] is that

> "Stakeholders believe the key strength of FSC lies in its ability to bring diverse groups of people together to craft policy. Evaluation participants gave high marks to the FSC for its ability to bring people with diverse backgrounds and interests together to discuss issues of forest management and community sustainability. In this process the FSC brings people together who normally would not talk or work together. The FSC is perceived as an excellent conflict resolution mechanism. This was revealed in comments made about the General Assembly meetings. Participants reported that the FSC creates a space or climate where it is possible to find common ground and consensus on difficult issues. When participants were asked about the shift in the role of the FSC as reflected in its mission statement, most comments were positive on the change to the concept of "...bringing people, organizations and businesses together to develop solutions that promote responsible management of the world's forests." (Guillery 2007)

Newsom & Hewitt (2005) as previously referred to note in respect to social issues that:

> "**Communication and conflict resolution with stakeholders, neighbors and communities** is the social issue most often requiring improvement by forestry operations during their FSC certification assessment by SW, with 75% of certified operations given at least one condition in this area. Conditions dealing with this issue sometimes required that a communication or conflict resolution process be put in place, and other times required operations to deal with a specific issue that the assessment team had identified as being important. For example, some operations were required to increase the general level of stakeholder input by providing copies of management plans to interested neighbors; other operations were required to involve specific stakeholders in defining of high conservation value forests. Some operations were required to develop a general dispute resolution policy, while others were required to resolve a specific conflict. Indigenous peoples' land

[187] Guillery, Phil; Haslett Marroquin, Reginaldo and Hampton, Maree (2007): Ford Foundation Funding to the Forest Stewardship Council: A Qualitative Review of External Impacts. A confidential report to the FSC International Center.

claims was a specific issue that was sometimes required to be addressed in these conditions. (...)"[188]

The observation that operations undergoing FSC certification in less developed countries require more social improvements than those in more developed countries (Ros-Tonen 2004)[189] is supported by the Newsom & Hewitt study. 95 % of operations certified in the less developed countries were required to improve upon their communication and conflict resolution with stakeholders, neighbors and communities, versus 56% of forestry operations in more developed countries. This difference may be attributable to a higher awareness of individual "rights" in more developed countries, and the presence of more laws outlining how landowners' actions can affect their neighbors."[190]

Protecting indigenous rights in the Republic of Congo: a review of progress

John Nelson (2006)[191] summarizes the results of his assessment on behalf of the Forest Peoples Programme (FPP) of the Congolaise Industrielle des Bois (CIB) logging concessions in northern Republic of Congo. The purpose of his visit to CIB was to assess progress against the Criteria set out under FSC Principles 2 & 3 protecting the rights of indigenous communities in logging concessions. A visit in 2004 to examine CIB's efforts to improve its operations in line with FSC Principles 1-10 led to recommendations to CIB to improve its operations in line with FSC Principles 2 & 3, including establishment of a new social project coupled with a community based mapping process, both specifically targeting indigenous communities, and which CIB directors subsequently agreed to implement. John Nelson found that

[188] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

[189] Ros-Tonen, Mirjam A.F. (2004): Final Report: Congress on Globalisation, Localisation and Tropical Forest Management in the 21st Century. Amsterdam Research Institute for Metropolitan and Int. Development Studies, Amsterdam, Netherlands.

[190] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

[191] Nelson, John (2006): Protecting Indigenous Rights in the Republic of Congo through the Application of FSC Standards in Forest Plans: A review of progress made by Congolaise Industrielle des Bois (CIB) against FSC Principles 2 and 3. Forest Peoples Programme. http://www.forestpeoples.org/documents/africa/congo_cib_prog_rev_jan06_eng.pdf (as of August 2008)

“particularly in Kabo concession, CIB is implementing a wide range of far-reaching measures designed to comply with FSC Criteria under Principles 2 & 3. Implementation of these by CIB represents a significant advance in the protection of indigenous peoples’ rights in the Republic of Congo and the region generally, and sets a new high standard for forestry in the Congo Basin.” It is worth noting that, by using innovative methods that take account of very low literacy levels, one of the most marginalized indigenous people in the world, namely the Pygmy hunter-gatherers, have been actively participating in protecting their rights.

The following measures have been implemented by CIB, designed to comply with FSC Criteria under Principles 2 & 3:

- Establishment of a new social program and the hiring of a skilled manager, who has begun to hire and train indigenous translators and cartographers to help communities map community forest use;
- Recognition of indigenous communities’ usage rights throughout the concessions;
- Information meetings with indigenous communities to discuss CIB forest plans;
- Provision of information to indigenous communities about CIB logging operations;
- Mapping with indigenous communities of key sites located within proposed logging areas, such as fields, (…) and hunting and gathering areas generally;
- Establishment of protection measures for key sites identified with communities through the mapping process, including, immediately, conservation zones around all sacred sites;
- Implementation of procedures to ensure that CIB staff are aware of community conservation zones so that these are not disturbed during logging operations;
- Immediate changes to logging operations to take into account community forest use data directly it becomes available;
- Support for communities to identify their development priorities, some of which will be funded by CIB through its long-term development fund;
- Establishment of formal agreements for development projects between communities and company directors;
- Provision of appropriate information and documentation to communities covering the above;
- Establishment of clear procedures to enable fair consultations to occur and for conflicts to be resolved with the full participation of the population;

- The initiation of consultations with indigenous communities based upon these procedures.
- "The evidence shows that since 2004, CIB has made significant positive changes to its policies and practices in line with FSC Principles 2 & 3. Indigenous communities in particular are benefiting from CIB's new emphasis by securing increased protection for their forest rights. We acknowledge the huge effort and long-term investments CIB is making to address recommendations concerning the social aspects of certification since 2004, and believe that CIB deserve special recognition for the success of their work in Kabo concession."[192]

Recommendations to further improve outstanding issues at CIB

John Nelson states, that

> "There are, however, areas where improvements could be made to achieve the highest FSC standards in all CIB concessions." Nelson discussed with the CIB directors who are setting in place appropriate measures, as recommended by John Nelson, to:
>
> 1 "Deepen and widen existing community consultation and mapping activities;
>
> 2 Accelerate the timetable for the establishment of the community radio to coincide with the outcome of 1.
>
> 3 Establish a new protocol between CIB, the government of the Republic of Congo, and other stakeholders in CIB concessions, especially the indigenous populations, and including existing (…) partners, to protect biodiversity and indigenous rights in line with FSC.
>
> 4 Agree in principle, and as soon as possible, to recognize indigenous tenure rights within CIB concessions once appropriate community documentation has been carried out and communities have secured access to all of the necessary information. This will take time. This should not impede certification if in the meantime CIB recognizes indigenous residence rights, thereby protecting, for example, Mbendjelle semi-

[192] Nelson, John (2006): Protecting Indigenous Rights in the Republic of Congo through the Application of FSC Standards in Forest Plans**:** A review of progress made by Congolaise Industrielle des Bois (CIB) against FSC Principles 2 and 3. Forest Peoples Programme.
http://www.forestpeoples.org/documents/africa/congo_cib_prog_rev_jan06_eng.pdf (as of August 2008)

nomad access to their permanent and seasonal forest camps, located throughout forests over-lapped by CIB concessions.

5 Instigate regular independent monitoring in order to help protect community rights while this process unfolds over the next few years. The Observatoire Congolais des-Droits de l'Homme (OCDH) is now visiting regularly at the invitation of CIB, and this is helping, so such measures should become systematic.

If the above recommendations are adequately addressed in CIB plans, and if after FSC certification CIB continues to follow through with the commitments it has made during this process, implementation of the new CIB concession management plans will lead to progressive and significant increases in the protection of indigenous peoples' rights in northern Republic of Congo in compliance with international standards, including the CBD, and will also contribute to the establishment of sustainable, long-term and community-based projects that will help local communities improve their welfare. This will, in my view, satisfy the requirements of FSC Criteria for Principles 2 & 3." (Nelson 2006).

Local people involved and investing in sound management in Congo Brazzaville

Robert Nasi et al. (2007)[193] found that

"if local people are guaranteed the benefits of sustainable land use and hunting practices, they will be willing to invest in sound management and negotiate selective hunting regimes." "In logging concessions surrounding Nouabalé Ndoki National Park, northern Republic of Congo, a successful collaboration has been established between the Government, an NGO (Wildlife Conservation Society), the private sector (Congolaise Industrielle des Bois, CIB), and local communities."

Positive consequences for Sweden's indigenous Sami population

In a report for FERN, Saskia Ozinga in 2000 wrote:

[193] Nelson, John (2006): Protecting Indigenous Rights in the Republic of Congo through the Application of FSC Standards in Forest Plans**:** A review of progress made by Congolaise Industrielle des Bois (CIB) against FSC Principles 2 and 3. Forest Peoples Programme.
http://www.forestpeoples.org/documents/africa/congo_cib_prog_rev_jan06_eng.pdf (as of August 2008)

> "(…) it is particularly relevant to look at the impact of certification processes on forest peoples and local communities. Although there are some positive impacts, as in the case of the Sami, the overall picture is gloomier. (…)."[194]

Rainey and Renström from the environmental NGO WWF Sweden (2001) are explaining this social impact of FSC-certification on the Sami:

> "In Sweden, FSC-certification has brought with it positive consequences for the indigenous Sami population. The Sami live in north-western Sweden and traditionally gain their livelihoods from reindeer herding. During the winter the semi-wild reindeer herds migrate from the mountains to the valley forests. Although the Sami people have customary rights to graze their reindeer in these forests, the areas of use are not specifically designated in the law. A large part of the forest area in the region is owned by forest companies that are FSC-certified, and here the grazing rights are guaranteed. The Sami people are, however, facing legal actions from non-FSC certified private forest owners in the region that question their traditional reindeer grazing rights. In order to prove their customary rights in court the Sami people must show their long-term use of the particular piece of land in question by producing written documentation. Since written documentation has not traditionally been used in the Sami culture, many Sami families have lost court cases and subsequently their reindeer grazing rights and with them their prospects of maintaining their livelihood and culture. "The FSC provides one way for the Sami people to continue their traditional way of life of reindeer herding," says Olof T. Johansson, reindeer herder and member of the Swedish FSC Council. "My community is targeted in several ongoing court cases, all of them initiated by private, non-FSC certified forest owners. But we have no grazing rights disputes at all with FSC-certified forest owners. There are other advantages with FSC certification for reindeer. The Swedish FSC standard stipulates that the local Sami community should be consulted before a logging is planned and that a fair amount of trees are saved at the logging sites. This means more lichens for our reindeer to eat." (Rainey & Renström 2001)[195]

[194] Ozinga, Saskia (2000): The limits of forest certification. Published by Fern 24.11.00 http://www.fern.org/pubs/articles/limits.htm (as of July 2008)

[195] Renström, Margareta and Rainey, Margaret (WWF Sweden) (2001): Social issues and the Forestry Stewardship Council. Sustainable Development International 4,137–139. http://www.p2pays.org/ref/40/39769.pdf (as of June 2008)

Involvement of indigenous Udegeitsi in Russia

Hirschberger's study (2005) of certification reports in Russia states in the summary:

> "Another important improvement is the involvement of all relevant stakeholders and the participation of local communities in the planning process of forest activities. One company had to recognize officially the traditional rights of indigenous people for prioritized right to use resources of flora and fauna as an indigenous Udegeitsi settlement is located in the certified forest area." [196]

Distribution of power in the Russian Arghangelsk area

In her study about forest certification in Russia Maria Tysiachniouk (2005) summarizes:

> "The FSC certification system has influenced the distribution of power on the regional level. This is especially evident in the Arghangelsk region, where the majority of forest companies are interested in certification. The working group formed to develop regional standards included not only forestry specialists, but also environmental NGOs, business representatives, and administrative officials. Before certification emerged, only experts and governmental agencies were involved in the decision-making process. No intersectional dialogue existed in society, especially around the issue of HCVF. The certification process allowed stakeholders to learn to participate in dialogue and find consensus. Thus, forest certification has led to significant change in the formerly non-inclusive regional public policy-making process."[197]

Tasso Rezende de Azevedo and Andre Giacini de Freitas describe for IMAFLORA in (2003)[198] describe for Brazil the

[196] Hirschberger, Peter (2005): The Effects of FSC-certification in Russia: an analysis of CARs. WWF Forest Programme. 25 p. http://www.panda.org/downloads/forests/fscanalysisrussia.pdf (as of June 2008)

[197] Tysiachniouk, Maria (2005): Forest Certification in Russia. (Center for Independent Social Research St. Petersburg, Russia); Paper presented at Yale Forest Certification Symposium. published by Yale school of forestry & environmental studies.
http://www.yale.edu/forestcertification/symposium/pdfs/Book%20Chapters/12%20Russia.pdf (as of June 2008)

[198] Rezende de Azevedo, Tasso & Giacini de Freitas, André (2003): Forest certification in Brazil: The parallel evolution of community forest management in the Brazilian Amazon and FSC certification. AND: Direct Impacts of certification on working conditions: the case of Brazil. IMAFLORA (Instituto de Manejo e Certificação Florestal e

“Impact on Community Relations”:

By and large, forest operations in Brazil are the source of conflicts between enterprises and local communities. Due to the fact that FSC certification procedures have a strong focus on aspects related to land tenure rights and community relations, these two subjects are of fundamental importance during assessments carried out for certification purposes. The solution of these conflicts points to new directions in forest management: the construction of relations between forest enterprises and local communities. The following paragraphs describe some of the problems found during certification assessments and how certification catalyzed adequate solutions for them:

Respect for indigenous areas – In theory, 19% of the surface area of the country consists of indigenous lands but, in practice, very few areas have been demarcated; examples of native populations having sovereignty over their territories are quite rare. Lumber companies frequently invade indigenous areas to cut mahogany and other valuable species; the same situation arises in extractivist reserves. Forest operations undergoing certification must be completely detached from indigenous areas, even when they have a legitimate claim to land tenure rights and demarcation is in its initial phases. During the evaluation process to certify Gethal it was noted that 4,000 hectares of the forest management area of the company were located in an area declared as of interest for establishing an indigenous reserve. For many years the company had considered putting that area under management but, as part of the certification process, this area had to be completely eliminated from its forest management unit. The legal status of this area is now being established by the National Foundation for Indigenous People (FUNAI).

It is worth noting that, according to the Brazilian standards approved by the FSC board of directors (in 2002), Principle 3 and its criteria are applicable not only to indigenous peoples but also to other traditional communities such as “quilombolas” and extractivist communities.

Compensation for damages to traditional rights – Many forest operations cause adverse effects on the subsistence of local communities. In order to be certified, it is of fundamental importance that such impacts be avoided. Whenever they occur, they must be mitigated and adequate compensation offered to the population affected.

Agrícola). IN: Molnar, A. (2003): Forest Certification and Communities: Forward to the Next Decade. Forest Trends. Washington, D.C.http://www.forest-trends.org/documents/publications/Forest%20Certification%20and%20Communities_Annex%201.pdf (as of June 2008)

Manicoré is a municipality located in the state of Amazon, about two days by river from Manaus. Income for the people living in this town has always been based on extractivist activities, including rubber tapping, and extracting Pau Rosa oil and Brazil nuts. In 1998 Gethal Amazonas bought 45,000 hectares of land to implement a forest management plan to supply its Itacoatiara plywood plant, 30 hours down the river. The areas where families lived along the rivers were left untouched and their land tenure rights were guaranteed. Since the main source of income for these families is the gathering of Brazil nuts in the areas bought by Gethal, despite the fact that the company has authorized this gathering and it will not harvest nut producing trees, logging activities cause impacts that affect the activities of the nut gatherers. Tree felling and skidder trails hinder the access of the local population to the nut producing areas and to conduct their extractivist activities. The end result is that the productivity and income of the nut gatherers decreased.

A loosely organized community would have great difficulty in putting forward a request for compensation for the losses caused by the presence of the company in the areas that have provided its members with income over the years. If they were to rely on public authorities the case could take a long time to be solved. As a certified enterprise, Gethal had to behave proactively, identifying the impacts and proposing solutions. The enterprise is now carrying out a survey of all families involved with nut gathering and their respective income, and also identifying the impacts of logging activities in the field.

Among the alternatives under study, Gethal intends to supply maps to facilitate the location of nut producing trees, planning logging activities after the nut-collecting season, and possibly offering transportation facilities to nut gatherers in order to expand the areas they can reach. In addition, Gethal is also studying the possibility of assisting the community to shell the nuts locally and promote their sale.

Recognizing land tenure rights – Land use rights is another extremely complex subject in Brazil. There are at least 17 different types of land titles and frequently overlap. The problem of land ownership and land tenure rights causes many conflicts that have resulted in armed confrontations and, in many cases, fatal incidents. Furthermore, this problem threatens the quality and the survival of forest resources due to forest fires and predatory logging. One of the most remarkable aspects of FSC certification is the requirement that the situation of the forest area be made absolutely clear with respect to: i) land tenure rights; ii) its use by traditional populations, and iii) the absence of conflicts that may threaten the physical integrity of individuals and forest resources. The case described in the ensuing paragraphs is an example of how conflicts involving land tenure rights that remained pending for many years were finally solved during the process of certification.

Mil Madeireira requested certification for its area of 82,000 hectares, it was aware that there were families living in company areas, but it did not know them nor maintained any relation with them. During the certification assessment it became clear that, al-though there was no apparent conflict, the potential for such situation was present. These families

used fire to clear their agricultural plots, an action that could threaten the forest resource under management. Furthermore, the families did not recognize Mil Madeireira as the legitimate owner of the area. As one of the certification conditions, it was required that no forest management activity would take place in the forest compartments[199] bordering the occupied areas. It was also required that the company had to carry out a complete survey of all families living in its areas and submit a proposal for formally recognizing the land tenure rights of the communities. In order to formalize the proper legal situation of the families with regard to their land tenure rights, after two years of work with the state government, the company decided to jointly demarcate with the communities the areas they occupied, including some forest areas. As a final step to close the issue, the company gave to each one of the families a letter officially recognizing their land tenure rights over the area." [200]

It is worth to add here that in September 2008 Ruben Gomes, Director of the National FSC Working Group in Brazil reported that, due to FSC certification requirements, 142 families received land titles within the framework agreement signed between the government of Amazonas and the certified company Mil Madeireira (Precious Woods Amazon), to compensate agrarian communities in the area of certified forest management.

This shows that FSC certification, as also in the case of Guatemala previously cited, can be a **powerful tool to help to secure a basic human right:** access to livelihood providing resources namely land.

The researchers of IMAFLORA (2008) analyzed another relevant study addressing social aspects of FSC certified areas:

"(...) showed improvements in administration and enhancement of local and indigenous communities in community forest management in Mexico (Fernandez&Guzman, 2003)" [201]

[199] (*Areas to be harvested once in every 20-30 years. After logging takes place, the area remains untouched in order to allow the forest to recover.)

[200] Rezende de Azevedo, Tasso and Giacini de Freitas, André (2003): ibid

[201] IMAFLORA (ed.) (2008): Impact of FSC Forest Certification on Agroextractive Communities of the State of Acre, Brazil. By Ana Carolina B. de Lima, André Luiz Novaes Keppe, Marcelo Corrêa Alves, Rodrigo Fernando Maule and Gerd Sparovek; University of São Paulo and Entropix Engineering Company. http://www.rainforest-alliance.org/resources/documents/san_coffee_acre.pdf (as of July 2008)

Free, Prior and Informed Consent in complex social settings

As noted before, Luke Freeman, Jerome Lewis, et al. (2007)[202] examined changes that are occurring in the way local forest populations, particularly Pygmy hunter-gatherers, are consulted and involved in the management of forest concessions in the Congo Basin. They researched current practice for the gaining of consent in five concessions in the Congo basin, of which one (Congolaise Industrielle des Bois, CIB) had already gained FSC certification and was therefore considered by its auditors to have successfully negotiated their interpretation of Free, Prior and Informed Consent (FPIC) for exploitation, as required in the FSC Principle 2 and 3. In the complex situation of the Congo Basin, negotiations with local communities can easily be ignored, and thus the concept of "Free, Prior and Informed Consent (FPIC)" is an important guiding principle. [Definition of free, prior and informed consent: "Free, prior and informed consent recognizes indigenous peoples' inherent and prior rights to their lands and resources and respects their legitimate authority to require that third parties enter into an equal and respectful relationship with them, based on the principle of informed consent" (Commission on Human Rights 2004)]. The criteria of FSC Principles 2 and 3 were used to guide the investigations in all five concessions visited (while bearing in mind that FSC criteria are not the only definition of FPIC) to test FPIC critically on the ground in order to generate some guidelines for practical implementation. The authors are stating that

> "The implications for negotiating FPIC from indigenous people are serious. Would people consent to exploitation if they were fully aware that operations would diminish their access to hunting resources and erode their cultural knowledge? Indigenous people's current acceptance of such activities is less consent than a resignation to powers beyond their control. (…) Consent is not an autonomous concept, but one which mutates depending on the circumstances and context of the negotiations."

Even though the working environment for companies seeking FSC certification is very challenging, Freeman, Lewis, et al. (2007) found that mutual understanding is possible:

> "The different concepts of consent can be reconciled. The concession we visited in Gabon has achieved this through anthropologically informed research which has raised both parties' awareness of the other's concept of consent. This has enabled them both to negotiate strategically through the issues of resource mapping, rights, laws, traditional concepts and local associations to the point where consent to forest operations was agreed. This

[202] Freeman, Luke; Lewis, Jerome et al. (2007): Free, Prior and Informed Consent: implications for sustainable forest management in the Congo Basin. With Sophie Borreill-Freeman, Christoph Wiedmer, Jane Carter, Nicole Clot, and Belmond Tchoumba (SECO financed study, final study will be released in summer 2008.)

achievement was then marked by a celebration. After that the company was able to channel its relations with villages into an on-going transaction of information and material items based on timber production in their forest areas. This outcome can be put down to a combination of sound research, continual dialogue over many years, and a constant effort on the part of the company to improve their practice. (…) To summarize, any sustainable notion of consent has to be rigid enough to stand as legal proof of an agreement but flexible enough to contain means of redress."[203]

The recommendations of the authors for steps to be taken by forest companies to achieve FPIC are listed in the Annex I.

Constructive negotiations based on guarantees

Robert Nasi et al. (2007)[204] elaborated that the hunting of terrestrial wildlife for food (mammals, birds, reptiles, and amphibians) poses a threat to the survival of many tropical forest species and ecosystems, and that this "bushmeat crisis" is also is also a food security crisis for many forest-dependent people. The solution to the bushmeat crisis is a more secure rights regime: if local people are guaranteed the benefits of sustainable land use and hunting practices, they will be willing to invest in sound management and negotiate selective hunting regimes. On page 12 the authors mention

"In logging concessions surrounding Nouabalé Ndoki National Park, northern Republic of Congo, a successful collaboration has been established between the Government, an NGO (Wildlife Conservation Society, WCS), the private sector (Congolaise Industrielle des Bois, CIB), and local communities."

This CIB concession is one of the today's (June 2008) two FSC certified CIB concessions in Republic of Congo. Some years ago it seemed to be almost impossible for the concessions in the region to fulfill all FSC requirements, despite being committed to improving their forest management since decades. However, over the years the recognition of the importance of certification in the marketplace convinced the concession holders to go for certification to differentiate from other less committed companies. Now that it has been proven possible, the

[203] Freeman, Lewis, et al. (2007) ibid.

[204] Nasi, Robert; Brown, D.; Wilkie, D.; Bennett, E.; Tutin, C.; van Tol, G.; Christophersen, T. (2007): Conservation and Use of Wildlife-Based Resources: The Bushmeat Crisis. Secretariat of the Convention on Biological Diversity, Montreal, and Center for International Forestry Research (CIFOR), Bogor. Technical Series no. 33, 50 pages. http://www.cbd.int/doc/publications/cbd-ts-33-en.pdf (as of July 2008)

committed companies are continuing working to achieve and maintain FSC certification. The improved collaboration and communication between concessions, local people, NGOs and the government is perhaps not simply only an impact of forest certification, but we can state again that companies committed to responsible forest management also tend to apply for certification.

2.3.5 Critique

In 2002 Simon Counsell and Kim Loraas published with “Trading in Credibility - The myth and reality of the Forest Stewardship Council”[205] a harsh critique regarding the lack of real consultation and free, prior and informed consent. Some of their examples for FSC's weak performance in this respect have been contradicted by people involved. New examples were given where the FSC system did perform strongly positive with regards to the discussed issues. What did not happen so far, is that any other forest policy mechanism – be it voluntary certification or any other – has developed better tools than FSC to meaningfully involve and empower marginalized stakeholder groups in forest management, for the benefit of all sides. Still, FSC is challenged with these complex social settings – being fully aware about the high expectations for FSC - and learning and improving. As demonstrated by researchers with the many examples already given: FSC's impact is positive and permanent if the different stakeholders are committed to work jointly for the benefit of the entire system.

Critique on consultation processes in Indonesia

Pokja Hutan Kaltim (the 'East Kalimantan Working Group on Forests') has been observing the development of the timber legality standard and its verification system, as well as the FSC certification of the PT Sumalindo Lestari Jaya logging concession since June 2003. In their 2007 report of the case study into the local indigenous people's experiences with Sumalindo they state that the FSC accredited certification body which carried out the inspection in 2003 did not fully consult with the affected communities.

[205] Counsell, Simon and Loraas, Kim T. (2002): Trading in Credibility. The myth and reality of the Forest Stewardship Council. Rainforest Foundation UK; http://www.wrm.org.uy/actors/FSC/Trading_Credibility.pdf (as of June 2008)

> "(…) the local communities do not under-stand the procedures or have not received any information at all about them. According to the findings of Pokja Hutan Kaltim, the local people have received hardly any information on the process of developing the timber legality verification system. At the beginning of the process in Melak district, the leader of the team developing the system promised that meetings would be held in all villages bordering with the Sumalindo concession area but this did not happen. According to a community representative who attended the meeting in Melak, there never were any village meetings in the Long Bagun area to discuss the development of the timber legality system. The Pokja Hutan Kaltim team recently attended a meeting in Samarinda. There were only very few representatives of local communities present." [206]

Marcus Colchester (2004)[207] also identified weaknesses in the consultation processes conducted by certification bodies:

> "In Indonesia, for a variety of reasons [lack of effective recognition of indigenous peoples' rights in Indonesia law and in forestry concessions due to unresolved differences among the key actors involved, based on both political economy and from deficiencies in the procedures of certification itself], participation at all these levels has been poor and, as a result, certification decisions have generated disputes rather than led to improved forest management. Field studies show that, even in communities where certification assessments have been carried out, few individuals understand what certification is; even fewer comprehend FSC Principles and Criteria in any detail; almost none have the capacity, by themselves, to make use of the official FSC complaints procedures. Extensive and costly public awareness-raising efforts are necessary if this is to change." Colchester concludes: "In the absence of clear legal mechanisms for recognizing customary rights or fair means for securing indigenous peoples' agreement to forestry operations on customary lands (…) FSC certification should remain suspended until there was a broad and inclusive national agreement about what standards should be applied in the circumstances. (…). The alternative, favored by community advocates, is for certification to focus on community forestry

[206] Pokja Hutan Kaltim & Forest Peoples Programme (2007): Can't see the people for the trees. Assessment of the free, prior and informed consent agreement between Sumalindo and the community of Long Bagun, district of Kutai Barat, East Kalimantan province. FPIC Working Papers; http://www.forestpeoples.org/documents/law_hr/fpic_indonesia_jun07_eng.pdf (as of August 2008)

[207] Colchester, Markus (2004): "Forest certification in Indonesia". Annex 4 In: Richards, Michael (ed.): Certification in complex socio-political settings: Looking forward to the next decade. Forest Trends. Washington, D.C.; http://www.forest-trends.org and https://www.gtz.de/en/dokumente/en-d99d-certification-in-Complex-Settings-Annex4.pdf

operations until the concession and tenure regimes in the country are reformed." (Colchester 2004).[208]

FSC's reaction to stakeholders' observations

FSC recognizes that in some regions of the world, the positive impact of FSC certification requires time. In some cases, observations and complaints of environmental and social NGOs have let to a number of additional ASI audits, and to review and check the work of FSC accredited certification bodies. In the FSC system, stakeholders should report their observations and any comment to the certified company first in order to point out inappropriate social and/or ecological management practices, so that the certified company can take and implement appropriate corrective actions. FSC accredited certification bodies can also be approached by stakeholders to provide comments on the performance of a certified company. The certification body has then to investigate and report on its findings. FSC certification reports have to be made publicly available to ensure a transparent process. If this does not solve the issues to the satisfaction of the stakeholders, the FSC National Initiative and/or the FSC can be approached. FSC and ASI will investigate any expression of dissatisfaction with the FSC certification process. This helps to maintain and/or improve the reliability of FSC. If a certificate holder is not able or willing to comply with FSC certification requirements, then this can lead to the suspension or even termination of the certificate by the FSC accredited certification body. ASI ensures that certification bodies fully implement FSC procedures so that credible FSC certificates are issued to all FSC certified companies.

Improvement of stakeholder consultation through national standards

Bob Frost et al (2003)[209] describes for South Africa:

"The weakest part of certification processes has been stakeholder consultation. Some major stakeholder groups have effectively been excluded by the continuation of long-standing patterns of interaction and mechanisms of consultation used by companies. This has been compounded by the lack of formal structures for ongoing consultation within audited com-

[208] ibid.

[209] Frost, Bob; Mayers, James & Roberts, Sarah (2003): Growing credibility? The impact of certification on forests and people in South Africa. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/G00412.pdf (as of August 2008)

panies to allow two-way communication on issues. Other failings include the subjective interpretation of certification's social criteria and the differing perception of role players' responsibilities to ensure compliance. The government led initiative to develop national standards is heralded as a key development to address these contentious issues. (…)"

2.3.6 Information versus participation

In her study about forest certification in Russia Maria Tysiachniouk (2005) summarizes:

> "However, some certified operations involve more positive changes then others. There are some "weak" FSC certificates, (…) later reinstated. In general, only in model forests, where WWF has closely scrutinized and guided the certification process, have all stakeholders, including the general public, been involved in decision-making. In the majority of FSC-certified territories, the local public was informed, but not involved in the certification process. **However, even in cases where the public does not directly participate, forest communities receive benefits embedded in the FSC's system of social standards.**"[210]

Learning and Social learning

In 2004, Shoana Humphries and Karen Kainer conducted a study[211] in Brazil which aimed to complement a researcher perspective on the positive and negative aspects of two FSC certifications for community-based forest enterprises (CFEs), seeking direct input from community members and support organizations participating in certified CFEs – "stakeholder groups whose voice is almost nonexistent in the literature".

> "These local CFE actors clearly indicated that the most negative aspects of certification were those related to the process of becoming certified. Examples included 'Too many conditions to meet in one year' and 'Both the certification standards and the auditors are hard to understand' (…) A key finding was that learning was one of the most appreciated

[210] Tysiachniouk, Maria (2005): Forest Certification in Russia. (Center for Independent Social Research St. Petersburg, Russia); Paper presented at Yale Forest Certification Symposium. Yale school of forestry & environmental studies. http://www.yale.edu/forestcertification/symposium/pdfs/Book%20Chapters/12%20Russia.pdf (as of June 2008)

[211] Humphries, Shoana S. & Kainer, Karen A. (2008): The certification process for community-based forest enterprises: Insights from local actors and a call for social learning. (Forthc.) Corr. author shoana@ufl.edu.

aspects of the certification process. This finding, based on operations in the Amazon, differs from Overdevest and Rickenbach's study (2006)[212] of FSC certificate holders in the U.S., which found that operations, particularly smaller ones, had not expected nor experienced much learning related to the certification process. Perhaps these different perspectives between U.S. and Brazilian certificate holders are due to their dissimilar access to information about forest management and certification, and experiences with the certification process in particular. Indeed, other Latin America-based studies have identified learning as a certification benefit for CFEs in Mexico, Guatemala, and Bolivia."

Humphries & Kainer[213] state that

"The identified need to adapt the CFE process coupled with the significant appreciation for the learning that occurs when certifiers and community members get together has inspired us to call for a social learning approach to CFE certification. **Social learning is defined by Schusler et al as "learning that occurs when people engage one another, sharing diverse perspectives and experiences to develop a common framework of understanding and basis for joint action."** Buck et al. clarify that it is the intersection of learning and collaboration that makes social learning distinct from learning that occurs on an individual basis or collaboration that does not involve conscious learning. They conclude, based on several case studies of social learning in collaborative management of community forests, that social learning "offers a compelling framework for sharing experiences and ideas for how to improve collaboration in natural resources management to foster institutional adaptiveness and ecological sustainability." A social learning approach may foster mutual learning and collaboration between the FSC, certifiers, and community members, and to help achieve their mutual goal of increasing the number of certified well-managed CFEs. (…)".

Besides a range of positive and negative experiences of the certified communities, Humphries and Kainer are emphasizing and concluding:

"Social learning provides a framework for multiple stakeholders to collaborate to address resource management problems through communication, mutual learning, evaluation, and adaption. Critical to this approach is good facilitation and the use of platforms that provide opportunities for more equal participation and power-sharing among stakeholders. (…) In our study site, dialogue and learning is taking place, but due to differences in power and

[212] Overdevest, C. & Rickenbach, M.G. (2006): Forest certification and institutional governance: an empirical study of forest stewardship council certificate holders in the United States. Forest Policy and Economics 9(1):93-102.

[213] Humphries, Shoana S. & Kainer, Karen A. (2008): ibid

the lack of dedication to fostering social learning, the information exchange is spontaneous and usually flows from certifier or FSC to community or partner organization. Mutual learning is greatly limited in our study site relative to its potential and need. Until open and balanced dialogue can be achieved, mutual learning, empathy and shared ownership of solutions will be limited. Furthermore, as far as we are aware, a social learning approach has not been adopted by the FSC or certifiers at the national level in Brazil, or at the international level – although the FSC-sponsored international workshop in Lisbon cited was a noteworthy and promising event. We conclude that social learning has not been deliberate, and, as a result, it has been limited. (…) Increased use of social learning between FSC, certifiers, *manejadores*, and support organizations could help improve both forest management and the application of certification. A wider application of certification and good forest management in CFEs stands to benefit communities, forests, and consumers."[214]

Ros-Thonen (2008)[215] warns:

"In the absence of social learning, erroneous decisions are made or existing conflicts among stakeholders may be aggravated. This was exemplified by a case from Papua New Guinea (see Turia 2003)[216], where there was no effective dialogue between local communities, local and international logging companies and central and local government." [N.B.: This Papua New Guinea case is not an FSC certified operation – the editor.]

Generic weakness with internalizing learning and feedback on broader issues

[214] Humphries, Shoana S. & Kainer, Karen A. (2008): ibid

[215] Ros-Tonen, Mirjam A.F. (2004): Final Report: Congress on Globalisation, Localisation and Tropical Forest Management in the 21st Century. Amsterdam Research Institute for Metropolitan and Int. Development Studies, Amsterdam, Netherlands.

[216] Turia, Ruth C.H. (2003): The dilemma of the 21st century forest management in Papua New Guinea. ETFRN NEWS 39/40: Globalisation, localisation and tropical forest management. Organisations - Institutions – Programmes. http://www.etfrn.org/ETFRN/newsletter/news39/nl39_oip_9_5.htm (as of June 2008)

Bob Frost et al (2003)[217] describes for South Africa:

> "The certification process has highlighted the importance (…) to internalize feedback mechanisms. Feedback includes inputs from audits, a changing policy and legislative framework, and issues raised by those affected by company activities. Also, the dynamic political landscape in South Africa since democratization in 1994 has meant more stringent demands have been placed on the sector, for example labor legislation and land reform programs.
>
> Assessors on surveillance visits have remarked on the improvements to systems that support companies responding to the requirements of certification, with formalized mechanisms to address issues raised during audits. This has resulted in improved operational manuals and training for staff. However, a generic weakness has been identified with internalizing learning and feedback on broader issues (in addition to certification requirements), to ensure companies are strategically placed to deal with a dynamic national and international forestry environment, and manage the goal of continuous improvement.
>
> Weaknesses are particularly acute with respect to social issues. Issues such as health and safety, stakeholder consultation, social responsibility and tenure security legislation have tended to be viewed as nuisances, which if ignored for long enough, will disappear. However, due to the requirements of certification, management is reappraising this attitude and mechanisms are beginning to be put in place to address these. Despite this, commentators suggest the role certification plays in learning is limited by the nature of the process. Feedback is limited to CARs read out in the closing meeting and the auditors' report that gives little detail. Company representatives and auditors comment on the lack of an effective discussion forum to relate insights gained on company's programs and approaches and ways to move forward. The closed out meetings at times have been viewed as confrontational sessions with both sides defending their positions. The use of a more participatory forum to discuss issues would be supported by both parties and viewed as a constructive mechanism to encourage greater understanding of the audit findings and methods for improvement." (Frost et al. 2003) [218]

"Know how transfer" for inexperienced foresters in Latvia

[217] Frost, Bob; Mayers, James & Roberts, Sarah (2003): Growing credibility? The impact of certification on forests and people in South Africa. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/G00412.pdf (as of June 2008)

[218] Frost, B. et al (2003): ibid.

Hirschberger's study (2005) of the Latvian certification reports found that

> "Group certification according to FSC provides also a "know how transfer" for inexperienced forest owners and their contractors as the group manager is required to provide adequate training to ensure a high quality of work. This is a key issue in Latvia as due to the restitution process the large number of private forest owners with small properties is mostly inexperienced in sustainable forest management." [219]

In an interview with one small forest owner, this was considered to be the main benefit of certification. (Alan Smith, FSC Social Program Manager, pers. Communication 2008).

Learning in Japan

Ikuo Ota researched the Yusuhara Forest Owners Cooperative (YFOC) in Kochi Prefecture in Japan and summarized (2006):

> "Forest certification has brought another advantage for small-scale forest owners: self-confidence. It provides for many of them a motivation to manage their forests well. The forests in Yusuhara have become more beautiful year by year because of increased tending, especially pre-commercial and commercial thinning operations. Representatives of more than 100 companies, organizations and local governments visit Yusuhara every year to see the FSC-managed forest and the local forest management practices. FSC forest certification has been a key to success for small-scale forest owners in Japan, and may hold promise for those in many other countries too."[220]

Benjamin Cashore et al. (2006)[221] summarized in „Confronting sustainability"for developing and transforming countries among others:

[219] Hirschberger, Peter (2005): The Effects of FSC-certification in Latvia: an analysis of CARs. WWF Forest Programme. 29 p. http://www.panda.org/downloads/forests/fscanalysislatvia.pdf (as of June 2008)

[220] Ota, Ikuo (2007): A forest owners' cooperative in Japan: obtaining benefits of certification for small-scale forests. Faculty of Agriculture, Ehime University, Matsuyama, Japan. In: Small-scale forestry. Unasylva No. 228 Vol. 58, 2007/3 FAO Rome. FAO Corporate document Repository. http://www.fao.org/docrep/010/a1346e/a1346e17.htm (as of June 2008)

[221] Cashore, B.; Gale, F.; Meidinger, E.; Newsom, D. (2006): Confronting Sustainability: Forest Certification in developing and transitioning countries. In: Environment. Vol 48, Nr 9, Nov 2006

> "In addition, forest certification programs have generated significant opportunities for public participation, exchange and learning among industrial, environmental and social organizations and indigenous peoples. For instance, **forest certification has led to a much greater understanding of the role of ancient, old-growth and other high-conservation-value forests."**

2.4 Community managed forests

Many researchers have put a focus on the issue of community forest management since the early time of FSC. According to the International Tropical Timber Organization ITTO (2007)[222], there has been a doubling of community-owned and administered forest lands in developing countries in the past 20 years. Trends indicate that there will be a further doubling by 2020, to a total of 700 million hectares of natural forest worldwide, and community forestry enterprises now employ over 110 million people, including indigenous people and other forest dwellers, harvesting both wood and NTFPs including nuts, resins, honey, fibers, bamboo and medicinal herbs. Community management of forests is regarded as an effective policy instrument for more equitable village-level economic development for forest peoples, and protecting forest environmental services. A survey of 25 of the world's 30 most-forested countries by the Rights and Resources Initiative (2008)[223] shows that, between 2002 and 2008, the area of forest owned by governments declined from 80% to 73% of the global forest estate, continuing a longer-term trend. At the same time, the area of forest owned by or designated for the use of local communities and indigenous peoples increased.

The International Labor Organization (ILO) observed (e.g. in 2001) that working conditions, basic salaries and worker health and safety are often worse in small forest enterprises than in

[222] Johnson, S. (2007): Tropical Forest Update 17/2, Editorial. ITTO, 2007

[223] Sunderlin, William D.; Hatcher, Jeffrey and Liddle, Megan (2008): From Exclusion to Ownership? Challenges and opportunities in advancing forest tenure reform. Rights and Resources Initiative. http://www.rightsandresources.org/~rightsan/publication_details.php?publicationID=790 (as of August 2008)

larger companies. This was confirmed in several studies, e.g. by May, Da Vinha & Macqueen, 2003.[224]

2.4.1 Unrealistically high expectations?

Nancy Vallejo (2003) concluded in her paper on community managed forests that

> "As a new tool, certification has raised unrealistically high expectations. It has often been promoted as a panacea to cure all the ills of forests, including issues associated with community forest management (CFM). It may seem optimistic to hope that certification can solve in a few years of operation all issues that have hindered CFM projects during 30 years. Similarly, certification is not likely to be able to absorb or even reverse the pressure put by globalization and structural adjustment policies on communities. However, CF certification has proven that it can offer a proactive manner to overcome the problems of integrating environmental and developmental concerns at the community level. If a community is engaged in community-based forest management, all should be done to empower them and support those efforts. The greatest priority should be given to support communities and partners in the development of tools, mechanisms and methodologies to satisfy a broad range of needs and their expectation. The distinction between "market-based" and other types of certification seems counterproductive. Such a distinction would entail that communities that have different aspirations concerning certification (i.e. market benefits along with social improvements, etc.) would have to undergo different certification processes, thus expanding administrative burden and costs. It seems that working within the existing system to allow a better integration of communities' needs and specificity would be a more rational and efficient way forward. Much more integrated work of environmental and social scientists, researchers and local activists is required to improve catalytic elements such as improved social organization for their management by user themselves. Currently, there is little common ground between the different buyer networks and, while some companies do make a substantial effort to help certification on the ground, most don't. A "fair trade" dimension should be introduced in their commitments. To create additional incentives than simply market ones, it could be opportune to develop mechanisms to

[224] May, Peter .H., Da Vinha, Valeria G. & Macqueen, Duncan J. (2003): Small and medium forest enterprise in Brazil. London, UK, Grupo Economia do Meio Ambiente e Desenvolvimento Sustentável & IIED. http://www.iied.org/pubs/pdfs/9538IIED.pdf (as of June 2008)

encourage and reward governments and donors that would engage pro-actively with a long-term perspective to promote and facilitate CFCs."[225]

Nancy Vallejo's rather pessimistic view can be balanced with some positive examples following, and some of them demonstrate that Vallejo's proposals have been taken up already:

- Purbawiyatna & Simula (2008) summarize in a comparative study of the different forest certification schemes for ITTO:

"A significant share of forests in the ITTO Producing Member countries is under community tenure or management but only FSC and LEI have been able to certify community forests." [226]

- In their study Shoana Humphries and Karen Kainer (2006)[227] investigated perceptions of certification for two FSC-certified CFEs in Brazil's western Amazon (1) to determine the positive and negative aspects of certification as perceived by community members and other key stakeholders, (2) to identify the relative importance of these perceived aspects, and (3) to analyze the differences in perceptions between actors.

"FSC certification has been promoted as a way to encourage and recognize community-based forest enterprises (CFEs). However, certification has proved more difficult for CFEs than expected, and few certified operations have achieved the highly anticipated market benefits of certification. This has led to questioning of the compatibility of certification with CFEs, though few studies have directly asked local CFE actors their perceptions on this issue."

"(…) Perceptions are the basis for action, and therefore critical in natural resource management decisions. (…) Overall, the most positive aspects were economic and social, and the most negative aspects concerned the certification process and, to a lesser extent, the associated economic expenditures. Community members typically scored the positive aspects higher and the negative aspects lower than the support organizations. This is likely due to differences in roles and vantage points of these ac-

[225] Vallejo, Nancy (2003): Certification of community forest management. In: Meidinger, E., C. Elliott, and G. Oesten (eds.) (2003) "Social and political dimensions of forest certification". Remagen-Oberwinter, Germany: Dr. Kessel. pp.63-82.

[226] Purbawiyatna, Alan & Simula, Markku (2008): Comparability and acceptance of forest certification systems. Main Report. International tropical timber organization (ITTO). http://www.ardot.fi/Documents/Mainreport_Jan14.doc (as of June 2008)

[227] Humphries, Shoana S. and Kainer, Karen A. (2006): Local perceptions of forest certification for community-based enterprises. Forest Ecology and Management 235 (2006) 30–43, Elsevier

tors. In general, informants agreed that positive aspects of certification outweighed negative ones. (…).”[228]

- Stephen Bass et al (2001) [229] together with FSC analyzed in early 1999 a detailed classification of all its certificates to reveal significant trends amongst certificates, and identified case studies with the Oxford Forestry Institute, of the impacts of community forest certification in Bolivia, Honduras, Mexico, Papua New Guinea, and Zambia and other case studies of FSC certified forest companies in Poland, Brazil and South Africa, and their interactions with supply chains.

> “The studies revealed that certification has invariably been driven from outside, and often by donors, who have enabled communities to meet these challenges with significant subsidies. These subsidies can undermine sustainable commercial decision-making by community enterprises. Although some communities value the non-market benefits of certification, such as recognition and credibility, the main driving force is the promise of greater market security. Without this security, communities may not continue with certification beyond an initial ‘honeymoon’ period when support from donors and certifiers is at its highest. (…) ”

Stephen Bass’ et al (2001) “review of certified community-based forest enterprises in developing countries has revealed the following impacts of market-based (FSC) certification[230]:

On forest management and administration:

- A shift towards more scientifically rigorous models of forest management, albeit sometimes at the expense of valid local norms or practices.
- Strengthened internal mechanisms of monitoring, evaluation and reporting.
- Improved procedures for documentation and bookkeeping.
- Increased administrative costs (generally borne by donors).

[228] Humphries & Kainer (2006): ibid.

[229] Bass, Stephen; Thornber, Kristi; Markopoulos, Matthew; Roberts, Sarah & Grieg-Gran, Maryanne (2001): Certification’s Impacts on Forests, Stakeholders and Supply Chains. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/9013IIED.pdf (as of July 2008)

[230] Bass, Stephen; Thornber, Kristi; Markopoulos, Matthew; Roberts, Sarah & Grieg-Gran, Maryanne (2001): Certification’s Impacts on Forests, Stakeholders and Supply Chains. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/9013IIED.pdf (as of July 2008)

- More efficient delivery and deployment of donor support.

On production, marketing and income:

- Typically, a change in emphasis from local or national markets to international markets for part or all of production.
- The adoption of more businesslike approaches, albeit sometimes to the cost of livelihood needs from the forest.
- Revenues limited by a lack of production capacity, processing technology, managerial skills and distribution channels.
- No significant increase in community incomes [this contradicts more recent findings e.g. from Bolivia and Papua New Guinea – the editor].

On community institutions and external relations:

- Greater emphasis on community structures as the basis for forest management.
- Enhanced professional status and prestige of the enterprise.
- Increased frequency of contacts and dialogue with government, industry and donors.
- Increased acceptance of the enterprise & its stakeholders in local or national policy fora.

On policy and legislation for community forestry:

- Limited direct impact of individual certificates on policy and legislation.
- Raised profile of community forest enterprises, but pro-community political and legal reform has yet to follow.

The above lack of impact may be correlated with the limited government involvement and learning in the certification process. However, certification has occasionally stimulated the implementation of a particular law or policy, or the award of dispensation from a particular legal requirement."

Bass et al. (2001) conclude:

> "Community forest enterprises face two main sets of challenges: those of getting certified, i.e. their ability to access certification; and those of getting certification to work in their interests, i.e. their ability to exploit certification."[231]

2.4.2 Examples from Acre, Brazil

In assessing the impact of socio-environmental certification on community forest management (CFM) in the Brazilian Amazon Region in the State of Acre for wood production, a group of researchers from IMAFLORA (2008)[232] found that

> "the impact caused by FSC certification actions on agro-extractive communities of the State of Acre was small. The vast array of institutions and public policies that are involved with CFM, many times carrying out activities that lead to results similar to those of certification, was the main reason for this reduced impact, as detected by observing the behavior of the group exposed to treatment (certification FSC) and the control group. (…) However, it is assumed that probably certification may have had a positive influence on the multiplication of initiatives of community forest management and of institutions dedicated to supporting and promoting such initiatives. This statement is based on the fact that certification is not restricted to local actions geared at certified communities, but also has indirect effects on the entire production chain, thus opening up discussions on the sustainability of community forest management in different spaces. (…) Despite the rather weak effects of certification, some positive changes related to environmental issues were observed, (...)." (IMAFLORA 2008).

Similarly, Humphries and Kainer's (2006)[233] study describes the flexibility and easiness shown by the members of the certified communities in Brazil in overcoming certain obstacles presented by forest certification, due to their experience with social organizations and due to the strong political, technical and financial support provided by the government. They found that

[231] Bass, Stephen et al. (2001): ibid

[232] IMAFLORA (ed.) (2008): Impact of FSC Forest Certification on Agroextractive Communities of the State of Acre, Brazil. By Ana Carolina B. de Lima, André Luiz Novaes Keppe, Marcelo Corrêa Alves, Rodrigo Fernando Maule and Gerd Sparovek; University of São Paulo and Entropix Engineering Company. http://www.rainforest-alliance.org/resources/documents/san_coffee_acre.pdf (as of July 2008)

[233] Humphries, Shoana S. and Kainer, Karen A. (2006): Local perceptions of forest certification for community-based enterprises. Forest Ecology and Management 235 (2006) 30–43, Elsevier

when talking to members of certified communities, in general, the more positive aspects mentioned were economic and social and the more negative referred to the certification process itself and its cost. This was reflected also in other studies. According to Humphries and Kainer (2006):

> "...typically, community members put more value on positive aspects and less value on negative aspects as compared to support organizations. This probably happens due to the differences in roles and advantage position of these actors. In general, informants agree that the positive aspects of certification outweigh the negative ones. This is in contrast with some communities in other parts of Latin America (then Brazil) that are now considering leaving certification."[234]

2.4.3 Examples from Bolivia of impacts on social issues

Rainey and Renström for the environmental NGO WWF conducted in 2001[235] a study on the social consequences around FSC certification, and found that

> "One of the most serious threats to the rainforest is the practice of new settlers of burning the forest to make room for subsistence agriculture and grasslands for grazing. In Bolivia, coca-leaf plantations for the production of cocaine have become an important source of income for rural farmers. Development of this kind will in the long run have a very negative impact on the areas involved. Community-based forest industries can provide another way forward. (…) FSC-labeled garden furniture, flooring and other products from Bolivia are now widely available in Europe and present a viable alternative to uncertified tropical wood products."

Rainey and Renström (2001) are citing a Sweden-based agency representing several FSC-certified forestry companies and wood product manufacturers in Bolivia:

> "Commercially and environmentally adapted forest management can provide long-term subsistence for local communities that lack infrastructure. The best way to help local communities is to allow the forest to have an economic value. Then the forest will be viewed as a natural resource that is important to manage in a sustainable way. The more the value-added chain can be developed on-site, the better the possibilities for output of

[234] Humphries & Kainer (2006): ibid.

[235] Renström, Margareta and Rainey, Margaret (WWF Sweden) (2001): Social issues and the Forestry Stewardship Council. Sustainable Development International 4, 137–139. http://www.p2pays.org/ref/40/39769.pdf (as of June 2008)

> local income and social infrastructure. FSC has a great potential for countries that are not traditionally known as wood producers by opening up new markets. Buyers looking for wood from well-managed forests will discover the supply of FSC-wood products from Bolivia."[236]

The University of Wageningen (WU) initiated in 2007 a program on "Benefits of FSC certification in community forestry", commissioned by Prof. Freerk Wiersum and Mr. Chris van der Goot. An explorative comparative analysis of existing case-studies was developed by a group of Master of Science (MSc) students from WU, and a first publication presented the comparative analytical tool in March 2008. Six MSc thesis studies were taken up within this framework by students from WU and University of Amsterdam. The research approaches are coordinated with representatives of the FSC and with donor organizations, which are also supporting communities in the global south and good forest management to jointly discuss ongoing activities, preliminary study results and issues for further attention. It is expected that the scope of the research network will be extended from mainly socio-economic impact to also ecological impact assessments.[237]

2.4.4 Increasing access to certification of Small and Low Intensity Managed Forests

As quoted earlier, in a report for FERN, Saskia Ozinga in 2000 wrote:

> "(…) it is particularly relevant to look at the impact of certification processes on forest peoples and local communities. (…) When the FSC was created, there were hopes that it would favor community based forest management initiatives run by forest owners and forest peoples on their own land. However the high overheads of managing forests to certifiable standards and the demand from large companies for big quantities favor economies of scale. Some small scale operations do not have the skills or can not afford the technical inputs required to develop and implement well documented forest management systems. Although costs have not found to be daunting by small forest owners in Western Europe - if they use the group certification scheme provided - costs might be daunting for some Southern producers. The combination of these obstacles has meant that less than 10% of

[236] Renström & Rainey (WWF Sweden) (2001): ibid.

[237] De Corso, Enrico; De Smet, Sanne; Fernández, Ignacio; Harrison, Duncan; Poortinga, Ate; Woelders, Lineke 2008: Literature study and comparative analysis of the benefits of FSC certification in community forestry. (Supervisor Prof. Freerk Wiersum). Wageningen University and Research Center, Wageningen

> FSC certified forests are community managed. Concerns have been expressed that FSC certification may actually be squeezing local communities out of the market-place as it fails to compete with large-scale certified forests, more in demand by big industry. FSC is seriously addressing this issue, by its group certification scheme, its annual conference and support for small forest owners (…)". [238]

Additionally to the group certification scheme FSC developed to address this issue, the SLIMFS policy was developed.

Calls for better accessibility for small-scale forest owners and communities

Purbawiyatna & Simula (2008) summarize in a comparative study of the different forest certification schemes for ITTO:

> "FSC has evolved into a highly complex centrally led forest certification system whose provisions are scattered among a large number of standards and other normative documents. FSC is strongly supported by leading international environmental NGOs, which is attractive to large forest industry corporations and internationally operating trading companies. On the other hand, FSC has not been able to mobilize large-scale participation of small-scale private forest owners and, in spite of being the leading system among tropical timber producers; its progress is still limited in developing countries with few exceptions. This indicates how difficult it is to reconcile different stakeholder views in a globally operating, voluntary certification scheme which should simultaneously serve different objectives."[239]

The Rights and Resources Initiative (2008) summarizes as well that

> "Certification has been less successful in the tropics - for which it was first conceived - and particularly in forests managed by communities. (…) the limited funds available to support community and small-holder forest development are being concentrated on a small num-

[238] Ozinga, Saskia (2000): The limits of forest certification. Published by FERN 24.11.2000 http://www.fern.org/pubs/articles/limits.htm (as of June 2008)

[239] Purbawiyatna, Alan & Simula, Markku (2008): Comparability and acceptance of forest certification systems. Main Report. International tropical timber organization (ITTO).

> ber of certifiable producers, inadvertently making it more difficult for the rest to thrive. Forest certification has many benefits but, until now, the costs have been a significant barrier."[240]

Andrew Tolfts (1998) looked particularly at the situation in the Solomon Islands, where FSC certification is most convenient for communities.

> "Potentially, small scale, community based timber production in Solomon Islands is fully compatible with the FSC Principles and Criteria, with minimal disturbance to the environment as heavy machinery is not used and conservative levels of cut prescribed. Together with the often intermittent operation of community-based timber production projects this means that the impact on the forest is likely to be very slight. But the small size of projects means that certification will be costly and until now all certification exercises for community-based timber production (CTP) projects in Solomon Islands have been supported by external donors at no cost to the producers. (…). In the absence of donor support there would almost certainly be no certified CTP projects in the Solomon Islands to-day (…). There is an urgent need to reduce its cost and tailor it to the specific environmental, social and economic conditions of the country. When combined with 'fair-trade' marketing mechanisms certification has the potential to ensure market access and improve returns to rural timber producers. But external support will be needed in the medium term at least, to enable coordinating bodies which support individual CTP projects and administer group certification schemes."[241]

Sophie Higman and Ruth Nussbaum summarized in 2002[242]:

> "FSC members and observers have been quick to point out that certification was disproportionately accessible to certain groups (e.g. large-scale industrial forest organizations in the developed world), due – among other things – to economies of scale, access to information, and familiarity with formalized, documented auditing procedures (…). The rela-

[240] Rights and Resources Initiative (2008): Seeing People Through The Trees: Scaling Up Efforts to Advance Rights and Address Poverty, Conflict and Climate Change. Washington DC: RR

[241] Tolfts, Andrew (1998): How appropriate is certification for small-scale timber producers in Melanesia? London: Overseas Development Institute, Rural Development Forestry Network, Network paper no. 23d. 14 pp. http://www.odi.org.uk/fpeg/rdfn/englishfiles/englishrdfnpdffiles/23deng.pdf (as of June 2008)

[242] Higman, Sophie & Nussbaum, Ruth (2002): How standards constrain the certification of small forest enterprises. Report for UK DFID Forestry Research Programme.

> tively high cost of certification evaluations for smaller operation was of particular concern. FSC eventually responded to the pressure to rectify this imbalance, and took a range of steps to simplify the certification process (FSC 2003). These include the Increasing Access to Small and Low Intensity Managed Forests (SLIMF) initiative and the group certification model. The former introduced an option for cases with low environmental risk, such as small forests and low intensity operations (Robinson, D. & Brown, L. 2002[243]).“[244]

A positive outcome as well as the urgent need of the evolution of FSC’s SLIMFS initiative is highlighted by Ros-Tonen (2008) with an example from Brazil:

> “In Rondonia (Brazil) partner-ships between WWF and other donors like PPG7 enabled the initiation of several income-generating projects since 1993, such as ecotourism, the production of a rubber-coated textile known as ecological leather and community-based logging. The latter, when based on sustainability criteria, is a promising option as regards improving the rubber tappers’ income. Such revenues can be further increased if the logging projects can be FSC certified. Getting the timber produced by community logging operations certified under FSC has been unsuccessful so far due to a lack of funds and difficulties in meeting the strict certification criteria. Since the FSC introduced the Small and Low-Intensity Managed Forests (SLIMF) initiative in 2002, group and community certification has been made more affordable. As a result, at least five Resident and Producers Associations in Acre’s extractive reserves were on the list of FSC-certified forest operations in June 2007 (http://ww2.imaflora.org). Despite these more favorable conditions, no products from extractive reserves in Rondonia have yet been certified.”[245]

After the introduction of the Small and Low-Intensity Managed Forests (SLIMF) initiative in 2002, the uptake of certificates for the SLIMFs did not happen as quickly as expected and desired. The hope was that those community-managed forests, after going through a phase of managerial improvements and receiving the FSC certificate, would have with an improved market access as having a promotional role for other communities. In 2007/08 an evaluation

[243] Robinson, Dawn & Brown, Larissa (2002): The SLIMFs Initiative: A Progress Report, FSC. www.fsc.org

[244] Guedes Pinto, Luis Fernando; Stanley, Patricia; Cota Gomes, Ana Patricia & Robinson, Dawn (2008): Experience with NTFP certification in Brazil. Forest, Trees and Livelihoods, Vol 18, pp 37-54.

[245] Ros-Tonen, Mirjam A.F. et al. (2008): Forest-related partnerships in Brazilian Amazonia: There is more to sustainable forest management than reduced impact logging, Forest Ecology and Management, Elsevier. doi:10.1016/j.foreco.2008.02.044

of the implementation of the SLIMFS was conducted by FSC, to identify the strength and weaknesses of the SLIMFS initiative.

Evaluation of the FSC SLIMF Initiative

In the Executive Summary of the “Evaluation of the FSC SLIMF Initiative” N. Perez and M.O. Arboleda (2008)[246] highlight the benefits perceived by the certificate holders:

> “In relation to benefits, the nine SLIMFs certified operations interviewed, expressed that they do identify benefits for becoming certified under the SLIMF system, they mentioned the following: Cost reduction, desk audits, low sampling, the certification process was faster with the SLIMFs procedures, not simpler but faster. One of them mentioned the support from the foundation Carton de Colombia. Other benefits are related to the benefits of certification in general such as better organization, credibility and respect and in some cases also market access was mentioned as a tangible benefit. The interviewed stakeholders mentioned the following main obstacles that inhibit the application of the SLIMFs initiative: lack of forest management practices in some cases, access to information, lack of written procedures, the standards are not yet simplified enough for the small and community operations, lack of training in relation to forest management for small operations and communities, cost of meeting the requirements for FSC certification, cost of maintaining certification, organization of small forest owners, the cost of forest management and certification is absorbed by the forest owners and not by the whole productive chain. Also, cultural background, areas in remote sites, small volumes, low value added, low quality of products, uncertainty in the land tenure among the main obstacles. It is important to consider that some of the main obstacles cannot be addressed by the SLIMF initiative even if the procedures are simplified. Other bigger strategies will have to be developed in order to help SLIMFs operations to overcome these hurdles." (Perez & Arboleda 2008).[247]

[246] Arboleda, Maria Ofelia and Perez, Noemi (2008): Evaluation of the FSC Small and Low intensity forest management (SLIMF) Initiative. Evaluation commissioned by the FSC IC. http://www.fsc.org

[247] Arboleda, Maria Ofelia and Perez, Noemi (2008): ibid.

Experience with the social impact of FSC social strategy – further case studies

A team of external evaluators assessed for a major donor of FSC the “Impacts of FSC as Illustrated by Case Studies Highlighting Social Benefits of FSC Certification”, featuring five case studies (Guillery et al 2007). The case studies illustrate the social impact that FSC has had in five different forest regions on five different continents. Sites were selected for each of five major forest regions of the world (North America, South/Central America, Europe, Africa and Asia), illustrating the diverse settings where FSC operates. The goal of the case studies was to learn from individuals who had first hand experience with the social impact of FSC social strategy. The case studies are not intended to produce generalizations, but are useful to better understand a situation or to gain in-depth information about a particular problem from an informed participant. By gathering rich information from the case studies, one can extrapolate the findings to other similar situations. For further reading please find these case studies by Guillery et al (2007)[248] in Annex I.

[248] Guillery, Phil; Haslett Marroquin, Reginaldo and Hampton, Maree (2007): Ford Foundation Funding to the Forest Stewardship Council: A Qualitative Review of External Impacts. A confidential report to the FSC International Center.

2.5 Economic effects

This chapter describes how adequate legal and economic farming conditions allow a better implementation of FSC standards and improved forest management; information about the implications of the cost of certification and the high expectations about, failures and real cases of price premia for certified timber and the discussion about demand for and feasibility of supporting mechanisms for community managed forests, such as Fair Trade certification.

The Rights and Resources Initiative (2008) states:

> "Forest certification was designed with the expectation that consumers would pay the additional cost of products from well-managed forests, thereby providing an incentive for producers and retailers to support sustainability. Ironically, industrial forest concessions and commercial plantations in developed and developing countries have been most favored by this development because of their larger scale, and forest certification has expanded disproportionately in temperate regions and in already well-governed countries."[249]

2.5.1 Setting the framing conditions right

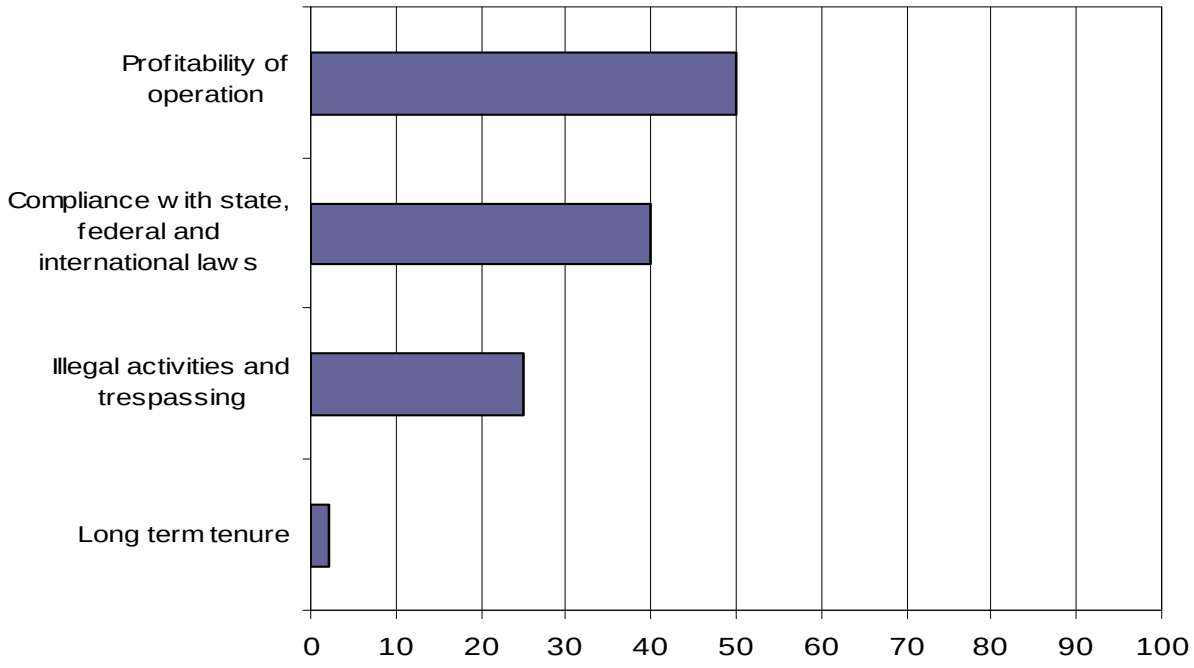
Before they can apply for FSC certification, many operations, especial smaller enterprises and community managed operations, have to get the legal conditions for their operations right. And before they can measure improvements, they have to learn how to monitor the current operations profitability. When analyzing the economic and legal changes in 129 FSC certified operations certified by SmartWood, Newsom and Hewitt (2005)[250] found that the most prevalent economic and legal impacts of SW certification were increased understanding of operation profitability and efficiency (required of 50% of operations), improved compliance with laws (40%), and improved treatment of illegal activities and trespassing (25%).

[249] Rights and Resources Initiative (2008): Seeing People Through The Trees: Scaling Up Efforts to Advance Rights and Address Poverty, Conflict and Climate Change. Washington DC: RR

[250] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

Governments and companies are examining certification with interest; it has become a “high profile subject in the forestry sector” (FAO 2000)[251]. Despite the stated purpose of certification for improving forest management, the main interest of most of those undertaking certification at present is probably the marketing benefits it may offer. This may explain why over 80% of FSC-certified forests are in developed countries, and 66% are by industrial enterprises (Thornber 1999)[252]. However, in developing countries it is noted “certification serves as an added strength as it facilitates entry into foreign markets” (Malaysian Timber Bulletin 1999)[253].

Diagram 6: Most common economic and legal changes required for FSC FM certification by SmartWood (from Newsom & Hewitt 2005)



[251] FAO (2000): Certification and forest product labelling: a review. 18th Session of the Asia Pacific Forestry Commission, Noosaville, Queensland, Australia, 15-19 May 2000. http://www.fao.org/docrep/meeting/X5967E.html (as of June 2008)

[252] Thornber, K. (1999) Overview of global trends in FSC certificates; instruments for sustainable private sector forestry. International Institute for Environment and Development (IIED)

[253] Malaysian Timber Bulletin MTB (1999) Safeguarding competitiveness and sustainability of primary commodities through EMS. Malaysian Timber Bulletin 5 (6): 8-9.

> "Issues regarding **operation profitability and efficiency** were addressed with conditions in 50 % of the certified operations. Specific changes ranged from more formalized accounting procedures to extending the planning horizon to improved marketing of certified products.
>
> Steps towards more clear **compliance with local, national and international laws** were required from 40% of certified operations. "This rarely involved actual illegal activity – most conditions dealing with compliance required that copies of all relevant laws and regulations be made available to and understood by staff. In the US, conditions often dealt with the application of forestry Best Management Practices ((…) where mandatory), while awareness of CITES regulations and species were most common in tropical regions.
>
> The issue **of long term tenure** was required to be address addressed in only 2% of the certified operations. "Although the absence of long term tenure is often cited as a problem that hinders FSC certification, our findings suggest that it may not be an important issue in practice. Or, alternatively, operations with a lack of long term tenure may simply not be pursuing FSC certification."[254]

Newsom and Hewitt (2005) highlight that

> "Interestingly, **operation profitability** was the only economic/legal issue that was required to be addressed by a significantly different number of operations in less developed and more developed countries (77% and 32%, respectively). This supports the observation by many certification practitioners that, in tendency, operations in less developed countries are more in need of business plans and analyses than those in more developed countries. Community forestry operations in the tropics, in particular, often conduct planning and base revenue calculations on the entire community enterprise, rather than just its forestry component, making it more difficult to understand specific forestry cost, revenue and efficiency issues. Here, FSC certification has helped many small operations better understand the financial standing of their forestry operations. For example, a condition given to the *Sociedad Civil Organizacion, Manejo y Conservacion, Comunidad Uaxactun* (OMYC) – a community managed forest concession in the Peten region of Guatemala - required OMYC to report costs and income from forestry activities and develop internal structures for managing forestry operations, finances, and marketing. This condition was a catalyst

[254] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

for internal restructuring and the development of an accounting and management division within the community."[255]

The STERN Review (2008) in part VI on International Collective Action "The Economics of Climate Change" [256] highlights that "Clarifying both property rights to forest-land and the legal rights and responsibilities of landowners is a vital pre-requisite for effective policy and enforcement." STERN gives the following example on how FSC processes can contribute to enhance the effectiveness on property and legal rights and to strengthen the institutions required to support and enforce them:

"Latin America and South Asia have increasingly involved local communities in the ownership and stewardship of forests, and communities have often opted for more sustainable long-term programmes as a result. ((..) For example, the Joint FM Program in India (...) has both improved forest regeneration and had a positive impact on livelihoods). Similarly in Guatemala 13 community concessions, almost all certified by the Forest Stewardship Council, have managed to combine highly profitable mahogany enterprises with deforestation rates lower than in protected or outside areas (…However deforestation is still present at a reduced rate) (Worldbank 2006). Other approaches have allowed local communities to benefit from timber revenues. This helps promote local support (...)". (from Box 25.1 Local and community ownership of forests.) Land use planning – as required under FSC certification- has a key role to play in determining what kinds of activities are appropriate in forest areas: a complete ban on all activities may be justified in some areas, while in others, logging may be allowed subject to specific rights and duties. Logging concessions can be granted with conditions such as permissible extraction levels and sustainability requirements." (STERN Review 2008)

[255] Newsom, Deanna and Hewitt, Daphne (2005): The Global Impacts of SmartWood Certification. Final Report of the TREES Program for the Rainforest Alliance. http://www.rainforest-alliance.org/programs/forestry/perspectives/documents/sw_impacts.pdf (as of June 2008)

[256] Stern (2008): Stern Review "The Economics of Climate Change"

2.5.2 Complex social, institutional and economic relations

Bolivian community forest

Matthew Markopoulos (2002)[257] describes the indigenous people Lomerío Community Forest Management Project in Santa Cruz, Bolivia: Since 1986 25 communities, under the direction of their umbrella organization CICOL, have participated in the development of a vertically integrated sawmill enterprise designed both to generate material benefits and to secure legal recognition for long-standing territorial claims. Financial and technical support for this undertaking has been provided by the NGO "Support for the Peasants-Indigenous People (…)" and, latterly, by the Bolivia Sustainable Forest Management Project." In 1996 the project was FSC certified. Markopoulos summarizes the impacts of the certification:

> "High standards of management within the project, as well as new forest legislation that has imposed strict standards for inventories, plans and other tools of management, have limited the impact of certification on forest management practices. However, (…) certification has obliged the project to prepare a protected forest area plan [See above 2.1 – the editor]. Certification identified debilitating faults in the social and institutional relations of the project. In addressing these weaknesses, the project has refocused attention on the community, rather than CICOL or any other entity, as the basic socio-political unit of forest management. Certification has also led to a redefinition of community roles and responsibilities in forest management and enterprise administration, and has emphasized the central role of the community in project decision-making. Indeed, without certification, it is likely that the conflicts engendered by enterprise development would have received far less attention. Two of the Lomerío project's main expectations of certification were higher prices and greater market security. With support from BOLFOR and several wholesalers and secondary processors (both in Bolivia and abroad), the project has found new export markets and substantial price premiums for several lesser-known timber species. However, several caveats apply to Lomerío's market success:
>
> 1 Higher timber prices have not led to significantly higher community incomes, owing to the financial demands of the undercapitalized communal sawmill.
>
> 2 The administrative and managerial capabilities of the sawmill enterprise are limited, and the demand for certified timber is being met only with difficulty.

[257] Markopoulos, Matthew D. (2002): Role of Certification in Community Based Enterprises. In: In Meidinger, E., Elliott, C. and Oesten, G.(eds). Social and political dimensions of forest certification, http://www.forstbuch.de (as of June 2008)

3 The extent to which higher prices are the result of certification per se, rather than BOLFOR's market development work, is open to question. (…)

There can be little doubt that, without certification, the Lomerío project would now be in a critical state, or possibly even moribund."[258]

2.5.3 Economic aspects

As previously referred to, researchers from IMAFLORA (2008) note that, when talking to members of certified communities:

"In general, the more positive aspects mentioned were economic and social and the more negative referred to the certification process itself and its cost. (...) it was possible to register a high degree of dissatisfaction among certified community producers in relation to wood sales and the corresponding economic returns. The main reasons for such dissatisfaction was the difficulty in accessing the market for certified wood, and the absence of aggregated value in certified wood. On the other hand, a significant number of community producers mentioned that, although there is no price differential between certified and non certified wood, certified wood is better accepted by the market. (…) In addition, the cooperative was using financial and human resources to implement structural changes to better carry out its tasks related to the commercialization of certified wood."[259]

Costs of certification

The costs of forest certification are often mentioned as an obstacle for forest operations to apply for certification, especially as a burden for the small and low intensity operations. Nevertheless not many studies have been done to analyze these costs, which are comprised of:

[258] Markopoulos, Matthew D. (2002): Role of Certification in Community Based Enterprises. In: In Meidinger, E., Elliott, C. and Oesten, G.(eds). Social and political dimensions of forest certification, http://www.forstbuch.de (as of June 2008)

[259] IMAFLORA (ed.) (2008): Impact of FSC Forest Certification on Agroextractive Communities of the State of Acre, Brazil. By Ana Carolina B. de Lima, André Luiz Novaes Keppe, Marcelo Corrêa Alves, Rodrigo Fernando Maule and Gerd Sparovek; University of São Paulo and Entropix Engineering Company. http://www.rainforest-alliance.org/resources/documents/san_coffee_acre.pdf (as of July 2008)

1 Costs to prepare the enterprise for the certification process (after or even before the first evaluation by the certification body, incl. informing and involving the relevant stakeholders, preparing, compiling and screening legal documents);

2 Costs for the actual certification process;

3 Costs of maintaining certification (audits, maintaining the standard achieved).

In order to overcome this financial hurdle for the small and low intensity forest owners, FSC developed two mechanisms: to allow through simplified and streamlined administrative requirements (incl. desk audits and lower sampling requirements) reduced costs of the certification process; the group certification scheme for small private forest managers organized under one joint administration; and the SLIMFs procedures (see above).

In the "Evaluation of the FSC SLIMF Initiative" Noemi Perez and Maria Ofelia Arboleda (2008) highlight the benefits of the SLIMFS process perceived by the certificate holders:

> "Cost reduction, desk audits, low sampling, the certification process was faster with the SLIMFs procedures, not simpler but faster. (...) in some cases also market access was mentioned as a tangible benefit."[260]

Cost of forest certification in Russia

Andrei Ptichnikov & John Park (2005)[261] identified in their study for the World Bank:

> "The cost of forest certification is still rather high, and this is especially so for small and medium size businesses. The costs of certification in Russia consist of the cost of audit and costs of improvement. Audit costs attribute to 25% of the total cost and implementation of new practice around 75%. The main challenge in the certification of forest management is the significant gap between practices in the Russian forest sector and the requirements of international certification schemes. Under current conditions, the average Russian company may save up to 10-15% of actual certification costs by using national

[260] Arboleda, Maria Ofelia and Perez, Noemi (2008): Evaluation of the FSC Small and Low intensity forest management (SLIMF) Initiative. Evaluation commissioned by the FSC IC.

[261] Ptichnikov, Andrei & Park, John (2005): Strengthening Russia's Engagement with Market-based Corporate Social Responsibility (CSR): Conclusions and Recommendations from Experience in Forestry and Lessons for other Sectors. For International Finance Corporation and the World Bank, co-financed by European Union. http://siteresources.worldbank.org/INTRUSSIANFEDERATION/Resources/02072006_eng.pdf (as of June 2008)

consultants, training in-house experts and pooling resources to avoid duplication of effort e.g. Government led certification centers of excellence providing training programs and services such as the mapping of HCV forests. Small and medium size businesses may consider the use of Group certification or SLIMF type certification, which are less costly. Large companies and the Government may support the certification of leskhozes (forest management units) in order to involve small and medium size businesses in certification.

Ptichnikov & Park's study identified that

> "the costs of implementing certified silviculture and harvesting exceed the financial benefits in the first five year period, although in the **medium and longer term benefits outweigh costs**. The highest negative cost/benefit ratio is associated with protection of soil and water resources, assessment of high conservation value forests and increasing the quality of forest planning. The highest positive cost/benefit ratio is associated with implementing ecosystem-based management and improving wage policy."[262]

Certification costs and benefits in South Africa

Bob Frost et al (2003)[263] describes for both plantation forestry and smaller-scale forestry in South Africa:

> "The costs of becoming certified have been comfortably borne by the large companies and have only been prohibitive for the smaller scale operations. (…) The direct and indirect costs of achieving and maintaining FSC certification for medium and small producers has generally remained prohibitive. However, a number have endured these costs to secure specific markets. For example, a number of farmers with wattle plantations in KwaZulu-Natal are selling certified charcoal to the German market. (…) Few regret becoming certified, in fact the process has helped consolidate and se-cure existing markets. Moreover, some firms feel that having FSC has improved their marketability to prospective customers, and others report getting orders for new products as these customers try to move away from non-certified sup-pliers, particularly in Asia. (…) There was a perception that the initial lack of FSC certified timber would push up prices but this has not happened. The

[262] Ptichnikov, Andrei & Park, John (2005): ibid.

[263] Frost, Bob; Mayers, James & Roberts, Sarah (2003): Growing credibility? The impact of certification on forests and people in South Africa. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/G00412.pdf (as of July 2008)

shift of the market to sourcing FSC certified timber has not resulted in a price increase but certified companies at least seem to have benefited from securing existing markets."

Price premium for certified products

"Does FSC certification bring extra economic benefits to certified forest owners and to producers of products from lumber and paper from those forests? And are these benefits available to small-scale forest land owners, community forests, or indigenous forests?" Michael Conroy (2007)[264] asked these questions, and answered:

> "Ample anecdotal evidence suggests that, in 2006, the demand for certified lumber and paper products was still considerable greater than the supply. Economic theory suggests that a price premium would arise, and there was, again, anecdotal evidence that significant price premiums were being paid, especially to those suppliers who could provide large quantities to major buyers. It is extremely difficult, however, to gather systematic data on price premium for the simple reason that it is not in the interest of either the supplier or the purchaser to admit that price premiums are being paid. The mills and manufacturers who buy FSC-certified timber are constantly seeking to obtain the lowest possible price; they won't publicly offer to pay a price premium. Sellers of certified timber prefer not to publicize the availability of a premium because they don't want to see the premium disappear as more sellers enter the market. However, off-the-record discussions with both sides indicate that the economic benefits come in form of greater assurance of access to markets and, in a large number of cases, actual higher cash prices that are being paid quietly and consistently." (Conroy 2007).

The following examples in fact show that price premia are being paid in many cases, although buyers in general are reluctant to admit it. On the other hand, paying a price premium is one of the most powerful mechanisms for promoting the supply of certified timber.

[264] Conroy, Michael E. (2007): Branded! - How the 'certification revolution' is transforming global corporations. New Society Publishers ISBN: 9780865715790

The conventional 'producer pays' wisdom – and apparent contradictions

T. Bensel, D. Newsom and V. Bahn (2008)[265] introduce to their research on economic benefits through FSC certification in Pennsylvania, USA in summarizing that

> "Despite growing demand for Forest Stewardship Council (FSC)-certified products, recent research appears to support the conventional wisdom that forest certification has failed to create the higher prices and new markets that it implicitly promised (Taylor, 2004)[266]. In a survey of FSC-certified forestry operations in the U.S., most forest owners were positive about their decision to certify and re-ported that certification has helped them to improve and gain recognition for their forest practices, but respondents were generally disappointed with the absence of price premiums (Oeverdevest and Rickenbach, 2006)[267]. Other discussions of price premiums understandably rely on anecdotes and opinions, since 'hard' data on this topic is so rare."

Because many observers assert that FSC-certified forestry operations should not expect to receive higher prices for their products despite of the of the steady increases in both the supply and demand for FSC-certified products over the past decade, T. Bensel, D. Newsom and V. Bahn (2008)[268] analyzed six years of data from timber sales on the US American Pennsylvania state forest land, certified by the FSC since 1998, to determine whether FSC chain-of-custody certified buyers are paying more for timber from these sales than non-certified buyers. They found that:

> "Between 2001 and 2006 FSC-certified buyers of Pennsylvania state forest timber sales paid approximately $7.7 million more for this timber than what would have been earned had all buyers been non-certified. Higher bid prices offered by FSC-certified buyers translated into roughly a 10 percent increase in revenue for the Pennsylvania state forest over what would have been earned in the absence of certification. (…) Most of the additional

[265] Newsom, Deanna; Bensel, Terrence & Bahn, Volker (2008): Are There Economic Benefits from Forest Stewardship Council (FSC) Certification? An Analysis of Pennsylvania State Forest Timber Sales. WORKING PAPER. (as of 8 April 2008). http://www.dovetailinc.org/documents/working_paper.pdf (as of July 2008)

[266] Taylor, P.L. 2005. In the market but not of it: Fair trade coffee and Forest Stewardship

[267] Oeverdevest, C, & Rickenbach, M.G. 2006. Forest certification and institutional governance: An empirical study of Forest Stewardship Council certificate holders in the United States. Forest Policy and Economics 9(1): 93-102. Quoted in: Newsom, Deanna; Bensel, Terrence & Bahn, Volker (2008): Are There Economic Benefits from Forest Stewardship Council (FSC) Certification? An Analysis of Pennsylvania State Forest Timber Sales. WORKING PAPER. (as of 8 April 2008). http://www.dovetailinc.org/documents/working_paper.pdf (as of July 2008)

[268] Newsom; Bensel & Bahn (2008): ibid.

> revenue earned by the Pennsylvania state forests through sales to FSC-certified buyers is driven by the sale of black cherry. On average, FSC-certified buyers paid $198 more per thousand board feet (mbf) for black cherry from state forest timber sales than did non-certified buyers. The price differential for sugar maple was $138 per mbf, $49 per mbf for red oak, $35 per mbf for red maple, and $17 per mbf for white ash. There was no price differential for white oak. (There is a relatively high volume of high-value black cherry on the state forest lands). (…) These results indicate that, in addition to any environmental or social benefits that FSC certification has brought to the management of Pennsylvania's state forests, certification has led to economic benefits in the form of higher prices being paid for state forest timber sales. (…) These findings represent an apparent contradiction to the conventional 'producer pays' wisdom, which holds that the brunt of the costs of certification are inevitably paid by the forest owner, with little monetary compensation." [269]

Purbawiyatna & Simula (2008) summarize in a comparative study of the different forest certification schemes for ITTO:

> "Verification of legality and SFM certification will increase the cost of timber production in exporting countries. These additional costs create pressure for price increases. However, in general, the buyers in importing countries have refused to pay a premium for certified product even though such premiums are being actually paid in some products and market segments where demand exceeds supply. (…) FSC-certified lumber has captured in some cases a 5% to 8% premium. (…) a premium of 11%-14% has been paid by some buyers for FSC-certified Brazilian products and an additional 9%-10% has been charged for CE-marking. (Oliver 2003). On the other hand, at the end-use industry level there continues to be limited willingness to pay for a premium (e.g. Werndle et al. 2005[270])."[271]

[269] Newsom; Bensel & Bahn (2008): ibid.

[270] Werndle, L., Brown, N. & Packer, M. 2005. Barriers to Certified Timber and Paper Uptake in the Construction and Paper Industries in the United Kingdom. Corp. Soc. Responsib. Environmental Management 12. Wiley InterScience DOI:10.1002/csr.093. www. interschence.wiley.com. In: Purbawiyatna, A. & Simula, M. (2008): Comparability and acceptance of forest certification systems. Main Report. ITTO

[271] Oliver, R. 2005. Price Premium for Verified Legal and Sustainable Timber. A Study for the UK Timber Trade Federation (TTF) and Department for International Development (DFID). July 2005. In: Purbawiyatna, A. & Simula, M. (2008): Comparability and acceptance of forest certification systems. Main Report. ITTO

The Price Waterhouse Coopers analysis of "Sustainable Investments for Conservation" (2007)[272] on behalf of WWF Germany is based on three case studies, of which one is the FSC-certified operation Precious Woods in Brazil, the other two look at ecotourism. The analysis concludes that it is possible to combine nature conservation with private investment in a way that produces a satisfactory return on the capital invested. The report mentions economic advantages of forest certification if it is credible and transparent.

> "Opportunities in sustainable forestry mainly arise from the expected surplus demand for certified tropical timber. According to FAO estimates, the demand for industrial round wood will increase by about 25% from 1996 to 2010. According to information provided by UNECE and FAO, market price premiums of between 12% and 20% are obtained for FSC-certified sawn hard woods." (…) "There is also an extensive portfolio of harvestable types of timber in the area of natural forest management. Companies can therefore react flexibly to market changes and switch to the production of goods with higher profit margins. The attainable market prices and the costs associated with harvesting and further processing are crucial factors affecting long-term profitability. Certification by the FSC has a favorable impact on the achievable market price. The harvesting costs are lower in the plantation project because of the higher density of trees and the existing infrastructure."[273]

The Price Waterhouse Coopers analysis of "Sustainable Investments for Conservation" also identifies risks associated with the acquisition of forests:

> "The risks associated with the acquisition of forests also include the possibility that it might not be possible to identify all land use rights before acquisition and that claims are asserted at a later date. The example of Precious Woods also shows that risks arise as a result of corruption and changes in administrative structures in the country, which could cause delays in the issue of official permits. [Ironically] FSC-certified companies that adhere strictly to the laws and regulations of the country are particularly badly affected by such delays."[274]

[272] PricewaterhouseCoopers (2007): Sustainable Investments for conservation – The business case for biodiversity. A study on behalf of the WWF. Executive Summary. WWF Germany http://www.pwc.com/extweb/pwcpublications.nsf/docid/4FE9CE9D78BFBE21852572890054ECC0 (as of June 2008)

[273] PricewaterhouseCoopers (2007): ibid.

[274] PricewaterhouseCoopers (2007): ibid.

Higher prices for certified timber in Bolivia

Nebel, Quevedo et al. (2003)[275] found that

> "It appears that major roles of the FSC certification have been (i) regulation-oriented verification of compliance with already established norms and (ii) creation of a forum for consensus formation between dominating policy formulating actors. Higher prices, in the range of 5–51%, were paid for the majority of exported certified timber products. There are indications that the price premiums exceed the direct operational costs of certification, but this excess profit will presumably disappear when the market develops. However, the substantial support not based on private initiative that has been given to the certification development restricts the interpretation of the concept as a successful market-based forest policy instrument. The dominance of large enterprises in certification confirms the fear that this tool distorts the conditions of forest production at the national level - small-scale and community based enterprises had difficulties in getting certified."

Higher timber prices in Indonesia

In its educational brochure from January 2007 on "German Development Cooperation in the Forest Sector: Approach – Impact – Prospects" the German Federal Ministry for Economic Cooperation and Development highlights the value of credible, independent certification schemes.

> "A number of (German forest sector development cooperation) projects promote the development of independent, credible certification schemes involving the development of criteria and indicators. These schemes help foster transparency across the whole chain of custody and establish monitoring mechanisms for the processing and marketing of trade in forest products. The participation and involvement of the private sector is the key to implementation and impact. (…) For example... in Indonesia, German Development Cooperation (DC) has assisted the Sumalindo forest enterprise. In 2006, as a result of fruitful cooperation between German DC, the enterprise and non-governmental organizations,

[275] Nebel, Gustav; Quevedo, Lincoln; Bredahl Jacobsen, Jette & Helles, Finn (2003): Development and economic significance of forest certification: the case of FSC in Bolivia. Forest Policy and Economics, Volume 7, Issue 2, Elsevier http://www.sciencedirect.com/science/journal/13899341 (as of June 2008)

the company received the Forest Stewardship Council (FSC) certificate for its management of natural forests, which allows it to sell its timber at higher prices."[276]

The UK based independent production company "Handcrafted Films" produced a series of films for the British Development aid agency DFID concerning stories surrounding illegal logging and deforestation in Indonesia www.handcraftedfilms.net/projects.html). They were introduced in late 2007 by the Minister of Parliament, Gareth Thomas national and international press. One of the films focuses on the successful implementation of FSC certified timber in a small co-operative (KHJL) in Sulawesi and captures how the communities implemented sustainable forestry practices within their teak forests, and as of 2005, successfully achieved Forest Stewardship Council (FSC) certification (the first community teak forest in Indonesia to do so), which even resulted in price premiums for FSC certified timber, "particularly due to the demand for certified teak from Indonesia" (Jeff Hayward, SmartWood's Asia Pacific region manager, in an interview).

The Borneo Initiative

The Borneo Initiative (TBI) is an international foundation of Dutch and Indonesian Ministries and Governments together with international NGOs, and timber processing companies to promote sustainable housing projects in the Indonesian Borneo and the certification of responsible forest management in Indonesia including the supply of FSC certified timber to the Netherlands. Jesse Kuijper, representative of the TBI, presented the TBI to the FSC in spring 2008 and explained that there currently European markets are prepared to pay a price premium of 30% for FSC certified Meranti. In terms of income for the Indonesian producers this means that the local suppliers are paid 150,-€ /m3 instead of 135,-€ /m3 for uncertified Meranti. "Currently this situation is not positive for FSC, since the price difference between certified and non-certified is too big. Non-certified Meranti costs around 900 euro per m3 and certified between 1500 - 1900 Euro per m3 (…)." (Jesse Kuijper, FSC Netherland, pers. communication)." ["Not positive for FSC" means that due to the high unsatisfied demand for FSC certified timber in Europe, the prices for FSC-timber are too high for those who want to buy the FSC products. – While managers of FSC certified timber are glad to be in the position to offer their timber for higher prices, the buyers in Europe are struggling to invest in FSC certified

[276] Federal Ministry of Economic Cooperation and Development, Germany (January 2007): German Development Cooperation in the Forest Sector: Approach – Impact – Prospects.
http://www.bmz.de/en/service/infothek/buerger/ForestSector.pdf (as of June 2008)

material. Anyway, a price premium of 30% will be acceptable, and this is the price the Borneo initiative hopes to achieve – the editor].

Price premiums for FSC timber from Malaysia

Kollert & Lagan analyzed in 2006 that

> "(…) time series of prices of certified and uncertified logs (2000 to 2004) provided by three forest management units from Sabah, Malaysia (…). The results suggest that forest management certification achieves a market premium for certified logs. In particular high quality hardwoods (e.g. Selangan Batu, Keruing) destined for the export market fetch a price premium of 27% to 56%. Lower quality timbers (e.g. Kapur, Seraya) also fetch a price premium, however the difference is less pronounced (2% to 30%)."[277]

Global timber markets for Chinese producer

Yuan & Eastin (2007) surveyed all in 2006 FSC certified (FM/CoC and CoC) in China and found that:

> "Certified companies obtained an average 6.3% price premium for certified wood products in European markets, a 5.1% price premium in the United States and a 1.5% price premium in Canada. About 24.4% of the companies reported that the profit margin for certified wood products was 6.7% higher than for non-certified wood products, while 39.0% of the companies reported a loss of about 5.6%. The profit margin for certified wood products is highly dependent on the price premium companies can achieve. A simple linear regression model was developed to estimate the profit margin based on the price premium. The regression model results suggest that as long as the price premium obtained for certified wood products exceeds 11% (relative to non-certified wood products), the profit margin for certified wood products will exceed that of non-certified wood products."

They identified "Some common problems that (FSC) certified companies in China face relate to the cost and supply of certified wood raw materials. Lacking domestic accredited

[277] Kollert, Walter & Lagan, Peter (2006): Do certified tropical logs fetch a market premium? A comparative price analysis from Sabah, Malaysia. Sabah Forestry Department Malaysia.

[277]Yuan, Yuan & Eastin, Ivan (2007): Forest Certification and Its Influence on the Forest Products Industry in China. CINTRAFOR Working Paper 110. http://www.cintrafor.org/research_tab/links/WP/wp110.htm (as of July 2008)

certification bodies not only in-creases the cost of certification, but also hinders the improved communication and training among foresters and manufacturers about certification issues. Due to the supply shortage of certified wood, companies have to communicate with importers more efficiently to obtain reliable information about the origin and supply of certified wood from foreign countries. Although domestic forest farms are in the process of being certified, which may alleviate the dependence on imported raw materials to some extent, the complexity and ambiguity of the forestry property rights reforms being considered and implemented in China will slow the privatization and consolidation of local forests, and further impede the process of certifying private forests." [278]

European timber markets

Marc Gross from WWF Austria analyzed in 2003 the four FSC certified Austrian forest operations and found that prices for logs achieved 10% - 50% higher prices than uncertified material. In one case the price was 10 times higher. Also from Switzerland the reported prices were 5% and 20% higher. All new customers on the Austrian market bought the timber because of the FSC certificate, and all FSC certified timber was ex-ported. The lack of the CoC chain in Austria was the reason for not further processing the FSC timber in Austria.

Example from Poland

The "Wood-Based Panels Producers Association of Poland" (SPPD) combines producers of fiberboards, particleboards and plywood. On their webpage they state that

> "The Association is also a founding member of the Polish Working Group within the Forest Stewardship Council (FSC). Thanks to this membership, producers of wood-based panels can influence the establishment of criteria for granting certification. It should be stressed that products marked with FSC certification have predominance on the world markets over products not holding this certification."[279]

Since 1996 they are selling products with the FSC label. In a letter to FSC they write "FSC is an instrument which greatly helps to compete in the world market". Due to suspension of cer-

[278] Yuan & Eastin (2007): ibid.

[279] Wood-Based Panels Producers Association of Poland (2008) http://www.sppd.pl/en/historia.html (as of July 2008)

tificates for some regions in Poland, the financial situation of SPPD companies have gone worse because they cannot offer products marked with FSC.

The UK timber market: examples for price premiums for FSC certified timber

Rupert Oliver, Director of Forest Industries Intelligence Limited assesses and tracks the market price premiums that may be available for "verified legal" and "verified legal and sustainable" timber in the UK market. His February 2006 report [280] (the 3rd of a regular 6 monthly series) brings several examples of price premiums for FSC certified products:

> "While importers of softwood, panels and engineered wood products were generally keen to play down the cost implications of their efforts to move to certified products, many emphasized the importance of ensuring flexibility with regard to the systems accepted. The cost implications associated with commitment to a single form of forest certification may be more significant. This point is illustrated by discussions with a representative of a timber frame manufacturer, one of the few UK based companies of this type that has committed exclusively to supplying FSC certified timber frames. He noted that in order to supply an FSC timber frame, his company had to charge a 15% premium on the typical price for an uncertified timber frame. (…) One large UK timber importer and builders merchant noted that they have introduced a policy to ensure that 85% of all timber products procured as derive from certified sources. This same company was identified in the July 2005 report as working closely with Brazilian suppliers of softwood and hard-wood plywood to develop a reliable long term source of combination FSC certified/CE-Marked material. They note now that their cost and price relationship with their Brazilian suppliers has changed little in the last 6 months. That is, the company continues to pay their suppliers $40-$45 per m3 as a premium for FSC certification, and an additional $30-$35/m3 for CE Marking in conformance with the European Construction Products Directive. This premium is applicable both for Brazilian softwood and hardwood plywood. On current price levels, this company is paying a premium of 11-14% for FSC certified material and a premium of 9-10% for CE-Marked marked material. A representative of another leading UK-based company involved in the Brazilian trade noted that as things stand, they are reasonably confident they could secure and deliver uncertified hardwood lumber from Brazil in around 2 to 3 months, but they would need to allow at least 5 months to secure and deliver FSC certified stock. This same company also noted that it was impossible now to give any

[280] Oliver, Rupert (2006): Price premiums for verified legal and sustainable timber. A study for the UK Timber Trade Federation (TTF) and Department for International Development (DFID). 17 February 2006

"standard list price" even for uncertified hardwood from Brazil. The situation changed so rapidly that it was necessary to go back for a new price with every single order. As a tentative guide, he noted that FSC certified hardwood from Brazil is always offered with at least a 20% premium."

For **timber from Far East** on the UK market Rupert Oliver found: "The July 2005 report noted that one UK-based agent had been requested to look for buyers for a large consignment of FSC certified meranti sawn lumber and mouldings by a mill in Peninsular Malaysia. Production was based on logs shipped from the FSC-certified Deramakot Reserve in Sabah. The sellers initially asked for a price premium of 20% on the standard UK cif price, but this proved impossible to obtain. Recent reports indicate that this wood was eventually offered at an 8% premium in the UK and that there was a great deal of market interest at this level. The agent responsible for this sale said that he now purchases FSC material from the Far East whenever possible. Although volumes are small, there is always a buyer at the 8% premium level. The July 2005 report noted that one UK-based agent had been requested to look for buyers for a large consignment of FSC certified meranti sawn lumber and mouldings by a mill in Peninsular Malaysia. Production was based on logs shipped from the FSC-certified Deramakot Reserve in Sabah. The sellers initially asked for a price premium of 20% on the standard UK cif price, but this proved impossible to obtain. Recent reports indicate that this wood was eventually offered at an 8% premium in the UK and that there was a great deal of market interest at this level. The agent responsible for this sale said that he now purchases FSC material from the Far East whenever possible. Although volumes are small, there is always a buyer at the 8% premium level. Indications are that verified supplies of balau/bangkarai decking material are extremely restricted. One UK importer said that he carried a small stock of FSC certified bangkarai decking originating from Indonesia and that he was offering this on to his own customers at a 5% premium. A representative of a large trading company noted that at present they are unable to secure any stocks of verified bankarai decking profiles. However, the company is "very close" to achieving FSC certification for one of their Far Eastern operations that would provide a source of this product. Initially they would be looking for a significant premium to cover the costs of investment." [281]

For **timber from Russia**, Rupert Oliver reports: "Russian shippers are charging UK importers 2% to 2.5% extra for FSC certified material compared to the typical prices for uncertified material. This translates into a premium of around £3 to £4/m3 on the UK delivered price for joinery redwood sawn lumber. These prices are being built into the large im-

[281] Oliver, Rupert (2006): ibid.

porters price structures as they are shifting over to 100% certified material and offering this as standard. (…)"

For **hardwood from temperate forests** on UK markets Rupert Oliver notes: "(…) FSC certified oak continues to be readily available from Poland, where it is offered as standard with little or no premium. FSC certified oak and beech may also be obtained from Germany, usually on payment of a small premium. (…) Price premiums on UK delivered price for FSC certified American hardwoods reported in February 2006 range from 3% to 11% depending on species, showing no significant changes over the last 12 months. The highest premiums tend to be for FSC certified American white oak – currently a very fashionable species in the UK. Lower premiums tend to be requested for American tulipwood. Although only a small minority of American exporters supply FSC certified products, these are available in the full range of species and sizes, with the exception of American black walnut. (…)"

Rupert Oliver's report on "UK market conditions for "legal" and "legal and sustainable" wood products" from May 2007 mentions:

"Where product is available, UK delivered prices for FSC certified Brazilian sawn hardwood are generally reported to be around 15% to 20% higher than non-FSC across the board. In February 2007, one UK agent reported that he could se-cure small volumes of FSC certified Brazilian wood in a variety of species, including tatajuba, angelim pedra and virola. He also noted that Brazilian suppliers are actively trying to persuade overseas buyers to purchase a range of lesser known species including Taxi, Abiu branco, Louro Amarelo, Orelha de macaco or Fava orelha de negro, Pequia Marfim or Araracanga, and Sapucaia. These species, which are either yellowish or reddy brown, are being promoted for a variety of construction applications. Prices are expected to be 10% to 15% below more established species. This agent noted that despite high premiums, the small volumes of better established Brazilian hardwoods that are FSC certified (such as tatajuba, angelim pedra and massaranduba) tend to find a buyer in the UK market. This view was confirmed by a representative of another trading company involved dealing in Brazilian hardwoods for many years who noted "**we have been able to achieve significant premiums for FSC certified hard-wood products from Brazil**".[282]

Rupert Oliver is currently (August 2008) working on a broader timber market report covering 9 European Union countries.

[282] Rupert Oliver (2007): ibid.

Ruth Nussbaum and Markku Simula (2004)[283] found that

> "Market benefits, mainly associated with sensitive markets, have often been reaped by the retailers that have promoted certified products to protect their corporate reputation and market share. Any premiums that have materialized have been driven more by a shortage of certified products at the retail end, rather than a conscious willingness on the part of the purchasers to pay a price for sustainability (Rametsteiner 2002)[284]. In general, producers have not benefited to the expected degree. In a survey undertaken as part of the development of its percentage claims rules by the FSC, respondents were asked whether they had ever received a price premium for their certified products. None of the responding forest managers reported a premium, whereas almost half of processors and two-thirds of retailers at least sometimes receive a premium (FSC, 2002)[285]. There are, however, exceptions from this general picture. For example Södra in Southern Sweden is currently reported to pay a premium of USD 2 per m3 for sawlogs and USD 1 per m3 of pulpwood to FSC certified forest owners (Södra, 2004)[286].

2.5.4 Non-tangible benefit of certification

Russia – Europe: stability and security in the marketplace

In her study about forest certification in Russia Maria Tysiachniouk (2005) summarizes:

> "The FSC appears to represent a way of bringing the Russian forest industry into European markets and simultaneously of bringing the European practices and technologies into Russia. Interestingly, much of WWF's promotion of FSC certification in Russia has been funded by western government agencies, including the World Bank, the Swedish International Development Agency, and the Swiss Agency for Development and Collabora-

[283] Nussbaum, Ruth & Simula, Markku (2004): Forest Certification. A Review of Impacts and Assessment Frameworks. Research Paper September 2004 A TFD Publication. The Forests Dialogue. Yale University School of Forestry & Environmental Studies. http://www.theforestsdialogue.org

[284] Rametsteiner, Ewald (2002): The role of governments in forest certification - a normative analysis based on new institutional economics theories; Journal of Forest Sector Policy and Economics 4 (3) (2002) pp. 163-173

[284] FSC (2002): Report on the Questionnaire to Assess the Impacts of the FSC Percentage Based Claims Policy. www.fsc.org

[285] FSC (2002): Report on the Questionnaire to Assess the Impacts of the FSC Percentage Based Claims Policy. http://www.fsc.org

[286] Södra Pays Out Bonus for FSC Approved Wood. 2004. Pulp & Paper International, June.

tion. In general, certification seeks to increase forest profit, promote reforestation, and improve management and control functions. Certification is a mechanism for developing relevant trade policy, supporting environmentally responsible business, and instituting investment safeguards. Additionally, FSC-certified companies claim that FSC certification has given them stability and security in the marketplace. In two cases companies claimed that their income grew by ten percent."[287]

A forest owners' cooperative in Japan: higher prices incl. psychological bonus

Ikuo Ota in his previously mentioned study of the Yusuhara Forest Owners Cooperative (YFOC) in Japan summarized his research findings (2006) in the abstract:

> "YFOC received its forest management certification from the FSC in 2000. (…) With the continuous efforts of selling FSC certified wood in the domestic housing construction market, YFOC has substantially increased their timber sales in recent years. It is a noteworthy event in Japanese small-scale forestry, which has been struggling with declining economic performance for many years. (…) It is concluded that the FSC certification system is a possible tool to revitalize Japanese small-scale forestry (…)."[288]

In another paper Ota (2006)[289] explains:

> "It is difficult to say how much of the higher price that the builders pay is due to certification per se and how much to the fact that in addition they require specially treated products. To wholesalers and auction markets, YFOC sells poles and beams without kiln drying, but to builders the cooperative sells specially ordered sawnwood products that are kiln dried and resawn. Therefore, the cost of producing the sawnwood for builders is at least 15 000 yen (US$124) higher per m3, but the difference in the selling price is enough to make dealing directly with builders profitable for the cooperative". Ito concludes: "The issue of a price

[287] Tysiachniouk, Maria (2005): Forest Certification in Russia. (Center for Independent Social Research St. Petersburg, Russia); Paper presented at Yale Forest Certification Symposium. Yale school of forestry & environmental studies. http://www.yale.edu/forestcertification/symposium/pdfs/Book%20Chapters/12%20Russia.pdf (as of June 2008)

[288] Ota, Ikuo (2006): Experiences of a Forest Owners' Cooperative in using FSC forest certification as an environmental strategy. In: Small-scale Forestry, Volume 5, Number 1, March 2006 , pp. 111-125(15), Springer. http://www.ingentaconnect.com/klu (as of June 2008)

[289] Ota, Ikuo (2007): A forest owners' cooperative in Japan: obtaining benefits of certification for small-scale forests. Faculty of Agriculture, Ehime University, Matsuyama, Japan. In: Small-scale forestry. Unasylva No. 228 Vol. 58, 2007/3 FAO Rome. FAO Corporate document Repository. http://www.fao.org/docrep/010/a1346e/a1346e17.htm (as of June 2008)

premium for certified timber is controversial. Economic benefits from certification can be sought both with and without it. The case of Yusuhara Forest Owners' Cooperative shows another way of achieving economic gain through certification. Intermediaries do not usually want to buy certified timber at a higher price. In this case ecologically minded builders (or builders with ecologically minded customers) who demand certified timber will obtain it not from retailers' shelves, but from certified sawmills. Direct dealings between sawmill and the builders make sense in such a situation, and are satisfactory to both. This is a kind of niche market that is growing with the trend in environmental awareness in Japan today. Forest certification has brought another advantage (...) The FSC forest certification has been a key to success for small-scale forest owners in Japan, and may hold promise for those in many other countries too."[290]

Transparency as a non-tangible benefit of certification

Bob Frost et al (2003)[291] describes for South Africa:

"A non-tangible benefit of certification has been the improved transparency it created throughout the supply chain. As individual producers products are marked with a unique manufacturer's certification number it becomes easier to monitor quality standards. Previously defects could only be traced to country of origin now they can be pegged to a specific manufacturer. Also it is possible for customers to recognize whether a supplier is supplying products to its competitors.

Market access

Market access has been a more obvious benefit for some suppliers than price premiums. A good example is the South African paper sector which sought certification early and successfully captured a share of the market for certified paper in Europe (particularly the UK, Netherlands and Germany). Several South American companies have had similar experiences with production of certified plywood, doors and garden furniture where the ability to supply certified products provided access to a high value market which provided an economic return on the investment in certification. For many producers and suppliers of temperate and boreal timbers, certification is becoming a baseline requirement. Buyers

[290] Ota, Ikuo (2007): Ibid.

[291] Frost, Bob; Mayers, James & Roberts, Sarah (2003): Growing credibility? The impact of certification on forests and people in South Africa. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/G00412.pdf (as of June 2008)

are expected to continue to strongly resist any pressure to pay any extra for certified products, even though certification adds value to the product in the sense that it provides information on the environmental quality of the product."[292]

[292] Frost; Mayers & Roberts (2003): Ibid.

2.6 Fairtrade and other systems

Several authors (Tolft 1998; Vallejos 2003, 2006; Macqueen, Dufey and Patel, 2006; Conroy 2007; Perez & Arboleda 2008) mentioned that an additional or joint Fairtrade certification together with FSC certification might be a good way to furthermore develop forest depending communities and their access to markets.

A specific label for fair trade / community label might help to differentiate market niches

It is a major challenge for associations (community or privately managed enterprises) to overcome competitive pressure, inefficiencies of scale, inadequate access to capital and disabling policy environments in order to reverse that trend.

> "New initiatives are needed to build market access for small forest enterprises. Ongoing research suggests that there is substantial industrial demand for a mechanism to distinguish community forest products in the market. A product-specific label for fair trade timber or a community label from a major certification scheme would be required to reward such preferential sourcing in the marketplace (Macqueen, Dufey and Patel, 2006[293], Macqueen et al., 2008[294]), to distinguishing, and increasing the returns from, responsible small forest enterprises in the market."[295]

Michael Conroy's Feasibility Study (2008)[296] explores the key considerations that may be needed for the boards of directors of both the Fairtrade Labeling Organizations International

[293] Macqueen, Duncan J., Dufey, A. & Patel, B. (2006): Exploring fair trade timber. London, UK, IIED. http://www.iied.org/pubs/pdf/full/13530IIED.pdf (as of June 2008)

[294] Macqueen, D., Dufey, A., Gomes, A.P.C., Nouer, M.R., Suárez, L.A.A., Subendranathan, V., Trujillo, Z.H.G., Vermeulen, S., Voivodic, M. de A. & Wilson, E. (2008): Distinguishing community forest products in the market: Industrial demand for a mechanism that brings together forest certification and fair trade. IIED Small and Medium Forestry Enterprise Series No. 22. IIED, Edinburgh, UK.

[295] Macqueen, Duncan J. (2007): Connecting small enterprises in ways that enhance the lives of forest-dependent people. IIED. IN: Small-scale forestry. Unasylva No. 228 Vol. 58, 2007/3 FAO Rome. FAO Corporate document Repository. http://www.fao.org/docrep/010/a1346e/a1346e07.htm (as of June 2008)

[296] Conroy, Michael (2008): Feasibility study: On the dual certification of Fairtrade and FSC forest products. Internal study for Fairtrade Labelling Organizations (FLO) and FSC. Unpublished.

(FLO), the international standard-setter for Fairtrade Certification, and the FSC to reach decisions about whether to proceed with the development of a dual-certification process that unites their efforts on behalf of disadvantaged forest land-holders who might benefit from a designation as Fairtrade certified as well as FSC certified. The final recommendation of Conroy's feasibility study is

> "that dual-certified forest products have many potential benefits for both FLO and FSC, and relatively few risks or liabilities, (… if decisions are based on pilot tests)". "Creation of a Fairtrade certified designation for forest products from community-based operations, from forestry enterprises owned by indigenous peoples, or from other small-scale operations could, in principle, alleviate many of the disadvantages that they face in global and national markets. The analyses provided below suggest that such a designation could have some, or all, of the following benefits, if both FSC and Fairtrade Labeling were to approve their designation as dual-certified products:
>
> - They could be associated with a minimum-price guarantee and/or with a social premium price that assures a flow of benefits to those forestry operations that qualify for Fairtrade certification, over and above the benefits derived from large-scale or conventional FSC-certified forestry operations;
> - They could potentially be sold in a distinct set of ethically-certified markets beyond those already available to FSC-certified products that do not carry the Fairtrade label and assurances;
> - They could be marketed as products with a distinct 'face' and 'story' that might appeal to buyers in ways that conventional forest products do not, even when certified to FSC standards for well managed forests; and
> - They could qualify for both national and international capacity-building development assistance as a distinct tool for poverty alleviation, offering local benefits beyond those that may be associated with larger-scale, industrial forestry, even when certified to FSC standards."

Michael Conroy summarizes the potential impacts joint FSC-FLO certification might have:

> "The benefits to vendors included the opportunity to 'share 'stories' of specific forest-dependent people who have benefited, improving the sector's image. Creating a repository of such stories, it was reported, would help to demonstrate impact and attract greater market interest. "Clear indication that forest products with 'social appeal' would create market benefits for woodworking shops, high-end furniture, and the cosmetic industry; (...)

> FSC's forte, and its greatest recognition in international markets, comes from its environmental standards for well-managed forestry. It does have social standards, as well, especially with respect to the tenure rights of local peoples and communities, the impact of logging upon local communities, and safety requirements in both harvesting and processing of FSC-certified forest products." (Conroy 2008) [297]

Duncan Macqueen et al (2008)[298] states that,

> "Unlike coffee and cotton, timber has yet to become a fair trade commodity. But now its time has come. Rights over forest resources are increasingly ceded to small-scale community forest enterprises (CFEs), as large-scale industrial logging is now largely discredited in the sustainable development context. The fair trade emphasis on just pricing for poorer producers is exactly what CFEs need as incentive to invest in sustainable forest management — and secure environmental and poverty reduction benefits at one stroke. With fair trade timber, CFEs could boost their entrepreneurial capacity using democratic business models with in-built social and environmental responsibility. The Fairtrade Labeling Organizations International and Forest Stewardship Council are exploring the ways and means through a new partnership, but more is needed. Consumers must be made aware of why paying higher prices is key to creating CFE incentives for sustainable forest management and poverty reduction. Time and money are needed for consumer education and installing fair trade timber in producer country forest policies, market segregation and procurement policies at all levels."

The FSC is working with Fairtrade Labeling Organization FLO to develop an adequate answer to this fair trade related challenge. A sound answer can be expected to be implemented in late 2009.

[297] Conroy, Michael (2008): ibid.

[298] Macqueen, Duncan (2008): A cut above: building the market for fair trade timber. Sustainable Development Opinion Papers International Institute for Environment and Development, London http://www.iied.org/pubs/pdfs/17033IIED.pdf (as of June 2008)

3. IMPACT ON FOREST POLICY

This chapter describes FSC's unique governing structures and their influence on state and non-state governance systems and markets internationally, with the special cases of FSC's uptake in the Corporate Social Responsibility practices; and the use of forest certification as a tool for implementing development policies.

3.1 FSC's governance is unique

This mandates a devolved, chamber-based membership which encourages interaction. The decision making body comprises the three main interest groups involved in tropical timber: the economic, the environ-mental and the social. FSC's three chamber structure and the National Initiatives globally working with a common set of principles and criteria is highlighted as one of FSC's specialties by many authors (for example by Fred Gale 2004[299]; Peter Wood 2004[300]). This mandates a devolved, chamber-based membership which encourages interaction. The decision making body comprises the three main interest groups involved in tropical timber: the economic, the environmental and the social. FSC's lack of dominant timber company representatives and governments is perceived by many FSC stakeholders as a clear advantage towards the development of balanced standards and processes; the same fact has led some commentators to dismiss the FSC arguing that without timber organizations it lacks credibility (Duncan Poore 2003)[301], and without government representation it lacks legitimacy (Donald Schepers 2008)[302]. The examples below are partially reflecting these different interpretations of FSC's unique structure.

[299] Gale, Fred & Haward, M.G. (2004): Public accountability in private regulation: contrasting models of the Forest Stewardship Council (FSC) and Marine Stewardship Council (MSC). Proceedings of the Australasian Political Studies Association Conference, 29 September-1 October 2004, Adelaide, Australia

[300] Wood, Peter (2004): Soft Law, Hard Law and the Development of an International Forest Convention. http://peterwood.ca/docs/Wood2004_ForestConvention.pdf (as of June 2008)

[301] Poore, Duncan (2003): Changing Landscapes : The Development of the International Tropical Timber Organization and Its Influence on Tropical Forest Management. Earthscan

[302] Schepers, Donald H. (2008): Challenges to the legitimacy at the FSC. Baruch College Zicklin School of Business. http://www.isbee.org/index.php?option=com_docman&task=doc_download&gid=205&Itemid=39

3.1.1 Facilitating participatory forest policy

Mirjam Ros-Tonen (2004) summarizes in the findings of an international congress on "Globalization, Localization and Tropical Forest Management in the 21st Century" that:

> "The FSC national standard-setting process has facilitated participatory forest policy processes, a better policy definition and has had very strong impacts on the ability of civil society and stakeholders to bring to the table issues around worker rights, tenure and health and safety standards in forest management. Stakeholder participation is especially strong at national level." [303]

This strength of stakeholder participation and of the national standard-setting is also highlighted by Frost et al (2003)[304] as a tool to overcome the weakness of stakeholder consultation, due to a lack of performance of the certification bodies in some South African certification processes.

Bringing people, organizations and businesses together to develop solutions

One of the seven main findings of an external evaluation of FSC's impacts by Guillery et al (2007) is that

> "Stakeholders believe the key strength of FSC lies in its ability to bring diverse groups of people together to craft policy. Evaluation participants gave high marks to the FSC for its ability to bring people with diverse backgrounds and interests together to discuss issues of forest management and community sustainability. In this process the FSC brings people together who normally would not talk or work together. (...) When participants were asked about the shift in the role of the FSC as reflected in its mission statement, most comments were positive on the change to the concept of "...bringing people, organizations and busi-

[303] Ros-Tonen, Mirjam A.F. (2004): Final Report: Congress on Globalisation, Localisation and Tropical Forest Management in the 21st Century. Amsterdam Research Institute for Metropolitan and Int. Development Studies, Amsterdam, Netherlands.

[304] Frost, Bob; Mayers, James & Roberts, Sarah (2003): Growing credibility? The impact of certification on forests and people in South Africa. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/G00412.pdf (as of June 2008)

nesses together to develop solutions that promote responsible management of the world's forests." [305]

Partnerships in forest governance

Ingrid Visseren-Hamakers' and Pieter Glasbergen's paper on "Partnerships in forest governance" (2006), which describes five major forest certification schemes, states that

> "The FSC is the only scheme in which social and environmental interests have their own formal place in the organization. In other partnerships (…) the relative influence of civil society is smaller. It could even mean that standards are adopted without the support of specific interest groups in civil society (…)."[306]

More participatory forest policy process in several countries

Michael Richards summarizes (2004)[307] that

> "Positive impacts have been obtained from the FSC national standard-setting processes. These have facilitated a more participatory forest policy process in several countries, most notably Bolivia, Brazil and South Africa. The benefits include increased acceptance of community representatives in local and national policy fora; raised awareness of the potential of SFM; a more participatory and decentralized forest policy process; better policy definition resulting from discussions of certification standards; and increased company and supply-chain transparency (Bass et al. 2001). A key question for countries like Brazil and Bolivia is whether these national certification processes stimulated key policy, regulatory

[305] Guillery, Phil; Haslett Marroquin, Reginaldo and Hampton, Maree (2007): Ford Foundation Funding to the Forest Stewardship Council: A Qualitative Review of External Impacts. A confidential report to the FSC International Center.

[306] Visseren-Hamakers, Ingrid J. & Glasbergen, Pieter (2006): Partnerships in forest governance**. (**Utrecht University**,** Copernicus Institute for Sustainable Development and Innovation.) Global Environmental Change, (2007), doi:10.1016/j.gloenvcha.2006.11.003 , Elsevier http://www.whyfsc.com/uploads/universiteit_utrecht.pdf (as of June 2008)

[307] Richards, Michael (ed.) (2004): Certification in complex socio-political settings: Looking forward to the next decade. With contributions from Marcus Colchester, Andre de Freitas, Mikhail Karpachevskiy, Henry Moreno Sanjines, Saskia Ozinga, Mike Packer, and Andrei Ptichnikov. Forest Trends. Washington, D.C.; http://www.forest-trends.org

and institutional reforms, or whether the latter preceded certification and were essential pre-conditions for its progress. The answer is probably a mixture of the two." [308]

3.1.2 Political impacts of voluntary standard initiatives

Participants of an international conference on "impacts of voluntary standards" organized by the German Ministry for Development BMZ et al. (2006) summarized

> "In general it was felt that still too little was actually known about the impacts on the political level, although certain broad themes could already be identified. Evidence of this kind of impact was demonstrated by analyzing standard initiatives such as forest certification and round tables for the implementation of social standards. In particular processes of forest certification amongst others entered into public procurement policies, stimulated more participatory policy processes up to sometimes even influencing policy change and raised the profile of key issues (i.e. land tenure) in political debate." [309]

Multi-sectoral development policy services

> "The impacts of forest certification are not limited to the certified enterprises. The whole process of agreement and binding implementation of standards has institutional impacts on organizations, behavior and culture throughout the entire sector, and beyond this in society it-self. Forest certification supports sustainable development in a particularly effective and obvious way. This development policy benefit should be much more strongly reflected, embodied and harnessed in the further conceptual and political development of forest certification. (…) Further development of forest certification following an institutionally diverse and stepwise approach could offer a viable chance of reducing conflict energies and accumulating cooperation energies." (Burger, Hess & Lang, 2005)[310]

[308] Richards, Michael (ed.) (2004): Certification in complex socio-political settings: Looking forward to the next decade. With contributions from Marcus Colchester, Andre de Freitas, Mikhail Karpachevskiy, Henry Moreno Sanjines, Saskia Ozinga, Mike Packer, and Andrei Ptichnikov. Forest Trends. Washington, D.C.; http://www.forest-trends.org

[309] BMZ, GTZ, CoC Round Table (2006): Shaping globalisation – Impacts of voluntary standards. International Conference. 24 –25 October 2006, Berlin

[310] Burger, Dietrich; Hess, Jürgen; Lang, Barbara (Eds.): Forest Certification: An innovative instrument in the service of sustainable development? Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Eschborn, Germany

Impacts on equity

Michael Richards summarizes (2004)[311] that

> "Significant benefits for communities in industrial concession areas and as partners in certified forestry operations on private company lands are reported by Andre de Freitas and Tasso Rezende de Azevedo (2003). These include more secure tenure rights, improved incomes and working conditions, new enterprise opportunities and training skills acquired. (…) In Bolivia national certification standards are particularly demanding in areas like conflict resolution and community organization (Contreras-Hermosilla and Vargas 2002). Certification has probably also helped strengthen labor unions and raised the dialogue on the rights and access of communities to forests in concessions. On the other hand, negative equity impacts are likely where there is inadequate recognition of customary rights and where local stakeholders lack the capacity to participate effectively in certification assessments, as shown by the Indonesia case study [by M. Colchester 2004[312]]."

Phillip H. Pattberg's (2006) "Private governance and the South: lessons from global forest politics" focused on the governance systems by analyzing the risks and the potential of private governance for the South. With the example of private forest politics he found "FSC as its most prominent embodiment (...)".[313]

[311] Richards, Michael (ed.) (2004): Certification in complex socio-political settings: Looking forward to the next decade. With contributions from Marcus Colchester, Andre de Freitas, Mikhail Karpachevskiy, Henry Moreno Sanjines, Saskia Ozinga, Mike Packer, and Andrei Ptichnikov. Forest Trends. Washington, D.C.; http://www.forest-trends.org (as of July 2008)

[312] Colchester, Markus (2004): " Forest certification in Indonesia". Annex 4 In: Richards, Michael (ed.): Certification in complex socio-political settings: Looking forward to the next decade. Forest Trends. Washington, D.C.; http://www.forest-trends.org and https://www.gtz.de/en/dokumente/en-d99d-certification-in-Complex-Settings-Annex4.pdf (as of July 2008)

[313] Pattberg, P.H. (2006): Private governance and the South: lessons from global forest politics. Vrije Universiteit Amsterdam - Institute for Environmental Studies

Impact on tropical forest management and public policies

Virgilio Viana (2003)[314] summarized that (FSC) certification processes have also helped to stimulate national and local dialogues on trade and equity issues and amendments in policies related to NTFPs.

Governmental use of voluntary standards

Around the world, a growing number of governments have been working with voluntary standards to deliver on a range of public policy objectives in their public procurement tenders, their policies for development and cooperation, trade, regional development, or the management of natural resources through agriculture, fisheries or forestry policies. The ISEAL Alliance commissioned in 2008 a study on the governmental use of voluntary standards. Christine Carey and Elizabeth Guttenstein (2008) [315] analyzed 10 case studies of different public-private partnerships (FSC, MSC, MAC, IFOAM, FLO etc.) that highlight best practice in the range of institutional forms.

> "For example, in the Netherlands, the province of Groningen has specified the use of Fairtrade standards in its tender documents for public procurement. In Bolivia, the government recognizes Forest Stewardship Council (FSC) standards to protect its threatened tropical forests and improve natural resource management in its forest sector. The government of South Georgia and the South Sandwich Islands is itself certified to Marine Steward-ship Council (MSC) standards to ensure the sustainability of its fishery, and the environmental practices of its fishing fleet." [316]
>
> "In Canada ([317]), the Alberta Ministry of Environment, the Government of Manitoba, and Georgian Bay Islands National Park (a protected area managed by the federal government agency Parks Canada) specify the FSC standard in their public procurement poli-

[314] Viana, Virgilio (2003): Indirect impacts of certification on tropical forest management and public policies. In Meidinger, E., Elliott, C. and Oesten, G.(eds). Social and political dimensions of forest certification, http://www.forstbuch.de (as of July 2008)

[315] Carey, Christine (2008): E047 Governmental Use of Voluntary Standards Case Study 2: Bolivia and Forest Stewardship Council Standards. ISEAL Alliance. (As of Sept 2008: www.isealalliance.org/_data/n_0001/resources/live/E047_Bolivia_FSC.pdf)

[316] Carey, Christine (2008): ibid.

[317] www.fsccanada.org/procurementpolicies.htm

cies. China ([318]) has integrated FSC sustainable forest management standards in its National Forest Strategy. The governments of Denmark ([319]), Japan ([320]) and New Zealand ([321]) accept FSC certification as proof of legality and sustainability for timber in their public procurement policy. (…) Two further governments studied, Bolivia and Guatemala, also have a direct user relationship with a voluntary standard. However, the standard is not named. (…)

Cities and municipalities also work with voluntary standards. “Cities for Forests”, a campaign by WWF Spain ([322]) includes Barcelona and 40 other local administrations that have committed themselves to buy FSC certified products. As part of its strategy to magnify this campaign beyond its own territory, Barcelona recently twinned with the municipality of Santa Cruz de la Sierra in Bolivia to facilitate technical support to help Santa Cruz implement new legislation approved in July 2007 establishing a responsible purchasing policy for forest products.” (Carey & Guttenstein 2008)[323].

Carey & Guttenstein revealed that

“governmental use of voluntary standards is characterized by diversity. Governments are successfully engaging with a range of standards in countries of different stages of economic development, under different policy environments, and for different motivations.” (…)“ there is extensive interaction between voluntary standards and public bodies.

Bolivia’s New Forest Law 1700 requires forest concession holders to undergo an audit of their operations every five years and recognizes third-party sustainable forest management certification as equivalent to government audits. (See more in Carey 2008/1: Case study 2 on Bolivia).

The Guatemalan National Council for Protected Areas (CONAP) forest concession contracts stipulate that concession holders must obtain forest management certification within

[318] www.unece.org/press/pr2006/06tim_n01e.htm

[319] www.2.skovognatur.dk/udgivelser/2003/tropical/

[320] www.env.go.jp/en/

[321] www.fao.org/forestry/media/11153/1/0/

[322] Global Forest and Trade Network
http://www.illegallogging.ifo/uploads/WWF_Spain_Seminar_Conclusions_(Englis).pdf (as of July 2008)

[323] Carey, Christine (2008): ibid.

the first three years from being awarded the concession, and maintain it for the duration of the concession contract. In both these case studies the FSC is de facto the only voluntary standards system used because it is the only one available meeting the specifications both governments have written in law."(See more in Carey 2008/2: Case study 4 on Guatemala).

Carey & Guttenstein (2008) showed examples for governments' drivers to apply FSC:

"**International Recognition & Credibility**: When the Bolivian New Forest Law 1700 was adopted in 1996, the FSC was the only voluntary forestry standards system that met the law's requirement for independent third party verification of the operations of forest concessions holders. As the government has been working to develop implementation guidelines for its own auditing scheme, FSC became the de facto standard used and continues to be the only forest certification system used in Bolivia today, allowing the law to be implemented despite the government audit scheme not yet being finalized.

Reputational risk management: CONAP, the Guatemalan National Council on Protected Areas, adopted the FSC amongst its requirements from forest concession areas in the Maya Biosphere Reserve in order to clearly communicate that if it was going to allow harvesting from a protected area, harvesting would be verified as sustainable, and the benefits equitably distributed. FSC certification, developed through consensus between economic, social and environmental stakeholders, was for CONAP a way to guarantee and communicate this."

"(…) most governments interviewed use a range of implementation mechanisms, often a combination of fiscal and non-fiscal ones. The choice is varied. [e.g. Requirements as conditions of access to forest concessions in the case of Guatemala, and tax relief on stumpage fees in the case of Bolivia – the editor, according to table 4 of the authors.] This variation is likely to be a reflection of the particular national approaches to policy implementation inherent to each country (e.g. more liberal or interventionist) than any particular constraint or requirement within voluntary standards systems." [324]

Carey & Guttenstein (2008) describe the outcomes when governments engage with voluntary standards:

"Governments typically engage with a voluntary standard where they can see it provides a way to deliver their intended public policy objective. All the governments inter-viewed reported positive outcomes from their use of voluntary standards.

[324] Carey, Christine (2008): ibid.

Some highlights include:

- **Bolivia's objective of improved forest resource management**: today Bolivia has the second largest area of FSC certified natural tropical forest in the world, covering 1.9 million hectares. Bolivia has transformed its forest sector from a system in serious decline to being a world leader in certified tropical sustainable forest management.
- **Guatemala's objective of improved forest resource management**: evidence was published in 2008 that forest certification in the Maya Biosphere Reserve has not only reduced deforestation, but that the average annual rate of deforestation in FSC certified forest concessions areas between 2002-2007 was 20 times lower than that in other protected areas where the harvesting of wood and of non-timber forest products is prohibited. [See also Hughell & Butterfield 2008 - the editor]. (…)"

As an important impact indicator Carey and Guttenstein (2008) show FSC's **multiplier effect**:

> "Satisfied with its experience of using voluntary certification as a basis for forest concessions in the Maya Biosphere Reserve (MBR), the Guatemalan government has begun to promote the model outside protected areas, on National Forest Lands across the country. Beyond Guatemala's borders, the Rainforest Alliance's SmartWood programme (which undertakes FSC certification in the MBR) and members of MBR community owned enterprises, have be-gun to work with the governments of Honduras, Panama, Peru and Nicaragua to reproduce Guatemala's experience." [325]

Concluding the findings from the case studies, Carey & Guttenstein (2008) mention that

> "Many of the case study governments developed their collaboration with voluntary standards though hearsay about what other countries are doing, for example in conferences (…), or through the advice and support of development agencies or international advisers (e.g. Bolivia, Guatemala)."

With their research Carey & Guttenstein, commissioned by ISEAL recommend that "If the governmental use of voluntary standards is to further develop, the practice needs to begin moving away from being ad hoc, depending on the initiative and knowledge of a handful of individuals (both in government and internationally). Information on best practices needs to

[325] Carey, Christine (2008): ibid.

become commonly available, and opportunities for shared learning fostered." For this purpose, their studies

> "provide opportunity for governments, including those in developing countries, and the champions of voluntary standards initiatives to explore together how to leverage the potential of these standards to deliver social, environmental and economic benefits." (Brian Levy, World Bank, on the ISEAL webpage). (Carey & Guttenstein 2008)[326]

[326] Carey, Christine (2008): E047 Governmental Use of Voluntary Standards Case Study 2: Bolivia and Forest Stewardship Council Standards. ISEAL Alliance http://www.isealalliance.org/_data/n_0001/resources/live/E047_Bolivia_FSC.pdf (as of September 2008)

3.2 Influence on the global market

FSC is the only global certification system for social and environmental practices that has so far emerged in the forestry sector.

Increasing globalization of the markets for forest products

Burger, Hess and Lang (2005)[327] summarize for globalized forest product markets (as one of the four trends they identified in forest use) that

> "In many countries, two markets with very different requirements and conditions are being served - national and international. The first mainly deals in firewood and other low-quality wood types and non-wood products, while the second deals in more valuable types with increasingly rising quality requirements in terms of both the goods and the delivery conditions. In many countries, the share of the international market is growing rapidly. While a 1998 survey by the research institute IMAZON (Instituto do Homem e Meio Ambiente da Amazonia) showed that only 14% of the wood harvested in the Brazilian Amazon was exported (Smeraldi & Verissimo 1999)[328], this share has increased to 36% according to a 2004 study, also by IMAZON (Lentini, Verissimo & Prereira 2005)[329]. Requirements and demand in international markets also influence the national markets. For ex-ample, the growing readiness to buy certified wood on the Brazilian market (Sobral et al. 2002)[330] is undoubtedly also caused by the international market."

[327] Burger, Dietrich; Hess, Jürgen; Lang, Barbara (Eds.): Forest Certification: An innovative instrument in the service of sustainable development? Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Eschborn, Germany

[328] Smeraldi, R. & Verissimo, J.A.; (1999): Hitting the Target: Timber Consumption in the Brazilian Domestic Market and Promotion of Forest Certification. Piracicaba/Belém.

[329] Lentini, M.; Verissimo, A.; Pereira, D. (2005): A Expansão Madeireira na Amazônia. O Estado da Amazônia No 2. http://www.imazon.org.br And in: Burger, Hess, & Lang (Eds.): Forest Certification: An innovative instrument in the service of sustainable development? GTZ GmbH, Eschborn, Germany

[330] Sobral, L.; Verissimo, A.; Lima, E.; Azevedo, T. & Smeraldi , R. (2002): Acertando o alvo 2. Consumo de madeira amazônica e certificação florestal no Estado de São Paulo, Belém – IN: Burger, Hess, & Lang (Eds.): Forest Certification: An innovative instrument in the service of sustainable development? GTZ GmbH, Eschborn, Germany

“Certification revolution”

Michael Conroy's “Branded!- How the ‘certification revolution’ is transforming global corporations” (2007)[331] is focused on the influence FSC and other organizations are having on the global market. Conroy, economist and researcher with long experience (12 years in various philanthropic positions in support of certification systems, on the boards of several key organizations in the certification field) describes in his book “Branded!” the history and success of FSC (and of other organizations) in detail. He makes the case that a certification revolution in the last 15 years has led to a profound transformation of the social and environmental practices of global corporations. Conroy concludes that FSC is “the most important example of increasingly successful certification systems that are transforming major industries around the world.” He states that

> “FSC spurred the creation of a number of competing forest management certification systems, each of which claimed to be based on improved forest management practices and to demand some level of verification of better practice from those it certified (...). The FSC deserves credit for any improvements in forest management practices documented by competing forest certification schemes, for there was nothing underway before FSC was created” and most observers agree that if FSC were to fail, most of those schemes would disappear as well. None of the other schemes has a widespread public acceptance, strengthened market access, nor demand that exceeds supply.” [332]

Cashore et al (2007) supports this:

> “Strikingly, as industrial companies in these regions (North America) came to feel marginalized by the FSC process, they did not abandon the idea of NSMD (non-state market driven governance systems) at all, but turned to alternative programs.”[333]

[331] Conroy, Michael E. 2007: Branded! - How the ‘certification revolution’ is transforming global corporations. New Society Publishers ISBN: 9780865715790

[332] Conroy 2007: ibid.

[333] Cashore, Benjamin; Auld, Graeme; Lawson, James & Newsom, Deanna (2007): The Future of Non-State Authority on Canadian Staples Industries: Assessing the Emergence of Forest Certification http://www.policyandsociety.org/archive/vol26no1/vol26no1_cashore_auld_lawson_newsom.pdf (as of June 2008)

FSC established a model for other certification schemes

Similarly to Michael Conroy, Lars Gulbrandsen summarizes (2008) in the introduction:

> "In setting a global standard based on a multi-stakeholder governance structure, FSC established a model for other certification schemes, specifically within the forestry and fisheries sectors. By creating the Marine Stewardship Council (MSC), FSC-supporters exported the certification model to the fisheries sector. Industry-led forest certification schemes that were initiated to compete with FSC and offer an industry-dominated model have come to mimic procedural accountability arrangements initially established by their competitor. However, they have carefully filtered out the prescriptions that could reduce their influence in standard-setting processes."[334]

FSC spurred significant improvements in less rigorous certification programs

Errol Meidinger (2003)[335] gives some examples on the broader national influence FSC has:

> "The fact that certification programs operate in a larger regulatory arena, often competing and cooperating with one another and with governments, means that they can also achieve efficacy by influencing other programs. First, and most obviously, there is reason to believe that more rigorous certification programs, such as the FSC, have spurred significant improvements in less rigorous ones, such as the SFI; (…) In Bolivia the FSC-oriented standard setting process undertaken by a non-profit civil society organization led not only to the creation FSC national standards, but also to revisions of government requirements, which ended up being effectively the same. The government regulations also recognize FSC certified forestry operations as complying with forest laws (Cordero 2001). For example, when Guatemala makes a land concession to a community forestry group in the Biosphere Reserve it requires the group to obtain FSC certification within three years (Finger-Stich 2001), apparently as a condition of retaining the concession. Even if they do not formally require certification, government agencies could concentrate their enforcement on uncertified firms, treating certified ones as likely to be in compliance. (…) this

[334] Gulbrandsen, Lars H. (2008): Accountability Arrangements in Non-State Standards Organizations: Instrumental Design and Imitation. Fridtjof Nansen Institute, Norway

[335] Meidinger, Errol (2003): Forest Certification as Environmental Law Making. In: Meidinger, E., C. Elliott, and G. Oesten (eds.) Social and political dimensions of forest certification. Remagen-Oberwinter, Germany: Dr. Kessel. pp.219-233.

would effectively expand total enforcement resources and presumably lead to improved overall compliance."[336]

Cashore, Auld and Newsom (2004) explain for the USA:

"The influence of the FSC on sustainable forest management is not simply through its own rule development, but also on the impact it has had on the way competing programs develop their decision making processes and their procedural and substantive rules (…)."[337]

[336] Meidinger, Errol (2003): ibid.

[337] Cashore, Ben, Auld, Graeme and Newsom, Deanna (2004): The United States' Race to Certify Sustainable Forestry: Non-State Environmental Governance and the Competition for Policy-Making Authority. Business and Politics Volume 5, Issue 3.

3.2.1 FSC as a non-state, market-driven governance system

Benjamin Cashore, researcher at Yale's School of Forestry and Environmental Studies is one of the most prominent analyzers of voluntary certification systems and describes them as “non-state market-driven” (NSMD) forms of governance. He introduced the analysis of forest certification as a special case of NSMD governance systems, based on three types of legitimacy 1) pragmatic, 2) moral and 3) cognitive legitimacy. (The debate around the certification of plantations might illustrate the complexity of these legitimacy types: the possibility to certify plantations certainly increases pragmatic legitimacy granted by the forest industry but potentially endangers the FSC’s moral support base in the environmental sector.)

Cashore (2002)[338] explains that there is a difference whether states decide to delegate regulatory competences to other actors, or whether the initiative to shape the rules comes from outside the public sphere entirely. When the states delegates regulatory competences, they allow other actors to regulate a certain field while retaining the ultimate authority to re-assume this delegation. Non-state actors are explicitly or implicitly empowered by governments (or international Organizations) to make decisions for others. Forest certification is an example for cases where governments did not regulate the (forest management) issue-area. Governments are in the FSC-system (as a non-state governance system) not necessarily excluded, but they cannot be main actors (they are, for example, not represented in the FSC Board of Directors of FSC AC or of National Initiatives). Cashore divides the FSC stakeholders in core and non-core audiences. Core audiences have an immediate interest in the rules of an NMSD system, as they are directly affected by them. In the case of FSC this includes four groups of stakeholders in particular: environmental NGOs, supply side economic interests (forest owners, managers and industry), demand-side economic interests (such as retailers), and the government. Non-core audiences with include the broader civil society, the general public, and forest product consumers. Benjamin Cashore with his research team’s (e.g. Graeme Auld, James Lawson and Deanna Newsom) main task is to explain the underlying features required for forest certification systems to gain rule-making authority - a matter of fundamental importance for those seeking to address environmental policy problems in an era of government downsizing and market globalization. (Cashore 2002[339]; Cashore et al. 2004[340] and Cashore

[338] Cashore, Benjamin (2002): Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule-Making Authority. Governance Journal 15 (4): 503-529.

[339] Cashore, Benjamin (2002): ibid.

[340] Cashore, Benjamin; Auld, Graeme & Newsom, Deanna (2004): The United States’ Race to Certify Sustainable Forestry: Non-State Environmental Governance and the Competition for Policy-Making Authority. Business and Politics Volume 5, Issue 3. http://environment.yale.edu/cashore/pdfs/2004/04_business_bleforestry.pdf (as of June 2007)

et al 2004[341]). In some parts of the world (for example in some African countries and in China) it is essential to have the support from the government in order to introduce certification.

3.2.2 Forest governance

Arena of greatest and least expected impact of certification

Ruth Nussbaum and Markku Simula (2004)[342] found that

> "Perhaps the greatest and least expected impact of forest certification to date has been in the arena of governance. National forest agencies were initially resistant to the concept of market-based regulation through certification, due to its inevitable implication that state regulations are either inadequate or ineffectively enforced. Furthermore, state forestry bodies, just like private companies can be resistant to public scrutiny of their operations, and therefore may not wish to pursue the certification of state forest lands. However, the process of developing national standards, and the involvement of government bodies in these processes, has had beneficial effects on the overall understanding of sustainable forest management and its regulation. This has led some forest agencies to harmonize their own management standards with those of the certification scheme, and to perceive the schemes as less of a threat to their own integrity (...). Where this has occurred there is potential for governments to differentiate supervision and control intensity between certified and non-certified forests (Vogt et al. 2000[343], Molnar 2003[344]). This issue still needs careful consideration and only in rare cases would it be justified to replace government control by third-party certification [Nussbaum & Simula 2005[345] - the editor]. The development of national standards has also provided a forum for the involvement of a far wider range of

[341] Cashore, Benjamin; Auld, Graeme & Newsom, Deanna (2004): Governing Through Markets: Forest Certification and the Emergence of Non-state Authority. Yale University Press, New Haven, USA, ISBN: 0-300-10109-0

[342] Nussbaum, Ruth & Simula, Markku (2004): Forest Certification. A Review of Impacts and Assessment Frameworks. Research Paper September 2004 A TFD Publication. The Forests Dialogue. Yale University School of Forestry & Environmental Studies. http://www.theforestsdialogue.org (as of June 2008)

[343] Vogt, K.A., Larson B.C., Gordon, J., Vogt, D.J. & Fanzeres, A. 2000. Forest Certification Roots, Issues, Challenges, and Benefits. CRC Press. Boca Raton, Florida.

[344] Molnar, A. 2003. Forest Certification and Communities: Forward to the Next Decade. Forest Trends. Washington, D.C.

[345] Simula, Markku & Nussbaum, Ruth (2005): The Forest Certification Handbook - 2nd EditionEarthscan. http://www.proforest.net/publication/pubcat.2007-05-18.3200128712 (as of June 2008)

stakeholders than have traditionally been provided with access to forest policy development. This has served two very important functions: (i) changing the power relations between stakeholders (...) and (ii) providing a mechanism for learning and engagement where factions which may have disagreed for many years about forest management can come to understand each other's views and, as a result, are finding ways to compromise and move forward. There is anecdotal evidence which suggests that the process of engagement of a wide range of stakeholders may be fundamental in combating some of the wider problems faced by the forest sector such as corruption, deforestation and illegal logging. However, it is also important to note that the uptake of certification has been slow in areas where corrupt, unsustainable and illegal practices are common (Nussbaum & Simula, 2005). There is no doubt that sound existing governance is an important enabling condition for certification (Rametsteiner 2000), but nevertheless, certification can also contribute to the development of sound governance." [346]

Success of forest certification depends on policy-related factors

In his study Joachim Ebeling (2005) examines some of the obstacles the FSC faces in achieving adherence to its regulations in the South. Its empirical basis is a comparative case study of Ecuador and Bolivia where over 60 interviews with key stakeholders were conducted. The paper shows that

"the success of forest certification – although it constitutes a market-based approach – depends on policy-related factors. While markets pro-vide the incentives, government regulation is crucial in determining the costs of certification. For example, when conventional timber extraction is very cheap due to a poor enforcement of environmental laws, there are high opportunity costs attached to switching to sustainable forestry." [347]

[346] Nussbaum, Ruth & Simula, Markku (2004): Forest Certification. A Review of Impacts and Assessment Frameworks. Research Paper September 2004 A TFD Publication. The Forests Dialogue. Yale University School of Forestry & Environmental Studies. http://www.theforestsdialogue.org (as of June 2008)

[347] Ebeling, Joachim (2005): The Effectiveness of Market-based Conservation: Can forest certification compensate for poor environmental regulation in the tropics? Paper prepared for the 2005 Berlin Conference on the Human Dimensions of Global Environmental Change "International Organizations and Global Environmental Governance", Berlin, Germany, 2-3 December 2005

Ebeling summarizes:

> "The FSC was founded by civil society actors in response to the perceived failure of governments to tackle a pressing global problem: the loss and degradation of tropical forests. Forest certification provides inter-national civil society with a tool to promote sustain-able forest management by relying on markets instead of governments. The FSC is an example of a private standard-setting organization and is regarded by many to be one of the most innovative institutions of global environmental governance. Its success, however, has been mainly limited to northern industrialized countries." [348]

[But see more recent examples of impact in the South in this document- the editor.]

Supported by other researchers' opinions Ebeling states that

> "(…) Certification of sustainable forest management by the FSC is a particularly advanced example of non-state market-driven (NSMD) governance. (…) Thus, from the very beginning, the FSC was conceived as a global governance effort by transnational civil society actors aiming to compensate for government inaction. Virtually all tropical forests are located in developing countries where environmental regulations are often poorly enforced. Ensuring compliance with environmental certification standards could potentially compensate for an insufficient enforcement of environmental laws (Gulbrandsen 2004[349]; Richards 2004). This notion of circumventing states and using market forces to implement rules established by civil society is implicit in the genesis of forest certification."

Ebeling & Yasue (2008) also conclude:

> "Forest certification is an example of how private environmental rule-making does not supplant hierarchical regulation but can effectively complement it and thereby play an important role in global environmental governance." [350]

[348] Ebeling, Joachim (2005): ibid.

[349] Gulbrandsen, Lars H. (2004). Overlapping public and private governance: can forest certification fill the gaps in the global forest regime? Global Environmental Politics 4(2): 75-99

[350] Ebeling, Joachim & Yasue, Mai (2008): The effectiveness of market-based conservation in the tropics: Forest certification in Ecuador and Bolivia. Journal of Environmental Management (2008) doi:10.1016/j.jenvman.2008.05.003

3.2.3 The role of governments in timber certification

In the summary of the discussion on the Role of Governments in timber certification of the FAO/UNECE Timber Committee Policy Forum Marieta Koleva (2005)[351] quoted:

> "Dr. Bick (Federal Research Center for forestry and Forest Products, BFH, Germany) pointed out some differences (….) of FSC and PEFC (…). Dr. Bick posed the question whether forest certification achieved its objectives. In several developing countries, mainly in the tropics, sustainable forest management and certification objectives failed because of the lack of an adequate legislative and institutional framework. Governments, therefore, have another essential role – encouragement at the international level for the achievement of sustainable forest management, which should be strengthened.

3.2.4 National conditions to encourage private regulatory systems

Van Kooten, Nelson and Vertinsky (2005)[352] examined national conditions that encourage the growth of a private regulatory environmental system to govern forests. Economic, institutional and social capital variables for 117 countries were used to examine factors determining forest certification under the FSC and domestic competitor schemes. Although economic factors, such as forest exports and GDP, are important in explaining the likelihood that a country's forest management practices are certified, the ability of citizens to influence the political process is also significant; in particular, the likelihood that firms and forest owners will seek to certify their forest practices is significantly reduced if women have little or no effective voice in civil society. They conclude in their research that

> "The results support the idea that the institutional and social context under which firms and forest landowners seek certification matter. Considering all certification schemes, the higher the level of exports, the more motivated firms and forest landowners will be to seek certification. Surprisingly, while FSC certification is recognized internationally, concern about protecting export markets does not appear to be a strong reason why firms might seek FSC certification. But concern about export markets does appear to play a major role in explaining why firms and/or landowners participate in FSC competitor schemes. One

[351] Koleva, Marieta (2005): Forest certification – do governments have a role? Proceedings and Summary of Discussions at the FAO/UNECE Timber Committee Policy Forum, 2005. Geneva Timber and Forest Discussion Paper 44

[352] Van Kooten, G.Cornelis; Nelson, Harry W. & Vertinsky, Ilan (2005): Certification of sustainable forest management practices: a global perspective on why countries certify. Forest Policy and Economics 7 (2005) 857– 867, Elsevier

explanation for this is that, since the FSC system is the only one established by environmental groups, firms that have pursued FSC certification have not always done so for economic reasons, but simply out of concern for the environment." (Van Kooten et al. 2005) [353].

[353] Van Kooten, G.Cornelis; Nelson, Harry W. & Vertinsky, Ilan (2005): ibid.

3.3 Governments and policy development

Greater awareness, clearer roles

Ruth Nussbaum and Markku Simula (2004)[354] found that

> "There is a general view that certification has had a positive impact on policy development and institutions. These impacts are found both in the policy process and the substantive contents of the policy. The process improvements are a result of raising awareness of the possibilities for sustainable forest management, decentralization and democratization through debates in national working groups on standards, and improved scientific interdisciplinary input in defining SFM (Bass at al. 2001[355], Elliott 2000[356]). However, certification's biggest role in policy change has probably been indirect through greater awareness and clearer roles of stakeholders (Rametsteiner 2000 [357]). The main impact derives from the participatory approach in national level standard setting and development of locally applicable certification procedures. This positive view on certification's role is not, however, shared by all stakeholders. In countries where sustainable forest management policies have been well established and institutional and governance problems are not major issues, some stakeholders feel that the development of certification may have sometimes unnecessarily contributed to the polarization of the national debate on how forests should be managed. There have even been some suggestions that certification may have opened a new avenue of influence for opportunistic parties to seek their own interest which may not necessarily by compatible with the goal of sustainable forest management."

[354] Nussbaum, Ruth & Simula, Markku (2004): Forest Certification. A Review of Impacts and Assessment Frameworks. Research Paper September 2004 A TFD Publication. The Forests Dialogue. Yale University School of Forestry & Environmental Studies. http://www.theforestsdialogue.org

[354] Bass, Stephen; Thornber, Kristi; Markopoulos, Matthew; Roberts, Sarah & Grieg-Gran, Maryanne (2001): Certification's Impacts on Forests, Stakeholders and Supply Chains. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/9013IIED.pdf (as of June 2008)

[355] Bass, Stephen; Thornber, Kristi; Markopoulos, Matthew; Roberts, Sarah & Grieg-Gran, Maryanne (2001): Certification's Impacts on Forests, Stakeholders and Supply Chains. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/9013IIED.pdf (as of June 2008)

[356] Elliott, Chris (2000): Forest Certification: A policy Perspective. CIFOR Thesis Series. Bogor.

[357] Rametsteiner, Ewald (2000): The role of governments in SFM-certification. In: Diskussionspapiere - Institut fuer Sozioökonomik der Forst- und Holzwirtschaft (Austria)

The impact on land tenure issues

Nussbaum and Simula (2004) continue that

> "Certification has probably fostered policy development particularly in countries with weak attention to traditional and indigenous tenure rights (Molnar 2003)[358]. A number of countries have specified certification in their forest legislation. The Mexican Forest Law (2003) makes provisions for certification as an instrument for good forest management. In the Russian Federation the current forest law (under revision in 2004) specifies mandatory certification as an enforcement instrument. In Brazil, the states of Acre and Amazonas will apply certification as a precondition for concession agreements (Viana, J. pers. comm.; Viana, V. 2004)[359]. In Bolivia, independent third-party certification can replace statutory audits in forest concessions (Forest Law 1996). In the Republic of South Africa certification in government leased land is mandatory substituting government monitoring of compliance with lease conditions (Bass et al. 2001). In Guatemala certification within three years is a concession agreement condition in the Mayan Biosphere Reserve (Molnar 2003)[360]. In England, certification will become a condition for forest areas of more than 30 ha to access woodland management grants from government from 2005 (Forestry Commission England, 2003)[361]. These examples cover a wide range of countries and applications and many other governments are in the process of exploring similar opportunities. There is still limited knowledge and experience on such policy linkages and therefore this issue will merit further study as there may be risks related to creation of unnecessary costs and bureaucracy, particularly for community forests, non-industrial private forest owners and small and medium forest enterprises."[362]

[358] Molnar, A. (2003): Forest Certification and Communities: Forward to the Next Decade. Forest Trends.Washington, D.C.

[359] Viana, Virgilio (2004): Sustainable Forestry Policy of the Amazonas State, Brazil, and Opportunities forInternational Cooperation. Paper submitted to the XXXVI Session of the International TropicalTimber Council.

[360] Molnar (2003): ibid.

[361] Forestry Commission England and Department for Environment, Food and Rural Affairs. 2003. The English Woodland Grand Scheme.

[362] Nussbaum, Ruth & Simula, Markku (2004): Forest Certification. A Review of Impacts and Assessment Frameworks. Research Paper September 2004 A TFD Publication. The Forests Dialogue. Yale University School of Forestry & Environmental Studies. http://www.theforestsdialogue.org (as of June 2008)

Nussbaum and Simula state the above for forest certification in general, but as FSC was in 2004 in most of the countries mentioned the only active forest certification scheme with considerable activities, the described impacts can be assumed for FSC.

The impact on social and labor policy issues

Peter Poschen (2003) for the International Labor Organization (ILO) appreciates certification as promoter of good social and labor practices, but he doubts that certification can show broadly impacts. He summarized his findings:

> "Social and labor aspects need to be brought into focus to balance the current bias towards ecological and sometimes economic functions. It is encouraging that the FSC and to some extent the PEFC are incorporating the above suggestions into their schemes. All avenues should be pursued to promote good social and labor practices in forestry: forest policy fora such as the regional "processes, codes of forest practices, and voluntary initiatives such as certification. For the latter two consistencies, harmonization and minimum standards are desirable. This paper has shown that much of the ground can be covered by using ILO texts to define criteria and indicators, to serve as reference for threshold values and verifiers. Certification has already made a valuable contribution to policy discussions and is contributing to improvements on the ground for people living in forests or depending on them. Its impact will, however, be limited because it can only address problems at the forest enterprise level and because the incentives will mostly attract firms with strong connections to western markets as well as with relatively high forest management standards."[363]

FSC's meta-governance role

Ingrid Visseren-Hamakers' and Pieter Glasbergen's paper on "Partnerships in forest governance" (2006) analyses the changes in the international forest biodiversity governance sys-tem, describing five forest certification schemes. In the chapter "Partner-ships for sustainable logging" they state that

[363] Poschen, Peter (2003): Economic and Social Justice. In: Meidinger, E., C. Elliott, and G. Oesten (eds.) Social and political dimensions of forest certification. Remagen-Oberwinter, Germany: Dr. Kessel. pp.63-82.

> "the FSC fulfilled and/or fulfils the functions of agenda setting, policy development, implementation, meta-governance, and ensuring good governance. The agenda setting function of the FSC should not be underestimated. Because of the FSC, certification of sustainable timber has become normal. The FSC fulfils its meta-governance role by coordinating a global system for sustainable forest management. Because it includes requirements on legality, the FSC ensures good governance." [364]

Michael Jenkins, director of Forest Trends states in an introduction to Gerardo Segura's paper (2004)[365]:

> "Globally, over the past couple of decades, the pressure on governments to demonstrate that forests are being managed in a more sustainable manner and delivering more social benefits has been steadily growing. Forest certification was originally designed and promoted as a market-based instrument to encourage sustainable forest management by forest producers selling into a more differentiated and demanding marketplace. However, as certification has developed, it has had a number of impacts on government policies and regulations for sustainable forestry. It has also been promoted to a varying extent by governments as a means to achieve the government's policy and enforcement objectives. Such schemes have been used by different interest groups as a means to influence government policies and actions (e.g. regulation-oriented verification to complement or strengthen forest law enforcement), and to verify that particular project-based forestry outcomes have been achieved. This dynamic interplay has evolved in tropical, complex settings as well as in the more developed producer countries."[366]

Jenkins summarizes:

> "It is still quite early to fully evaluate the impacts or to project the future potential for impact of forest certification on government policies and regulatory frameworks. However, the evidence that exists indicates that:

[364] Visseren-Hamakers, Ingrid J. & Glasbergen, Pieter (2006): Partnerships in forest governance**.** (Utrecht University**,** Copernicus Institute for Sustainable Development and Innovation.) Global Environmental Change, (2007), doi:10.1016/j.gloenvcha.2006.11.003 , Elsevier http://www.whyfsc.com/uploads/universiteit_utrecht.pdf (as of June 2008)

[365] Segura, Gerardo (2004): Forest Certification and Governments: The real and potential influence of regulatory frameworks and forest policies Forest Certification and Governments© 2004 Forest Trends. With contributions from Thang Hooi Chiew, Richard Ebaa'a Atyi, Pablo Pacheco, and Markku Simula http://www.forest-trends.org/documents/publications/Certification%20 and%20Governments%2011-15-04.pdf (as of July 2008)

[366] Segura, Gerardo (2004): ibid.

- Forest certification has provided a credible set of standards on which a few countries have based their own forestry reform principles and agendas;
- The participation of a diverse range of stakeholders in standard setting and in the certification process for specific producers or chains of custody have increased civil society participation in the sector, enabling some governments to draw upon these relationships for broader forest sector dialogue;
- Forest certification initiatives have provided needed credibility for recognizing local tenure rights over forests in some countries and for raising tenure issues in the broader country dialogue;
- Some governments have successfully provided incentives for forest certification in the form of tax breaks, waivers of regulatory approval processes, or financial incentives." (Jenkins in Segura 2004).

In the same Segura (2004)[367] it is summarized:

> "The most important contribution of certification as a policy instrument has been on the induction of multi-stakeholder dialogues to advance in developing local principles, standards and criteria to achieve sustainable forest management. Governments have found stakeholder participation in national standard setting initiatives to be most effective when these processes are given the space and flexibility to develop healthy relationships among the stakeholders. When countries have been under pressure from donors or outside advocates to progress quickly, balanced relationships have not developed between government, industry, and civil society and government officials have sometimes ended up monopolizing the process. The standard process cannot be rushed.
>
> To date, forest certification has had a limited influence on inducing direct forest policy changes and reforms of regulations and institutional arrangements. Its impact has been greatest in countries which depend heavily upon export markets where a large share of forest producers and processors have an incentive to adopt certification as a means of accessing more lucrative or more demanding markets. In addition, the role of certification as a "soft" policy instrument to achieve sustainable forest management has been most effective in countries where minimal preconditions of good forest governance have been developed."

[367] Segura, Gerardo (2004): ibid.

A new culture of multi-stakeholder processes

> "One of certification's most relevant contributions to positive policy developments has been the introduction of a new culture of multi-stakeholder processes that is characterized by an increased awareness of SFM. New forms of dialogue have emerged where forestry issues are addressed at local, national, and even regional levels improving the transparency of forest practice, the understanding of what should be deemed good forestry and the appropriate role of different groups in the process. This influence seems to have derived more from the outcomes related to the participatory processes for developing SFM standards, than from the cumulative biophysical or sectoral impacts of individual certificates." (Rametsteiner 2000)[368]

Creation of inter-sectoral dialogues in Russia

Hirschberger's study (2005) of certification reports from 12 Russian forest companies says in the summary:

> "Another important improvement, which cannot be shown by an analysis of the CARs, is the creation of an inter-sectoral dialogue between environmental NGOs, business representatives and administration."[369]

Measures to foster certification

Lincoln Quevedo (2006)[370] and other authors report that governments in some countries actually reducing regulatory requirements for certified operations, which partly include tax incentives for the forest management with FSC certification:

[368] Rametsteiner, Ewald (2000): The role of governments in SFM-certification. In: Diskussionspapiere - Institut fuer Sozioökonomik der Forst- und Holzwirtschaft (Austria).

[369] Hirschberger, Peter (2005): The Effects of FSC-certification in Russia: an analysis of CARs. WWF Forest Programme. 25 p. http://www.panda.org/downloads/forests/fscanalysisrussia.pdf (as of June 2008)

[370] Quevedo, Lincoln (2006): Forest Certification in Bolivia. In: Cashore, B.; Gale, F.; Meidinger, E.; Newsom, D. (2006): Confronting Sustainability: Forest Certification in developing and transitioning countries. In: Environment.

The case of Romania

In 1990, Romania experienced major changes in forest management practices, based on the restitution of about 70% of forests to former owners. This change led to the promotion of FSC certification by the WWF. A direct result of the WWF campaigns was the first FSC certification in Romania for 1 million ha in 2005. In order to further support the responsible forest management and its certification in Romania and Bulgaria, a Forest Certification Information Centre has been created in each country (resulting from the cooperation between WWF and IKEA).

In late 2006 Romania was further promoting sustainable forestry by providing generous tax incentives for sustainable forestry practices. According to new Law no. 105 on the Environmental Fund, all companies that use in their wood processing activities standing wood and/or assortments of raw wood resulted from logging in certified forests are excepted from paying the 3% contribution to the Environment Fund. For any other situation the law requires for a contribution of 3% to the Environmental Fund from the value of the wood that is being sold. The 3% additional value is included in the price of the timber and paid to the Environmental Fund by the seller (Art 9, letter f of Governmental Emergency Ordinance no. 196/2005)[371]. Romania has over 6 million ha of valuable forests. In late 2006 1'124'412 ha of state and private forests were certified; in June 2008 973'989 ha of state and private forests are certified. In 2005 25 companies hold chain of custody certificates, 27 in 2008.

Marius Turtica, Forest Certification Information Centre, Romania updated some information from Romania: Due to the ongoing restitution process in Romania, the figures from 2006 are looking less positive in 2008: The contribution to the Environmental law is down to 1% - still, those companies working with FSC certified wood to not need to pay this amount. And the number of FSC FM certificates is now three, including the forest of the Baia Mare Municipality with 7535 ha. More positive are the two 2008 updates on the (re-)action of the Romanian governments:

- The government banned some those pesticides which are also restricted by FSC.

Vol 48, Nr 9, Nov 2006, p 6 - 25. http://www.heldref.org/env.php (as of June 2008) © Benjamin Cashore, Fred Gale, Errol Meidinger, and Deanna Newsom, 2006.

[371] Turtica, Marius (2006): Romania leads in sustainable forestry – tax incentives and certification for FSC wood. WWF Danube- Carpathian Programme http://www.panda.org/about_wwf/where_we_work/europe/where/romania/index.cfm?uNewsID=89140 (as of June 2008)

- FSC certified companies which are applying for public funds are receiving bonus points as advantages for the application process compared to not certified forest companies.

(Marius Turtica, Forest Certification Information Centre, Romania (unpublished)).

3.4 Development policy

Conclusion: a helpful instrument with development potential

The German development cooperation has been working on forest certification since 1989. In its 1990 statement to Deutscher Bundestag on protecting tropical forests to the Commission of Enquiry of the German Parliament, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) supported the development of forest certification. In their book "Forest Certification: An innovative instrument in the service of sustainable development" (2005)[372] GTZ staff writes:

> "From the start the development policy interest has looked beyond the function of a market instrument and the certified area. Much more than this, development cooperation has the expectation that forest certification will help to effectively support achievement of the paradigm of sustainable development, because it holds out the prospect of both incentives and concrete orientation for sustainable forest management. It might moreover possibly improve the structural conditions for sustainable development, for example by promoting participation, binding rules and transparency in the forestry and wood industry sector, and maybe even beyond."
>
> The authors conclude that **certification is "a helpful instrument with development potential`:** "Forest certification (…) has had astounding success in the past 15 years, but has still failed to slow the pace of forest destruction, particularly in the tropics - a sobering balance. However, it would be premature to conclude from this that forest certification has failed. Man-aging forests can be compared with a ship which is kept on a particular course by a lot of effort from many hands. It would be unrealistic to expect that a single instrument - let alone one which was until recently totally unknown - could change the ship's course

[372] Burger, Dietrich; Hess, Jürgen; Lang, Barbara (Eds.) (2005): Forest Certification: An innovative instrument in the service of sustainable development? Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Eschborn, Germany

quickly by itself. An interim balance after only 15 years of forest certification can only answer the questions of whether the instrument has demonstrated its ability to follow the right direction, and whether and how the capability of the instrument can be improved."

Burger, Hess and Lang summarize that

"**The instrument has proved helpful:** Although there are still only a small number of studies dealing with the impacts of certification, there is growing evidence that forest certification helps to make more responsible use of resources in forest management on the lines of sustainable development. Natural resources are used more economically, and more in the interests of our grandchildren. There is more promotion for employee health and training. The rights of neighboring communities are better protected, and gains are more equitably shared, e.g. through adequate payment. The capital and other economic resources invested are more efficiently used through improved planning, avoiding unnecessary losses and increased attention to learning processes in operating procedures. From a development policy point of view it is particularly important to emphasize that forest certification also promotes improved use of social capital, i.e. the stock of rules and standard behavior:

- Legality is promoted (i.e. compliance with formal legislation);
- Many systems require increased compliance with traditional rules and rights;
- Coherent integration of forest management into the cultural, administrative and political environment is reviewed critically and possibly improved;
- Forms of conflict resolution are further developed and practiced;
- The same applies to forms of participation;

As a result, certification also contributes to reducing the mortgaging of social capital which lies in the isolation and walling off of the forestry sector and which has become positively hazardous in some countries. The opening up of the forestry sector to include relevant actors and to enhance comprehensibility and transparency for society are prerequisites for forestry's potential for sustainable use to be fully utilized and acknowledged by society at large. Opening up the forestry sector to broader groups of the population is, however, regarded by traditional representatives of the forestry sector as a threat rather than as support, which is a major reason for their resistance to forest certification."[373]

[373] Burger, Dietrich; Hess, Jürgen &; Lang, Barbara (Eds.) (2005): ibid.

Measures to fostering certification in developing countries

Several authors and editors (Cashore 2002, Meidinger, Elliott, & Oesten 2003, Richards 2004, Ebeling 2005, Stoian & Carrera 2004, Burger, Hess & Lang 2006; Cashore, Gale, Meidinger, & Newsom 2006, Perez & Arboleda 2008) identified a wide range of additional options with which the spread of certification in developing countries could be fostered by different actors. These include measures to increase the international demand for certified tropical timber, for example through marketing campaigns or public procurement in industrialized countries. Requesting in legal timber sourcing program (e.g. FLEG, Lacey act, public procurement policies (e.g. LEED)) forest certification as a minimum requirement could also be effective, as FSC certification at present is the only reliable way to demonstrate the legal origin of wood products. A combination of FSC certification with Fairtrade mechanisms could foster certification for the benefit of community managed forests. FSC certification could be combined with payments for ecosystem services, such as carbon sequestration or the conservation of biodiversity, to increase its monetary benefits.

Ebeling (2005)[374] summarizes the proposals:

> "While forest certification can promote sustainable forestry practices with certain producers in the tropics, it cannot be expected to lead to a widespread implementation of good forest management and it almost certainly cannot prevent tropical deforestation. In order to affect logging practices in the majority of tropical forest areas and to tackle agricultural land-use conversion and deforestation, authoritative rule-enforcement is indispensable. This does not mean that civil society actors have to wait for governments to take the initiative. There are numerous ways in which non-state actors can influence and complement public policy processes. But it suggests that governments have to be included in effective governance efforts. How non-state market-driven governance can be combined with rule-making by national governments and intergovernmental organizations is a question that demands further research."

[374] Ebeling, Johannes (2005): Market-based conservation and global governance: Can forest certification compensate for poor environmental law enforcement? Insights from Ecuador and Bolivia. Thesis presented to the Albert-Ludwigs-Universität Freiburg.

3.5 Corporate social responsibility

The number of public Corporate Social Responsibility (CSR) reports highlighting the fact of the companies' engagement with or support of FSC is continuously growing. One output of this commitment is the increasing number of environmental reports (e.g. by Henkel, Vodafone, HSBC, Global Compact), catalogues, brochures, train tickets et cetera printed on FSC paper; FSC-certified envelops and printing paper used in offices like Rabobank. The amount of FSC-certified magazine paper produced e.g. by SCA is increasing steadily since 2001. Harper Collins, Random House, Bloomsbury, BBC Worldwide, Piper and others print their books on FSC paper, often with a statement for FSC on the back cover or inside. Famous authors (e.g. "Harry Potter's author Rowlings, and the Noble Peace Price honored Samarago) request that their text is published on paper with guarantees responsible forest management. British and Swiss food markets use FSC-certified wrapping. All these are indicators for growing commitment to corporate social responsibility, which takes care of forests and people, and relies on the FSC mechanisms.

In their study for the World Bank Andrei Ptichnikov & John Park (2005) introduce generally that

> "In the forest sector, forest certification has developed into an international benchmark for CSR in the forest sector. Demand for certified products, especially in the northern consumer markets, is rapidly increasing and has driven the expansion of certification worldwide. Many importers of forest products have a publicized goal of achieving the sourcing of its forest products from certified forests. In addition, Government and Public procurement organizations are beginning to demand legality and CSR from their suppliers. Many investment organizations have started to demand certification as a prerequisite to investment in forest sector projects. International processes (FLEG) and potential forest product trade agreements such as FLEG(T) are designed to rule out trade in illegally sourced forest products and encourage the CSR process." [375]

[375] Ptichnikov, Andrei & Park, John (2005): Strengthening Russia's Engagement with Market-based Corporate Social Responsibility (CSR): Conclusions and Recommendations from Experience in Forestry and Lessons for other Sectors. For the International Finance Corporation and the World Bank, co-financed by European Union http://siteresources.worldbank.org/INTRUSSIANFEDERATION/Resources/02072006_eng.pdf (as of June 2008)

3.5.1 The Russian forestry sector

Focused on Russia, Ptichnikov and Park (2005) summarize:

> "The combination of these factors is creating a favorable external driving force for CSR and certification in the Russian forest sector which is 70% oriented towards export, with 55% of those exports oriented to-wards the ecologically sensitive markets of the European Union and North America. The Russian internal market, through some DIY outlets (IKEA, Obi), also shows an interest in CSR products, but on a minor scale. Certification has be-come a driving force of best practice in the Russian forest sector. Certification is:
>
> a Sector wide ((…) certified by FSC scheme – 12% of commercial forests)
>
> b Transparent (due to publicly available certification reports, three chamber equal weight and stakeholder consultations)
>
> c Aimed at sharing governance (Government and corporate sector partnerships in different areas)
>
> d Targeted at reducing inefficiencies (e.g. legislative barriers)
>
> e Implementing management systems and measures of productivity gains
>
> f Capturing market based benefits (trade in certified products, ethical investments).
>
> The main **environmental effect** (of FSC certification in Russia) is the conservation and enhancement of biodiversity. The main **social improvement** of certification under FSC is the implementation of the health and safety guidelines at the site level. The main **economic improvement** effected by certification under FSC is the enhancement of the quality of forest management planning, including appropriate documentation, monitoring and the verification of the long-term sustainability of the actual harvesting volume. (…)
>
> Certification provides a significant boost for improving silvicultural operations in Russia, but internationally acceptable CSR practice will only be achieved if this is combined with mod-ern policies and the improvement of legislation and governance. Investment in silvicultural improvements is only reasonable where a responsible leaseholder has overall responsibil-ity for the complete forest management cycle."[376]

[376] Ptichnikov, Andrei & Park, John (2005): ibid.

Purbawiyatna & Simula (2008) summarize in a comparative study of the different forest certification schemes for ITTO:

> "Several large corporations have developed their own policies for acceptance of forest certification, some referring to individual schemes (often FSC only), some defining criteria that acceptable certification should comply with."[377]

The Rights and Resources Initiative (2008) states that

> "(…) expectations that companies will behave in socially responsible, transparent and accountable ways in forest management, processing and trade are fast becoming the norm in developed countries and will be increasingly required of their trading partners in the South. This transition began with independent certification and was picked up by the Forest Law Enforcement and Governance and other transparency initiatives."[378]

3.5.2 Example from Mitsubishi

Peter Asmus (2006)[379] describes the process of negotiations between environmentalists from Forest Trends and Rainforest Action Network with Mitsubishi Corporation, to accept responsibility for the tropical rainforest, even though the company is not directly destroying forests in the tropics, when producing outside of the tropical forest belts.

Ultimately Mitsubishi Corporation went through an internal process to advance its approach to timber supply selection. All timber and paper products from its operations are now FSC certified and the company is certified to ISO 14000. There is not yet adequate supply for the firm to fill all of its orders with FSC, but that is its first product choice for customers. Peter Asmus quotes James Brumm from Mitsubishi Corporation: "The biggest lesson I learned in 20/20 hindsight from these experiences is that there are certain things one cannot do. We at MC should have engaged in stakeholder engagement right up front."

[377] Purbawiyatna, Alan & Simula, Markku (2008): Comparability and acceptance of forest certification systems. Main Report. International tropical timber organization (ITTO). http://www.ardot.fi/Documents/Mainreport_Jan14.doc (as of June 2008)

[378] Rights and Resources Initiative (2008): Seeing People Through The Trees: Scaling Up Efforts to AdvanceRights and Address Poverty, Conflict and Climate Change. Washington DC: RR

[379] Asmus, Peter (2006): Strategy & Management: NGO engagement and partnerships - Ten lessons for corporations. Ethical Cooperation (31.July 2006) http://www.ethicalcorp.com/content.asp?ContentID=4412 (as of 22.June 2008)

3.5.3 Packaging the future – Tetra Pak and WWF's answer

The World Wildlife Fund's (WWF) "Climate Change Cooperation – Climate news for business" gives with Tetra Pak as an example for a positive culture of corporate responsibility[380]:

> "Tetra Pak has been firmly on board with the WWF since 2005, when it signed up to WWF's **Climate Saver's Programme**. The company pledged to reduce its emissions by 10% by 2010. Despite allegations of green-washing the previous year – which saw Tetra Pak UK thrown off the WWF's 95+ Group over a "misleading" ad that claimed that "because the trees we use are replaced by even more trees, when you choose cartons you're helping to grow more forests" – Tetra Pak has demonstrated commitment to forest stewardship, with a strong focus on the certification of its products. Currently, 80 percent of the wood fibers used to make Tetra Pak cartons have been chain of custody certified independent auditing body, (…). This means Tetra Pak can verify that the paperboard it uses can be traced back to suppliers who meet minimum forestry management standards and who are considered 'acceptable' according to definitions by the FSC and the WWF Global Forest and Trade Network (GFTN). Of this, 25 percent is FSC certified. To obtain FSC certification, the forest supplying the paperboard must be managed according to a set of criteria, including the protection of biodiversity and indigenous livelihoods, adherence to local and international laws and forest renewal to ISO standards."
>
> "It has taken us about 15 years to get to this stage of traceability," said Erika Mink, Tetra-Pak's Environmental Director for Europe. "We aim to have all of our paperboard 100 percent chain of custody certified by 2018, latest," she added. Environmental pressure groups, - here the WWF - say companies like Tetra Pak could be doing a lot more. "Tetra Pak needs to be more aggressive," said Gustafson. "They could be a real driver of change by saying they will only source from FSC certified forests," he said.[381]

[380] WWF and Tetrapak - taking steps together towards sustainability" http://www.climatechangecorp.com/content.asp?ContentID=5472 (as of 22.July 2008)
[381] ibid.

3.5.4 Gender is a major factor

Van Kooten, Nelson and Vertinsky (2005)[382] found that gender is a major factor explaining countries' proclivity to certify their forest practices - to protect the environment.

> "The likelihood that firms and forest owners will seek to certify their forest practices is significantly reduced if women have little or no effective voice in civil society. Our results appear to confirm observations in the literature (Rodda 1993[383]; Twarog 2001[384]) that women are most affected by the environment and therefore have a substantial stake in its protection. If they are not given a voice in matters related to the environment, there is less chance that it will be protected. This appears to be the case particularly with respect to forestry in developing countries, as indicated by the negative and highly statistical value of the estimated coefficients for this variable in the FSC and overall certification models."[385]

The area of certification impact on gender issues clearly needs more research. However FSC Principles and Criteria incorporate equity, which certainly encompasses an equitable gender balance. There are also elements which have more relevance for women than for men, for example the protection of subsistence rights in the forest (FSC Principle 2).

The Building and Woodworkers' Union BW International organized a two days seminar in September 2008 to address a looming information gap about the situation of women in forestry and to call attention to the challenges women face in the context of forestry work and how these issues impact on women's involvement and representation in the trade union movement. The press release from October 27th 2008 on the BW International web pages states:

> "Protection of rights for women in forestry and wood sectors is increasingly becoming a very complicated matter, as most workplaces are in remote often temporary locations where trade unions cannot reach the workers" recalls a participant working for a forestry

[382] Van Kooten, G.Cornelis; Nelson, Harry W. and Vertinsky, Ilan (2005): ibid.

[383] Rodda, A., 1993. Women and the Environment. Zed Books, London. Cited in: van Kooten, G.Cornelis; Nelson, Harry W. & Vertinsky, Ilan (2005): Certification of sustainable forest management practices: a global perspective on why countries certify. Forest Policy and Economics 7 (2005) 857– 867, Elsevier

[384] Twarog Sophia (2001): Trade, sustainable development and gender in the forestry sector. Trade, Environment and Development Section Division on International Trade in Goods and Services, and Commodities(UNCTAD). http://www.unctad.org/trade_env/test1/publications/twarog1.pdf (as of June 2008)

[385] Van Kooten, G.Cornelis; Nelson, Harry W. & Vertinsky, Ilan (2005): ibid.

company in Zimbabwe were most sawmilling under taken contractors in “Bush Mills” (mills located in remote and isolated places).”

The following key areas for follow-up were discussed during the seminar:

- “To use forest certification as a tool to ensure that women’s voices are heard in the participatory processes that form the basis for forest certification. The effective participation of women in forest certification discussions and processes will ensure them space to air their concerns on working and living concerns.
- Promotion of skills development opportunities for women in wood and forestry would contribute to better, quality jobs and will contribute to alleviating poverty.
- Social dialogue on gender dimensions of decent work needs to be enhanced and measures to ensure women reconcile work with family responsibilities without compromising other rights to fair wages, opportunities for promotion and training, be explored.” (Building and Woodworkers’ Union BW International 2008)[386]

3.5.5 Contribution to biodiversity conservation

Oliver Balch (2008) describes that he feels that

> “Developers are winning the fight with conservationists over the future of the world’s largest standing rainforest. (…) Industry groups concur, pointing out the success of business-led sustainable forestry initiatives over recent years. Unsustainable or illegal logging, for example, has been widely identified as a key cause of deforestation in the Amazon. In an attempt to reverse this trend, signatories to the Forest Stewardship Council, the international conservation group, guarantee that only around five trees per 10,000 m2 of forest are logged. Today, Brazil has 215 FSC-certified timber companies, more than the rest of South America put together.”[387]

[386] Building and Woodworkers’ Union BW International: Women demand decent work in wood and forestry in Africa http://www.bwint.org/default.asp?index=1885&Language=EN (as of July 2008)

[387] Balch, Oliver (2008): Latin America: Brazil – Losing the battle in the Amazon. Ethical Cooperation (14 July 2008). http://www.ethicalcorp.com/content.asp?ContentID=6002 (as of July 2008)

Price Waterhouse Coopers' analysis of "Sustainable Investments for Conservation" (2007)[388] on behalf of WWF Germany is based on three case studies, of which one is the FSC-certified company Precious Woods in Brazil, the other two look at ecotourism. The aim of the study is to inform potential investors and opinion multipliers about the opportunity of investing in nature conservation. The analysis concludes that privately organized and financed self-supporting projects can make a valuable contribution to nature conservation and the preservation of biological diversity. It recommends government to set up programs for assisting or co-financing such sustainable investments.

Ebeling & Yasue (2008)[389], building on experiences gathered in Bolivia and Ecuador, summarize:

> "Overall, conservationists need to have realistic expectations about the potential of forest certification and other market-based strategies to improve management practices on the ground. Certification is clearly no silver bullet, but could be a valuable tool in a comprehensive conservation strategy for tropical forests, which would also include enhanced environmental law enforcement, effectively implemented and ecologically-minded land-use planning, expanded protected area networks, and agricultural policy reforms. Importantly, a comprehensive forest conservation strategy must not be limited to the forestry sector itself but instead address all drivers of deforestation and forest degradation."

For the future of forest certification and conservation in Ebeling's focus countries Bolivia and Ecuador he foresees

> "(…) in sum, Bolivia disposes over an exemplary forestry law which is very compatible with certification requirements. Enforcement of the law varies for different segments of producers but is credible for the majority of timber production. On the other hand, the quality of enforcement, which is currently high compared to many other tropical countries, is threatened. The controlling agency still enjoys a "credibility bonus" from earlier years." However,

[388] PricewaterhouseCoopers (2007): Sustainable Investments for conservation – The business case for biodiversity. A study on behalf of the WWF. Executive Summary. WWF Germany http://www.pwc.com/extweb/pwcpublications.nsf/docid/4FE9CE9D78BFBE21852572890054ECC0 (as of June 2008)

[389] Ebeling, Joachim & Yasue, Mai (2008): The effectiveness of market-based conservation in the tropics: Forest certification in Ecuador and Bolivia. Journal of Environmental Management (2008) doi:10.1016/j.jenvman.2008.05.003

"if the developments continue like this, then (….) we will, in some years, return to conditions as they existed before the reform, which would resembled the current situation in Ecuador." [390]

[390] Ebeling & Yasue (2008): ibid.

4. BEYOND FSC

This chapter describes the demand for FSC's involvement and FSC's potentials to influence positively carbon credit markets and combat the illegal timber trade. It also shows the differences between FSC and those forest management certification schemes that were developed following FSC's creation.

4.1 Certification of environmental services

The Katoomba Group (2008) defines:

> "Environmental markets, ecosystem markets and Payments for Ecosystem Services (PES) are all terms that are used to refer to the entire suite of economic tools used to reward the conservation of ecosystem services. Confusingly, each of these terms also refers to a more specific subset of these tools. People use the term environmental markets pretty loosely to mean all markets that have been set up to fuel environmental improvements of some kind. Markets for renewable energy, sulfur dioxide emissions reductions and organic food might all be termed environmental markets. Ecosystem markets is a slightly narrower term that usually refers only to those markets that trade permits or credits related to ecosystem services. The trouble comes when the moniker "environmental market" or "ecosystem market" is used to describe conservation payments that aren't really part of a "market."" [391]

The FSC Global Strategy (2007) outlines that "The system of FSC standards and the infrastructure that has been created is also now demanded in other settings, where 'textbook' solutions are lacking, such as in the new markets for carbon sequestration, ecosystem services, biofuels, and green energy. And FSC continues to play a vital role in under-resourced forest regions around the world." Therefore FSC will "Strengthen existing partnerships as a key mechanism in implementing the FSC Strategy and develop new partnerships that support and complement responsible forest management (e.g. carbon credits, commercialization of ecosystem services, sustainable tourism and eco-tourism, sustainable biomass energy). So far

[391] The Katoomba Group, http://www.ecosystemmarketplace.com/pages/static/about.conservation_backgrounder.php (as of August 2008)

only very few FSC certificates have been issued for the purpose of PES only, and FSC just started to get more actively engaged in these partnerships. FSC and partner organizations see an important role for FSC in this area.

On “The Katoomba Group’s Ecosystems Marketplace” FSC as such is already listed under “Other Environmental Markets or Payment Schemes”.

The German development aid Agency GTZ (2005)[392] states that

> “Because the value of the forest to sustainable development lies specifically in the variety of products, forest certification should cover all products and functions. Specifically, forest certification should also include certification of CO2 binding, water storage and purification as well as certification of nature reserves.”

Climate change issues

FSC is not designed for forest carbon projects per se, but it includes several elements which are basic for meaningful carbon offset projects and unique compared to other standards. Currently (2008) FSC FM certification is used as the minimum threshold by some of the FSC ac-credited certification bodies to add on top verification of carbon credits and to enables the certificate holders’ access to Carbon Credit Markets. The FSC AC is developing a position paper on certification of carbon offsets.

Through its Green Carbon Initiative, WWF is deeply involved in the process of developing a credible and comprehensive standard system for forest carbon projects.

> “(…) While WWF recognizes the value of these existing systems, we find that no single existing standard covers all the necessary aspects of a comprehensive standard system for forest carbon from project design to validation, registration and ongoing monitoring. WWF has therefore adopted a ‘meta-standard’ approach drawing on best practice guidance provided by these existing standards and methodologies (..). WWF is promoting the application of a meta-standard framework (MSF) for forest carbon – i.e. a comprehensive and

[392] Burger, Dietrich; Hess, Jürgen; Lang, Barbara (Eds.): Forest Certification: An innovative instrument in the service of sustainable development? Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Eschborn, Germany

> credible ‘umbrella’ framework that includes the best features of the key existing standards. (…).”[393]

In the “Green Carbon Guideline” WWF explains and compares the standards and methodologies already available that can be used as ‘building blocks’ for the above mentioned MSF: The Voluntary Carbon Standard (VCS), the Climate, Community and Biodiversity (CCB) standards, the Gold Standard (GS) and the FSC certification. In this context WWF reconfirms

> “Forest Stewardship Council (FSC) certification. (…) FSC certification is one of several such systems for inspecting forest management and tracking timber and paper through a ‘chain of custody’ to ensure that the products have come from sustainably managed forests. The FSC certification system is currently the only one that meets all of WWF’s criteria for environmental, social and economic sustainability. Although not designed for forest carbon projects per se, the FSC certification system for production forests is included here as it is the most widely applied and credible system for ensuring responsible forest management and embodies many of the key concepts and principles of relevance to the MSF. While the FSC standard is applicable mainly to existing operations, it does provide up-front guidance on how social and environmental is-sues are to be addressed in preparing projects/concessions for certification.”[394]

WWF continues in pointing out guidance and gaps in addressing project implementation issues

> “Social and environmental performance. The Gold Standard [initiated by WWF – the editor] requires verification of social and environmental performance as set out in the monitoring plan, and issuance of credits can be delayed in case there is need for corrective action; however these processes have not been designed for forest carbon projects. CCB standard requires verification of social and environmental performance at most five years after validation; however the guidelines for this verification are still under development. Standards on social and environmental performance are available from the FSC system, which has built up long-standing experience in the evaluation of forest management performance. (However, FSC certification is applicable only for operations which include forest harvesting in one form or another [this is not correct - the editor]. For other project types, such as forest protection or REDD, no such standards are available. The FSC system pro-

[393] WWF International; Rietbergen-McCracken, Jennifer (Ed) (2008): Green Carbon Guideline. http://assets.panda.org/downloads/green_carbon_guidebook.pdf (as of August 2008)

[394] WWF International; Rietbergen-McCracken, Jennifer (Ed) (2008): ibid.

vides the best available guidance on procedures and requirements for assessing and certifying the social and environ-mental performance of commercial forest operations.

Verification: The same applies here. For the verification of social and environmental performance, the Gold Standard and the FSC certification and accreditation procedures could be used as the basis for a credible surveillance mechanism for all forest carbon projects that include some form of extraction. For other project types, appropriate surveillance mechanisms still have to be developed. (…)"

WWF explains and compares three standards tailored for carbon offset projects and the FSC,

"as it is the most widely applied and credible system for ensuring responsible forest management and embodies many of the key concepts and principles of relevance to the MSF". WWF reconfirms that "FSC certification is one of several such systems for inspecting forest management and tracking timber and paper through a 'chain of custody' to ensure that the products have come from sustainably managed forests. The FSC certification system is currently the only one that meets all of WWF's criteria for environmental, social and economic sustainability."[395]

Clean Development Mechanism

Clean Development Mechanism (CDM) investments can include carbon sequestration projects in developing countries. However, guidelines for achieving the socio-economic and environmental objectives of the CDM, and other concerns with sinks projects, have yet to be elaborated. Susan Subak (2002)[396] evaluated the FSC Criteria and indicators of US in light of concerns for guiding afforestation and reforestation projects in the CDM. She found that

"the FSC criteria would help to meet some of the objectives of the Kyoto Protocol, including provisions to reduce the risk of premature carbon loss, and features that could somewhat lessen leakage of emissions outside the project area. Existing FSC monitoring and verification procedures provide some, but insufficient, overlap with expected requirements for measuring carbon stock changes. FSC principles and criteria articulate stringent guidelines for meeting environmental and social goals that reflect years of negotiations between environmental, timber, human rights and labor interests."

[395] WWF International; Rietbergen-McCracken, Jennifer (Ed) (2008): ibid.

[396] Subak, Susan (2002): Forest certification eligibility as a screen for CDM sinks projects. Climate Policy 2 (2002) 335–351. Elsevier.

"The FSC process reflects years of dialogue among forest managers, consumers, environmentalists and other interested parties and embodies a negotiated definition of sustainable forest management. It would be difficult to weaken the FSC standards without extensive negotiations and the requirements cannot be easily scaled down by removing an FSC principle or two. Given that CDM credits for sinks are currently limited to offsetting only a small proportion of industrialized countries' emissions, FSC principles and criteria offer a selective basis for including sinks credits. The alternative to requiring a quality screen - providing incentives instead for only fast-growing plantations - would mean that many of the environmental and social objections to sinks projects may be realized. Subsidizing large areas of uncertified plantations would mean that less land would be available for new, sustainably managed plantations or for agricultural purposes, and could have the perverse result of making quality plantations less competitive. In contrast, requiring that projects meet FSC principles as an eligibility threshold for CDM projects would provide a boost to achieving environmental and social goals worldwide. In theory, FSC principles still allow for considerable carbon sequestration because the majority of the area can be devoted to fast-growing species as long as at least a quarter is left open or planted with other species. And FSC management plans include many components that help ensure that forests actually last - an important concern for carbon sequestration. FSC criteria, as currently stated, do not yet provide an overarching approach for addressing the challenges of non-permanence, leakage and uncertain-ties in sequestration projects. (…) The main contribution of the FSC standards and processes is that it has demonstrated that consensus-building towards definitions of sustainability in forest management that are specific at the local level yet consistent across countries - is possible."[397]

[397] Subak, Susan (2002): ibid.

4.2 Combating the illegal timber trade

A report by SGS Global Trade Solutions[398], written for the World Bank/WWF Alliance states:

> "Certification schemes such as FSC, PEFC or ISO 14000 […] may not be the most appropriate and comprehensive solutions to the illegal logging problem […]. These 'quality assurance' systems have not been designed as tools to enforce the law and to be made compulsory. They are not based on regular and unannounced audits and on continuous sampling and they rely on paper-based chain-of-custody systems that are possible to forge. Given this, certification schemes do not provide the level of confidence that is likely to be required to demonstrate legal origin (…) By design, certification cannot be used as a detection tool: although 'respect of all national and local laws and administrative requirements … and of all the provisions of binding international agreements…' is part of FSC principles 1.1 to 1.5, certification audits do not involve probing, in-depth investigation for fraud. Legality is not the primary concern: assessors are not policemen. Certification is a quality assurance approach and demands trust and goodwill. Initial assessments and surveillance visits are limited in time, frequency and area. Current chain-of-custody requirements and audit systems are therefore vulnerable to abuse."[399]

However, FSC certification requires compliance on legality, both in respect of national laws and international conventions such as ILO, CITES.

Also Donald Schepers (2008)[400] requests that: "the FSC needs the coercive power of governments to tamp down the illegal trading of forestry products. Private governance schemes alone are insufficient." demonstrates the high expectations he sets in FSC. The editor agrees that FSC can be by far more effective acting within supportive policy and regulatory frameworks with democratic space for civil society participation also in providing incentives against illegal logging.

[398] SGS Global Trade Solutions (2003): "Legal Origin of Timber as a Step Towards Sustainable Forest Management", Final Draft, Sept 2002 – June 2003. World Bank / WWF Alliance.

[399] SGS Global Trade Solutions (2003): ibid.

[400] Schepers, Donald H. (2008): Challenges to the legitimacy at the FSC. Baruch College Zicklin School of Business. http://www.isbee.org/index.php?option=com_docman&task=doc_download&gid=205&Itemid=39 (as of July 2008)

FERN (2004) in their comparison of eight different certification schemes find about the link between avoiding illegal logging and voluntary forest certification schemes:

> "Many link discussions on forest certification with the verification of legality, necessary to identify illegally sourced timber. (…) forest certification schemes are not ideal tools to address illegal logging practices, although some schemes (FSC and CSA) are notably better in identifying them than others. Even these schemes are not based sufficiently on the unannounced audits, continuous sampling, and in depth chain of custody analyses that are seen as essential for verification of legality in cases where fraud could be a problem. Furthermore, certification schemes do not address – or adequately address – the legality of the non-certified timber supplies. While most certification schemes are attempting to address the legality of non-certified timber supplies procured and purveyed by certified companies, the procedures are still largely inadequate. It is therefore advisable to de-link the discussions on verification of legality from the qualitative auditing of forest management practices (p.35)." [401]

Hirschberger's study (2005)[402] of certification in Estonia states in the summary:

> "Illegal logging is one of the main problems in the Estonian forest sector. FSC certification cannot eliminate illegal logging, but the ability to trace (…) millions cubic meters of certified timber from its origin will make illegal harvesting activities harder. It should be noted that even illegally logged timber, which is recovered by the legal owner, cannot be sold as FSC certified."

Not surprisingly, Hirschberger drew the same conclusion for the Latvian CARs studied.

Guillery et al (2007) in their case studies for the FSC evaluation (see separate publication) gives another example where FSC certification dried up illegal timber trade: In Vietnam joint efforts of retailers and manufacturer (supported by WWF and Tropical Forest Trust) were successful at cut-ting out an illegal supply of timber and improving social conditions in a large sector of the forest products marketplace.

[401] FERN (2004): Footprints in the Forest: Current Practice and Future Challenges in Forest Certification. FERN, UK. www.fern.org/pubs/reports/footprints.pdf (as of June 2008)

[402] Hirschberger, Peter (2005): The Effects of FSC-certification in Estonia: an analysis of CARs. WWF Forest Program. 18 p. http://www.panda.org/downloads/forests/finalanalysisestonia.pdf (as of June 2008)

FSC responded to this challenge of illegal timber trade in developing and implementing policies for a controlled wood standard. However, with the introduction of the FSC Controlled Wood Standard in 2008, FSC now requires that non-certified material mixed with FSC certified timber come from legal sources. A first controlled wood certificate was granted in mid 2008.

4.3 Comparing certification systems

It was highlighted above that several forest certification schemes were developed in response of the success of FSC. The schemes are competing with each other on the market; therefore several researchers are analyzing and comparing the different characteristics and outcomes of these schemes.

4.3.1 How academic and international organizations see the differences

Cashore, Rayner and Glück (2005)[403] describe how the existence of FSC had impact on the creation of other forest management certification scheme, which are tools for forest sector self-regulation:

> "The forest industry and private forest owners have responded to FSC by developing competing certification programs, usually with the implicit, if not explicit, support of governmental forestry and resource agencies. While some of these programs were originally little more than transparent attempts to resist the influence of the FSC, they have evolved into important forms of forest sector self-regulation and created new programs to compete directly with the FSC. Examples include the American Forest and Paper Association's Sus-

[403] Glück, Peter; Rayner, Jeremy & Cashore, Benjamin (2005): Change in the Governance of Forest Resources. In: Mery, Gerardo; Alfaro, Rene; Kanninen, Markku & Labovikov, Maxim (eds.) (2005): Forests in the Global Balance – Changing Paradigms. IUFRO World Series, volume 17. Helsinki: IUFRO, 2005, 51-74. http://www.yale.edu/forestcertification/pdfs/2005/2005%20-%20Change%20in%20the%20Governance%20of%20Forest%20Resources.pdf (as of June 2008)

tainable Forestry Initiative (SFI) program, which was converted from a voluntary code of practices pro-gram into one that developed “on the ground” standards and a third party auditing process to assess whether companies were in compliance. Often NSMD (non-state market driven governance system) alternatives, including the Canadian Standards Association SFM Program in Canada, Indonesia’s LEI Program, the Finnish Forest Certification Program, Brazil’s CEFLOR, and Malaysia’s Tropical Timber Council (MTTC) program, were developed with the assistance of the very governmental agencies the FSC consciously excluded. Other programs, such as Program for Endorsement of Forest Certification governance systems (PEFC), originally created by European forest owners as a response to the FSC, serve as “umbrella”, “mutual recognition” program for national initiatives that have been developed to compete, or pre-empt, the FSC model. National initiatives can take on the PEFC name directly or they can be mutually recognized, as occurred in November 2004 with the Australian Forestry Standards (AFS), after the industry developed its own standard. From the beginning, most of these alternative programs relied more heavily on process rather than performance standards (…).”[404]

Ruth Nussbaum and Markku Simula (2004)[405] analyzed for “The Forest Dialogue” four forest certification assessment frameworks which themselves analyze and compare different forest certification schemes:

a Confederation of European Paper Industry (CEPI) Matrix;

b International Forest Industry Roundtable (IFIR) Framework;

c World Bank - WWF Alliance Questionnaire for Assessing the Comprehensiveness of Certification Schemes (QACC) and;

d (FERN) report 'Footprints in the Forest’.

The goal of the study was to reflect on the impacts of forest certification over the last 10+ years and to compare and contrast several prominent certification assessment frame-works that had recently been developed by individual stakeholders. The analysis did not differentiate

[404] Glück, Peter; Rayner, Jeremy & Cashore, Benjamin (2005): ibid.

[405] Nussbaum, Ruth & Simula, Markku (2004): Forest Certification. A Review of Impacts and Assessment Frameworks. Research Paper September 2004 A TFD Publication. The Forests Dialogue. Yale University School of Forestry & Environmental Studies. http://www.theforestsdialogue.org (as of June 2008)

impacts of different certification systems as the focus was on the instrument as a whole. They found that

> "It is, however, apparent that:
>
> - Different certification systems seem to address different potential needs of different users.
> - Different schemes are almost certainly delivering different impacts, so that any further analysis needs to establish the degree to which any particular impact is generic or scheme specific.
> - There remain concerns about the impacts and equity of forest certification on different groups and particularly Non-Industrial private forest owners and other small or community enterprises.
>
> However, there is very limited data on what the actual impacts have been to date. Work in this area is needed to inform the equitable further development of certification schemes." (Nussbaum & Simula 2004).

The story of FSC, ISO, PEFC

Reporting to the International Institute for Environment and Development, Stephen Bass et al (2001)[406] tell

> "the story of FSC, ISO, PEFC and the two dozen or so national certification schemes (…)". They explain that "Forest certification' is not one single operation, but a mix of several mechanical and political functions. Most schemes have been influenced by FSC in terms of forestry standards and by ISO in terms of certification procedures. The rise in the number of schemes being developed is indicative of certification's perceived usefulness and value – but also the need to tailor schemes to suit particular producers and markets. Where there is competition and contention, it is invariably over the perceived dominance or exclusion of certain parties, or over the lack of comparability (or different degrees of ambition or challenge) between the forestry standards."

[406] Bass, Stephen; Thornber, Kristi; Markopoulos, Matthew; Roberts, Sarah & Grieg-Gran, Maryanne (2001): Certification's Impacts on Forests, Stakeholders and Supply Chains. International Institute for Environment and Development, London. http://www.iied.org/pubs/pdfs/9013IIED.pdf (as of July 2008)

Report to the International Timber Trade Organization

Purbawiyatna & Simula (2008) summarize in a comparative study of the different forest certification schemes for ITTO:

> "There is one globally operating certification scheme, FSC and a large number of national schemes, presently found in 32 countries of which four in developing countries. (…) Almost two thirds (65%) of the world's certified forests carry a PEFC-certificate (in 22 countries) and FSC's share is 28% (in 78 countries), the rest being under other national systems. Most of the certified forests in the tropics are FSC-certified. (…) The total number of chain-of custody (CoC) certificates is more than 9,000 (June 2007) which is growing steadily. FSC is the market leader with more than 6,000 CoC certificates while the remaining 3,000 are from PEFC-recognized systems."[407]

Meta-analysis of FSC's acceptance on the German paper market

As part of his research paper on current paper markets in Germany, Bihlmaier (2008)[408] analyzed a number of research papers analyzing the strength and credibility of FSC and PEFC. He analyzed four studies conducted by universities[409], and seven studies conducted by researchers for other institutes[410], including the joint FSC-PEFC synopsis (2002). He found that

[407] Purbawiyatna, Alan & Simula, Markku (2008): Comparability and acceptance of forest certification systems. Main Report. International tropical timber organization (ITTO). http://www.ardot.fi/Documents/Mainreport_Jan14.doc (as of June 2008)

[408] Bihlmaier, Christian Peter (2008): The current market development of certified paper - Special emphasis on German publishers. Final thesis Tropical Forestry (BSc) and Forest Economics (Dipl. Ing. FH) Larenstein University of Professional Education.

[409] University papers analyzed by Bihlmaier 2008: Cashore, Auld, & Newsom (2004); Cashore, Gale, Meidinger, & Newsom (2006); Gullison (2003); Visseren-Hamakers & Glasbergen (2006);

[410] Other institutes research papers analyzed by Bihlmaier 2008:

- CEPI (2004): Forest Certification Matrix. Oliver Rupert. 2004. Confederation of European Paper Industries, Brussels, Belgium

- Edelman, Richard (2003): The Fourth Edelman Survey on Trust & Credibility. World Economic Forum, Davos, Switzerland, 23 January 2003

- FSC & PEFC (2002): Gemeinsame Synopse der Zertifizierungssysteme von Forest Stewardship Council A.C. (FSC) und Pan-European Forest Certification (PEFC) Erstellt von: FSC Arbeitsgruppe Deutschland e.V. PEFC Deutschland e.V. Stand: 21.05.02

> "All studies by universities that were analyzed for this thesis agree that FSC is more ambitious and stringent compared to PEFC. Studies conducted by other institutions see FSC as the more ambitious and credible standard in the field of forest certification. Criticism mainly comes from forest owners and forest industry-related appraisals, which denounce that the more stringent rules of FSC lead to higher costs and to more intensive management practices. This would make it harder for small forest owners to join FSC. One big advantage of FSC is the support by NGOs. This means a great benefit for FSC users with regard to risk management, reputation and marketing possibilities. The use of FSC is especially a good opportunity for well-known companies or famous brands to present their environmental and social activities in a 'green light', and to show that this is acknowledged by well-known environmental and social NGOs.
>
> It seems that stakeholders of FSC are more interested in pointing out the advantages of their system, while PEFC stakeholders like to emphasize points that are similar between FSC and PEFC. (…). It is doubtless that PEFC is often easier and cheaper to implement and that FSC usually means higher costs and efforts for the forest tenants, but it also offers the security of more stringent controls and criteria, as well as the support by NGOs."

Additional interviews with key stakeholders in the German paper sector allowed Bihlmaier to summarize that

> "FSC is the preferred system for publishers and companies regarding marketing possibilities and credibility. The fact that most of the paper available at present could be certified as PEFC and the use of a label on a product is justified but isn't done might indicate that PEFC isn't of much interest for the paper market. The marketing value of PEFC is regarded as very low, and it is therefore not attractive for publishers and companies to present their use of PEFC in public. Concerning the certification standards of PEFC and FSC,

- Kern, Kristine; Kissling-Näf, Ingrid; Landmann, Ute; Mauch, Corine in collaboration with Löffelsend, Tina (2001): Policy Convergence and Policy Diffusion by Governmental and Non-Governmental Institutions. An Int. Comparison of Eco-labeling Systems. Berlin, Germany, Discussion Paper FS II 01 -305

- Lang Barbara (2006): Experiences with voluntary standards initiatives and related multi-stakeholder dialogues. Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, GTZ

- Sprang, Peter; Meyer-Ohlendorf, Nils; Tarasofsky, Richard G.; Mechel, Friederike (2006): Public Procurement and Forest Certification: Assessment of the Implications for Policy, Law and Int. Trade. Comparing major certification schemes: FSC, PEFC, CSA, MTCC and SFI. Berlin, Germany, Ecologic

- Thoroe, C. (2000): Abschlussbericht über die Begleitung und Begutachtung des Modellprojektes "Zertifizierung nachhaltiger Forstwirtschaft in Nordrhein-Westfalen im Raum Ostwestfalen-Lippe" durchgeführt i.A. des Min. für Umwelt, Raumordnung und Landwirtschaft (MURL). Inst. für Ökonomie der Bundesforschungsanstalt für Forst- und Holzwirtschaft, Hamburg, Dezember 2000

> many players argue that the Ger-man standards of PEFC and FSC are both applicable to ensure good forest management on national level, but on international level all players see no alternative to FSC, to its internationally constant high standard."[411]

Implications for policy, law and international trade

Mechel, Meyer-Ohlendorf, Sprang & Tarasofsky (2006)[412] compare major certification schemes (FSC, PEFC, CSA, MTCC and SFI) to assess implications of public procurement and forest certification for policy, law and international trade. On FSC the report mentions that it has - in contrast with other systems - more checks and balances in place to keep inconsistencies at a minimum while providing clear assurance of performance and evidence of its impact on forest management and that FSC carries out more audits, has a greater range and quantity of products available, the FSC logo has a higher level of consumer recognition and that FSC remains the only provider of a worldwide forest certification system based on an uniform set of principles and criteria.

> "Through the review of publicly available Corrective Action Requests (CARs) the FSC has the ability to demonstrate measurable performance, and in most cases, a significant improvement of forest management is apparent. FSC differentiates itself through the chain of custody (CoC) and the chosen claim of well managed forestry. FSC has developed new options for companies which mix FSC and non-FSC material, including a system and standard for the 'control' of the non-FSC part (shall not include timber which is illegally harvested, genetically modified, from high conservation value forest or from areas where the rights of indigenous people are violated). Finally, FSC is also different from other schemes in respect to the range and quantity of products available with a FSC logo, which has the highest level of consumer recognition, compared to other forest certification schemes." [413]

[411] Bihlmaier, Christian Peter (2008): The current market development of certified paper - Special emphasis on German publishers. Final thesis Tropical Forestry (BSc) and Forest Economics (Dipl. Ing. FH) Larenstein University of Professional Education.

[412] Mechel, Friederike; Meyer-Ohlendorf, Nils; Sprang, Peter & Tarasofsky, Richard G. (2006): Public Procurement and Forest Certification: Assessing the Implications for Policy, Law and International Trade Comparing major certification schemes: FSC, PEFC, CSA, MTCC and SFI. "Ecologic"-Report in Cooperation with Chatham House. http://www.ecologic.de/download/projekte/900-949/933/933_final_report.pdf (as of June 2008)

[413] Mechel; Meyer-Ohlendorf; Sprang & Tarasofsky (2006): ibid.

From the lawyer's perspective

Eckard Rehbinder, Professor of Economic Law, Environmental Law and Comparative Law at a University in Frankfurt, Germany, describes the major differences between FSC and PEFC from his perspective as follows[414]:

> "Although there are quite a number of national forest certification systems, the reality of forest certification is characterized by the dualism - coexistence and competition - of two major international forest certification systems, the systems operated internationally by the FSC and the PEFC, the latter of which is limited to Europe but has, since its establishment in 1998, surpassed the FSC system in terms of the forest area covered. There are differences between the two systems relating to the object of certification, the representation of groups of civil society in the bodies that run the system and the degree of internationality (Bass and Simula 1999; Rametsteiner et al. 1998; Sprang 2001). One essential difference between the two systems is in the kind of certification. Whereas in the FSC system, in principle every single forest enterprise is assessed, the PEFC awards eco-labels for whole regions, and the assessment is limited to taking samples. The criteria applied by the FSC are more complex in that they are not limited to the environment but cover the whole complex of sustainability, including social and economic aspects of forest management. The FSC is an NGO in which environmental, social, and economic interests from the north (developed countries) and the south (developing countries) are represented. Representatives of economic interests include not only forest owners but also representatives from wood processing and trade. The decision-making power of the organization is divided into three chambers - economy, environment, and social affairs, with northern and southern sub chambers - which provides NGOs with a high degree of influence. By contrast, the PEFC system is dominated by forest owners and the paper industry; forest owners have a clear majority in the national decision-making bodies. In addition to their minority position, the participation of noneconomic interests is provided at a relatively late stage of the process. There is also indirect governmental participation, because, in many European countries,

[414] Rehbinder, Eckard (2003): Forest Certification and Environmental Law In: Meidinger, E., C. Elliott, and G. Oesten (eds.) Social and political dimensions of forest certification. Remagen-Oberwinter, Germany: Dr. Kessel. pp.63-82.

the state and the municipalities are major forest owners. Finally, the FSC is an international body that has its own control facilities. (…)"[415]

The FSC is the most stringent and inclusive

Ingrid Visseren-Hamakers' and Pieter Glasbergen's paper on "Partnerships in forest governance" (2006)[416], which describes five major forest certification schemes, summarizes that:

"The effectiveness of the different certification schemes also differs. The FSC is the most stringent and inclusive. The FSC clearly specifies the level of performance or results that must be achieved in a forest; it is a performance based system. It also addresses issues that the others do not." [NB.: FSC also includes system-based elements, notably in Principle 7 – the editor.]

What is the future of the different schemes – in Canada

Analyzing the development and establishment competing forest certification schemes in Canada, Cashore et al (2007)[417] ask

"(…) what is the future of NSMD (non state market driven) governance as an entrenched system of private authority that simultaneously enjoys support from firms and addresses global forest degradation? The answer, we suspect, rests, in part, on where the environmental activists view forest certification's biggest impact. For example, do supporters see the FSC as primarily useful for influencing a country's domestic forestry debates, or more important for its indirect effects, as a lever to improve forest practices elsewhere? That is, it matters very much in the early days of NSMD "institutionalization" whether certification is used as a baseline for improving forest practices in some of the most critically sensitive,

[415] Rehbinder, Eckard (2003): Forest Certification and Environmental Law In: Meidinger, E., C. Elliott, and G. Oesten (eds.) Social and political dimensions of forest certification. Remagen-Oberwinter, Germany: Dr. Kessel. pp.63-82.

[416] Visseren-Hamakers, Ingrid J. & Glasbergen, Pieter (2006): Partnerships in forest governance**.** (Utrecht University**,** Copernicus Inst. for Sust. Development and Innovation) Global Environmental Change. Elsevier doi:10.1016/j.gloenvcha.2006.11.003, http://www.whyfsc.com/uploads/universiteit_utrecht.pdf (as of June 2008)

[417] Cashore, Benjamin; Auld, Graeme; Lawson, James & Newsom, Deanna (2007): The Future of Non-State Authority on Canadian Staples Industries: Assessing the Emergence of Forest Certification. http://www.policyandsociety.org/archive/vol26no1/vol26no1_cashore_auld_lawson_newsom.pdf (as of June 2008)

yet under-regulated forests, such as in the tropics, or as a gold standard that few firms operating anywhere would actually be able to meet. In the former case, we would expect, and as is consistent with the empirical record in Canada, that those firms that are relatively highly regulated will support FSC certification, in the hopes that their endorsement might pressure their less regulated competitors to improve their forestry practices. In the latter case, we would expect FSC certification to remain in a "niche" phase, with widespread support occurring through industry initiated alternative programs." [418]

ISO - FSC

"Technically, ISO certify management systems and not forests, and as such they do not enable product 'labeling'. It is probably for this reason that ISO implementation is greater in companies supplying predominantly to the pulp and paper sector, whilst companies supplying wood timber opt for performance-based systems, such as the FSC. For example, all SAPPI's plantations in South Africa are ISO-certified, but only those supplying sawn-logs are FSC-certified" (von Maltitz 2000)[419].

4.3.2 How the environmental NGOs' see the differences

Why the PEFC, SFI and CSA are not credible forest certification systems

Already in May 2001 the Joint NGO statement by FERN "**Why the PEFC, SFI and CSA are not credible forest certification systems"** was signed by most environmental and social NGOs active in the field of forest certification. It says that:

"While the PEFC, CSA and SFI incorporate some of the above features, only FSC delivers on every important component of a credible forest management certification system. Consequently, we consider the FSC to be the only available framework that meets the basic requirements outlined above. The FSC is therefore the only credible forest certification

[418] Cashore; Auld; Lawson & Newsom (2007): ibid.

[419] Von Maltilz, G. (2000) Draft: The impacts of the ISO 14000 management system on Sustainable Forest Management in South Africa. Division of Environmental, Water and Forest Technology, CSIR, Pretoria, SA. (in Coventry, Peter (2001): Forest Certification and Genetically Engineered Trees: Will the two ever be compatible? O.F.I. Occasional Papers No. 53 http://www.plants.ox.ac.uk/ofi/pubs/OP53.pdf (as of June 2008)

system that we can recommend to consumers or promote among forest managers, policy makers and the public."[420]

FERN: Footprints in the Forest

The "Forests and the European Union Resource Network" FERN, created in 1995 to keep track of the EU's involvement in forests and co-ordinate NGO activities at the European level, issued in 2004 a study assessing eight forest certification schemes (an update of FERN's 2001 report Behind the Logo: An environmental and social assessment of forest certification schemes). Because FERN speaks for a significant number of the dominant environmental NGOs and covering different aspects of forest certification, it is quoted here in detail:

"Five of these schemes are national schemes (Brazil, Malaysia, Chile, Canada and Australia), and a sixth is the US-based SFI scheme, which certifies in the US and in Canada. The remaining two, the PEFC and the FSC, are different animals as they are programs that endorse national certification schemes."[421]

The conclusion of FERN's study are:

"Despite the discrepancy that a forest certification scheme that is not based on minimum performance standards is unsuitable for a labeled product, most certification schemes researched in this report have standards that mainly consist of system-based elements. They do not have clear minimum performance thresholds for forest management. Such schemes include MTCC, CER-FLOR, SFI, CSA, AFS, Certfor, and most European PEFC schemes. By contrast, the FSC national standards are all performance-based. Furthermore, some standards (SFI and CSA) allow an individual forestry company to customize the standard against which it will be certified. This means that the standard of these schemes varies on a case-by-case basis, rather than being applied in a consistent and replicable manner. (…)"

"Six of the forest certification schemes examined in this report – SFI, PEFC, MTTC, CER-FLOR, AFS and Certfor – are based on national forest standards, but lack the basic principle emphasized here that a forest certification standard can only be developed with the full

[420] Joint NGO Statement (2001): Why the PEFC, SFI and CSA are not Credible Forest Certification Systems: 21 May. DGVIII of the European Commission. European Union Forest Resource Network. http://www.fern.org/pubs/ngostats/whypefc.pdf (as of June 2008)

[421] FERN (2004): Footprints in the Forest: Current Practice and Future Challenges in Forest Certification. FERN, UK http://www.fern.org/pubs/reports/footprints.pdf (as of June 2008)

participation of all stakeholders. In each of these certification schemes, forestry industry interests have dominated the standard-setting process. In the case of CSA the national standard-setting process was not unbalanced, but the development of the actual standard used for certification (i.e. the indicators and targets against which performance is measured) could be dominated by the forestry sector. (…)

In contrast, the FSC does demand equal participation of ecological, social and economic interests in the standard-setting process. It is, therefore, a clear step ahead. In many countries, however, FSC certification has proceeded using generic standards developed by certification bodies based on the FSC Principles and Criteria. In some countries, such as Indonesia, Thailand and Malaysia, where stakeholder consensus on national standards has not been secured, such certifications have been criticized for undermining local and national calls for forestry reform.

(…) the World Bank, governments and forestry industry all seem to agree on most of the conditions for credible certification schemes such as balanced participation, transparency, consistency and measurable minimum performance-based standards. Most of the certification schemes researched here, however, do not meet these demands. (…) no schemes, with the exception of the FSC, and arguably the CSA, require balanced participation of all stakeholders and no schemes, with the exception of the FSC, are based on clear and meaningful minimum performance standards. (…) Finally, the World Bank clearly states that certification schemes must be designed to avoid conflict of interests; this demand is violated by AFS, PEFC, CERFLOR, Certfor and SFI, as the decision-making structure is clearly dominated by the forestry sector." [422]

"FSC: When FERN published its original comparison of forest certification schemes in 2001, the FSC emerged as the only scheme credible to NGOs. (…) The FSC remains the only scheme that demands a truly performance-based minimum threshold for forest management practices before a national standard can be endorsed. Its standard-setting process is not unduly influenced by the forestry sector. Its certification and accreditation procedures are well defined and thorough in formulation. The scheme is transparent: standards, procedures and summary reports of the certifications are all available. The standard does not allow for forest conversion, use of GMO trees, and includes protection measure for high conservation value forests. Since its conception, the FSC has both benefited from broad NGO support and received the most NGO scrutiny. This has led to NGOs reporting that FSC procedures are not always implemented, as they should be – particularly in those countries where there is no national standard. The consultation processes have not been

[422] FERN (2004): Footprints in the Forest: ibid.

satisfactory in a number of cases. The ongoing FSC certification of large-scale plantations has also raised many concerns and prompted FSC to undertake a review of its Principle 10 dealing with plantations." [review ongoing in 2008, the editor].

Main positive points of FSC[423]

- Balanced participation of economic, social and environmental interests in decision-making at all levels, including in the development of the standards.
- Thorough and well formulated procedures.
- A credible performance-based standards that qualifies for a consumer label: FSC certified forests prohibit the clearing of natural forests for replacement by plantations, exclude the use of GMO trees, includes the protection of high conservation value forests and afford the clear recognition of Indigenous Peoples' rights.

Main negative points

- Certification in absence of national standards is problematic. Phasing out of certifiers standards as soon as possible is required. [Process ongoing in 2008, the editor].
- Consultation processes are not always implemented as required on paper. Clear improvement is needed to ensure adequate consultation processes are carried out.
- Current certification of large-scale industrial tree plantations has led to undermining of lo-cal and national campaigns in a number of countries. A revision of Principle 10, dealing with plantations, is urgently needed. [Review ongoing in 2008, the editor].

FERN's Conclusion

"FSC remains by far the most independent, rigorous and, therefore, credible certification system. Its national standards are performance-based and their development requires full participation of all interest groups. The FSC's baseline prohibits the conversion of forests to plantations. GMO trees are explicitly excluded and the standard includes forest protection measures. FSC is also most advanced in recognition of forest peoples' rights. It rightfully uses a consumer label. For the FSC to retain the confidence of the environmental and social movement for the future, however, it needs to

[423] FERN (2004): Footprints in the Forest: ibid.

> enforce stricter implementation of its procedures and seriously address the problems associated with the certification of plantations. (…)
>
> Considering these results, it should come as no surprise that for most NGOs the FSC remains the only credible scheme. (…) Although much attention has been focused on the threat for forest certification posed by the WTO, this report argues that that this threat has been exaggerated. As long as a certification scheme fulfils international rules for standardization, which most and notably the FSC does, then it is wholly WTO compatible.

Many link discussions on forest certification with the verification of legality, necessary to identify illegally sourced timber. It should be kept in mind however, that forest certification schemes are not ideal tools to address illegal logging practices – although some schemes are notably better in identifying illegal practices than others. Even these schemes are not based sufficiently on the unannounced audits, continuous sampling and independent monitoring of the chain of custody that are seen as essential for verification of legality. It is, there-fore, advisable to disassociate the discussions on verification of legality and the qualitative auditing of forest management practices.

With the majority of certification schemes currently in operation certifying the current status quo of forest management, the credibility of certification as a tool to improved forest management is on the line. Unless existing forest certification schemes improve and tighten their procedures and practices, forest certification can achieve very little in improving forest management. The FSC should still be seen as the benchmark for credible certification, as it has clear minimum performance-based national standards and a balanced and inclusive decision-making process. It is also transparent and has well developed certification, accreditation, chain of custody and labeling procedures. Nonetheless, the FSC has also come under close scrutiny for failing to implement its own policies, and will have to improve its performance on the ground (rather than its procedures) to ensure forest certification remains a credible tool for improving forest management." [424]

"FERN believes that certification can only have a positive impact at grass roots level, if it can harness the market power of consumers – and their concerns about forests – to change the balance of power. If certification schemes become too closely linked to the forestry industry, there is little chance they will contribute to a better balance of power. Unfortunately, as this report shows, in most cases forest certification schemes are currently too

[424] FERN (2004): Footprints in the Forest: ibid.

closely linked to the forestry sector, and are therefore reinforcing the status quo of forest management rather than improving it. There is widespread failure to recognize the rights of forest-dependent people to participate in decision-making."[425]

FSC certification more demanding than PEFC

In the summary of the discussion on the Role of Governments in timber certification of the FAO/UNECE Timber Committee Policy Forum Marieta Koleva (2005) quoted:

"Dr. Bick (Federal Research Center for forestry and Forest Products, BFH, Germany) pointed out some differences in the wording in the principles and criteria of FSC and PEFC, which lead to different obligations for the forest managers from both schemes, and thus make FSC certification more demanding. It might be questionable whether PEFC requirements will be able to comply with the public timber procurement standard." [426]

"Markets Initiative"

The "Markets Initiative" is a team based in Canada with the goal to protect the world's ancient and endangered forests by creating new markets. The Montreal-based management consultants ÉEM Inc. compared for the "Markets Initiative" the three dominating forestry certification schemes acting in Canada: the FSC, the Canadian Standards Association (CSA), the Program for the Endorsement of Forest Certifications (PEFC), and the Sustainable Forest Initiative (SFI). The study is based on an analysis of the written standards of those schemes. In October 2007 they published their study, designed to help paper purchasers determine which certification system best suits their environ-mental paper procurement criteria. The "Markets Initiative" summarizes that the FSC is the most effective certification system of those three for achieving sustainable forest management in Canada.

"Unlike the other certification systems, namely CSA, SFI and PEFC, FSC is the only one that prohibits the use of genetically modified trees, prevents the conversion of nat-

[425] FERN (2004): Footprints in the Forest: Current Practice and Future Challenges in Forest Certification. FERN, UK. http://www.fern.org/pubs/reports/footprints.pdf (as of June 2008)

[426] Koleva, Marieta (2005): Forest certification – do governments have a role? Proceedings and Summary of Discussions at the FAO/UNECE Timber Committee Policy Forum, 2005. Geneva Timber and Forest Discussion Paper 44

> ural forest to plantations and requires a precautionary approach to the management of areas with high conservation value".

The ÉEM inc. (2007)[427] highlights their conclusions and findings, that in North America

> "(…) A sustainable forest is most likely to exist under an FSC certification. FSC strengths include the protection of ecologically important forests and the banning of the conversion of natural forests into plantations. A CSA certification can be acceptable but further knowledge of the forest and management practices is required. The CSA standard does not address forest conversion into plantations, or protection of high conservation value areas and wildlife habitat, other than those protected by government. The SFI program is weaker with respect to forest management practices and the lack of independence in the certification process in the past means that it is still struggling with credibility issues. This survey formed the knowledge base of a paper procurement tool for our client.

ÉEM Inc. generalized results were as follows:

- "The SFI Program is weak with respect to forest management practices and the lack of independence in the certification process in the past means that it has credibility is-sues. Implementation of recent improvements will take time.
- A CSA certification can be acceptable, but further knowledge of the forest and management practices is required to assure the environmental performance of the forest is adequately defined and managed.
- A PEFC label is unreliable in Canada as it unconditionally endorses both CSA and SFI
- **The FSC certification is most likely to ensure a sustainable forest.**"[428]

[427] EEM Inc. (2007): Survey of Forestry Certification Schemes in Canada. For The Market Initiative. http://www.eem.ca/index.php/case-studies/survey-of-forestry-certification-schemes-in-canada

[428] EEM Inc. (2007): ibid.

5. CONCLUSIONS

Database

For this qualitative review of “FSC’s outcomes and impacts” numerous academic papers, journal articles, book chapters and analyses of NGOs were screened, to learn about the role FSC has played in changing forests management practices positively and in supporting people in managing their assets: forest managers, forest workers and communities, concessionaires, forest stakeholders (such as consumers, indigenous people etc.) and also governments. The 180 different papers’ follow unequal research designs or focus on different topics, hence outcomes quoted above are not easy to compare with each other and to summarize. Only very few examples were found where FSC forest certification impact was assessed in an ideal research setting including comparisons with control groups (e.g. Lima et al. 2008).

Still, summarizing all the different findings, it can be clearly stated that there are indeed, in several different respects, numerous verified examples of positive impacts on forest management that the stakeholder groups in the FSC community can proudly present.

Successful model with multiplication effects

FSC certification has been in use as an instrument to control and to promote responsible forestry for 15 years now. It is embedded in a general international trend towards developing market-oriented policy instruments, involvement of non-state and voluntary initiatives in environment and social policy control. The review of the literature provides strong evidence that FSC is today recognized as a policy tool to address many forestry issues (Cashore 2006; Conroy 2007; Meidinger et al.2005; Rametsteiner 2005; Carey & Guttenstein 2008 etc.). FSC has established itself as one of the most influential market dynamics in the forestry and wood industry sector, with its overarching goal of promoting responsible forest management. As a reaction on FSC’s success other forest and other voluntary certification schemes have followed (Gulbrandson 2008). Forest certification is now so broadly applied in the forestry and wood industry sector that it is very unlikely ever to disappear.

Although the majority of interest groups involved are aware of the positive impact of forest certification, it is still the subject of lively controversy and debate, focused on plantation forestry certification and beyond. For example, FSC’s three chamber governance structure and the manner in which National Initiatives work globally with a common set of principles and criteria is highlighted as one of FSC’s unique characteristics by many authors (Gale 2004; Wood 2004). FSC’s lack of dominant timber company representatives and governments is perceived by many FSC stakeholders as a clear advantage towards the development of balanced standards and processes. The same fact has led some commentators to dismiss the

FSC arguing that without timber organizations it lacks credibility (Poore 2003), and without government representation it lacks legitimacy (Schepers 2008). Another frequent reason for debates around FSC is based on the very high expectations towards FSC, which are partly beyond FSC's intended scope of mission.

A strong link in a chain

FSC has grown in size and inclusiveness to influence the power relationships around environmental, community and indigenous peoples interests (Cashore 2006). However, the literature also shows that effectiveness of FSC certification on different sectors varies, and the momentum behind certification has been weak in developing countries. FSC can better expand its impact in countries with a supportive policy and regulatory frameworks with democratic space for civil society participation (Burger et al. 2005, van Kooten et al 2005, Quevedo 2006). A balanced set of national actors and donors working jointly on certification and the policy and governance framework (so called "pre-condition for sustainable forest management and its certification" by Richards 2004) is more promising to result in concrete certification progress than when isolated donors focus mainly on a certification agenda. Where such a positive political and institutional framework exists or develops, the national standard-setting process has helped to create the political space for raising awareness of social and environmental issues around natural forest and plantation management, for example providing forest access to local people (examples are Bolivia and Brazil, Russia and Romania). FSC's progress and impact is by far lower in countries with poorly defined land tenure rights and a high degree of centralization in forest authority and decision-making, and attempts to promote certification outside a national FSC standard-setting process (examples from Malaysia, Indonesia), have been problematic. However, even from those countries success stories related to improved forest management in certified forest operations can be reported. There are very positive examples for the implementation of a wide range of far-reaching measures designed to comply with FSC Criteria under Principles 2 & 3, and for significant advances in the protection of indigenous peoples' rights from the Republic of Congo (Nelson 2003); at the same time other groups (Freeman & Lewis 2007, Pokja Hutan Kaltim 2008) are calling certification bodies to better perform and to facilitate consultation processes with local stakeholders based on truly free, prior and informed consents.

Learning organization

Donor organizations are recognizing FSC's potential to build the financial, human, social and natural assets that support low-income people and communities. Still, community forestry enterprises in the South have been certified slower than other operation types in temperate and boreal forests (Humphries 2006) - and much slower than hoped by the FSC stakeholders

(Ozinga, 2004; Guillery et al. 2007). This is in part because certification was not intended for small operations (Butterfield 2005), but also due to a lack of supporting institutional and legal frameworks in those countries. While FSC has introduced new and adapted policies accordingly to address the issues and obstacles with certifying communities (SLIMFS and Group certification policies), more adjustments are needed (Molnar 2003). But it is also noted that certification of community forestry enterprises has increased 120% since 2001, with the majority taking place in Latin America (Humphries 2006), due to a better implementation of the new corresponding FSC policies.

Impact on forest management

There is agreement globally that, apart from a sustained yield of timber supplies, sustainable forest management includes social, environmental, economic, cultural and spiritual values. An important question that has generally not been addressed in evaluating FSC and forest certification is whether it has been “effective in promoting effective solutions to persistent and pressing environmental and social policy problems” (Newsom 2006). Or, as FERN 2006 points out: “The center of the forest certification debate is the question: ‘”What does this mean in practice?’” Some of the screened research papers are focusing on FSC’s impact on forest management, leading to changes in the management. Their evaluations are based on an indirect assessment against the certification reports (e.g. Thornber 2003; Gullison 2003, Hirschberger 2005, Newsom et al 2005). The authors reveal that certification has improved the conservation status and enhanced biodiversity levels in forests. They found that forest certification is indeed a catalyst for often substantial changes to diverse aspects of forest management approaches, rather than a means of rewarding operations that were already conducting excellent forestry before certification. While certification does attract industry leaders, even these operations are required to make important changes to aspects of their operations as a result of the certification process. The extensive preparation that many operations undergo before their assessment means that the impacts represented in research papers are likely an underestimate of the true impacts of forest certification.

The majority of improvements in certified forest management units have been described for forest planning based on inventories; improved monitoring and evaluation; reduced impact logging and improved silvicultural techniques; adoption of scientific methods, for example in establishing permanent sample plots; and biodiversity conservation measures (Newsom et al. 2005; Bass et al. 2001). These and the wider policy benefits of FSC certification are often clearly described, while livelihood and economic benefits appear to be less often identified.

There have also been important social benefits to local communities and forest workers, for example, in favoring employment of local people and in the area of health and safety standards, since FSC forest management standards are generally above those demanded by national legislation and regulations, and their implementation is monitored by certification bodies

(Poschen 2003). In general, the impact of FSC certification on workers are both direct and indirect (often reported e.g. from Russia, Brazil, e.g. by Viana 2003, Azevedo et al. 2003) and as effecting new policy in relationship to workers, increasing the involvement of workers in decisions, improving health and safety, and addressing issues over migrant labor (Thornber 2003, Bowling 2003, etc.).

The conventional 'producer pays' wisdom – and apparent contradictions

High cost of audits and documentation for complex ecologies, especially for the certification of natural tropical forest management are often described as particularly difficult challenges. Facts about market prices are difficult to find, as people are usually not willing to share information about the financial situation. However, there is some published information of price premia and also ample anecdotal evidences of off-the-record discussions with both sides indicate that the economic benefits come in form of greater assurance of access to markets and, in a large number of cases, actual higher cash prices, that are being paid quietly and consistently (Conroy 2007). Frequent instances of recertification after 5 years also demonstrate that the financial benefits of certification, together with the non-market benefits, are probably higher than the costs. When talking to members of certified communities in general, the more positive aspects mentioned were economic and social and the more negative referred to the certification process itself and its cost.

Among the non-market benefits, the encouragement of a more participatory forest policy process is often highlighted as an important benefit in countries which have undergone a national FSC certification standard setting process (Ros-Tonen 2004, Richards 2004). Another benefit often appreciated both in the North and in the South is "learning" through the certification process. Researchers also highlight that dialogue and learning is taking place, but due to differences in power and the lack of dedication to fostering social learning, the information exchange is spontaneous and usually flows from certifier or FSC to community or partner organization. Increased mutual learning use of social learning between FSC, certifiers, managers, and support organizations could help improve both forest management and the application of certification. (Frost 2003, Humphries et al. 2008). Also important are the direct effects of consolidating or conferring land tenure or use right, as happened in Guatemala and Brazil.

Forest users including local communities and indigenous peoples, government management agencies, environmental NGOs, logging companies and timber concessionaires all have diverse, and often conflicting, interests in how forests are managed. Each of these groups – and the individuals who represent them – is rooted within a variety of cultures that influence the ways they view and interact with a forest. Forests are often sites where social and political conflicts are played out; these conflicts frequently derive from conflict over access to the forest, and the formal and informal means by which people gain that access. Therefore, deciding what practices qualify as 'good' or 'sustainable' forest management is complex and controver-

sial, with no objective or simple or scientifically based answer. From a sustainable development perspective, good forest management should be a compromise between ecological, social and economic interests. FSC's approach is therefore to develop a vision of what can be considered sustainable forest management in a particular country or region, with the full participation of all stakeholders and, particularly, the local people who own or use the forest. While many non governmental organizations recognize FSC for this approach to credible forest certification schemes, this also raises very high expectations that FSC cannot always meet in a short timeframe, leading to frustration among some stakeholders.

A qualitative evaluation of external impacts commissioned by an FSC sponsor summarizes: "(…) one commonality among FSC stakeholders is that they place high value on FSC and care deeply about the communities and people who reside in or depend on forests. Overall, FSC has proven to be a powerful tool that can benefit communities, workers and indigenous peoples. However, there are a number of challenges that remain and are only likely to grow as FSC expands. Key among them is having the resources to ensure that the FSC Social Principles are being implemented on the ground and in a consistent manner. In conclusion, FSC has become a credible international body that many look to as a tool to improve livelihoods for people dependent on forests." (Guillery et al. 2007).

Research needs

Although research on FSC's impact on a broad range of issues has been conducted by several different organizations and individuals since the early years of FSC, not much systematic or comparable research has been done so far. Only recently researchers are in direct contact with FSC to organize more streamlined access to impact assessments. An attempt to apply a systematic approach using selected indicators was not successful due the fragmentary and anecdotal nature of the available information. Much more systematic work based on ideal research settings including comparisons with control groups and with repetitions of the research design is needed to better demonstrate FSC's strengths and weaknesses of impacts in the numerous fields of influence. There is a need for further studies on certification impacts in order to advise policy-makers and stakeholders on how to best use certification as a soft policy instrument for achieving intended goals and objectives. More systematic studies covering both forest management units and national level impacts (which are rarely systematically assessed) would be useful. Future research could therefore have a broader focus rather than just limiting itself to the forest management level issues. This is important as many impacts are indirect and broader than those observed on the ground. The question of how to fund such research will also need to be tackled.

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ANNEX I: FREE, PRIOR AND INFORMED CONSENT

Challenging the concept of “Free, Prior and Informed Consent (FPIC)” as required in the FSC Principle 2 and 3, Luke Freeman and Jerome Lewis et al. (2007) elaborated recommendations for committed concession holders working in a complex social environment. These recommendations are developed for the Congo basin but can be recommended for all those situations where local communities are easily ignored as stakeholders of industrial forestry. Consent is not an autonomous concept, but one which mutates depending on the circum-stances and context of the negotiations, which is fully within the spirit of FSC. The concept of “Free, Prior and Informed Consent (FPIC)” is an important guiding principle for the practical implementation of elements of FSC principle 2 and 3. The authors found in their studies in the Congo basin, that mutual understanding is possible even between very different groups like multinational concession holders and marginalized groups of indigenous people, and to reconcile the concept of consent they recommend certification bodies as well as forest managers to establishing certain basic processes and actions. These include

- ascertaining communities’ customary rights, developing effective communication and information sharing strategies,
- ensuring that a share of the profits and taxes derived from forest exploitation are invested locally,
- protecting people’s important forest resources against the negative impacts of timber exploitation and wildlife management, and giving them a clearly defined role in decision-making processes that concern forest they use.

Forestry companies could benefit from outside support in this until clear examples of best practice have been developed. To achieve this:

1 Hire staff with the appropriate skills to work with the local populations (language skills, research skills, appropriate cultural knowledge and social skills) and to provide them with adequate resources and institutional support.

2 Ensure that discussions with the community are pro-active in seeking to include all major stakeholder groups (not just the most powerful and vocal), and that negotiations are conducted with a body that represents them.

3 Identify, together with local community representatives and external specialists, the traditional rights of local people, their way of using the forests, and analyze the impacts logging activities might have on them and their way of life in order to co-develop mutually acceptable mitigation strategies.

4 Seek to ensure that this is widely communicated and discussed within the community.

5 Develop an ongoing dialogue between local communities and forest companies, using appropriate communication mechanisms, to ensure a regular exchange of information and goods/benefits. Consent should be understood as an on-going relationship between forest companies and fully represented local communities. Consent can be marked at certain key stages of this relationship by appropriate ceremonies to provide evidence that the community consents to the company's activities.

6 Develop appropriate conflict resolution mechanisms and a complaint procedure together with local communities and forest companies that enables them to contact, discuss and resolve all problems that are directly or indirectly linked to the activities of the companies.

7 Engage with and, if necessary, employ local and/or international expertise to ensure continued development of FPIC.

8 Publish the processes and agreements elaborated with and accepted by the local communities and the forest companies. (Luke Freeman, Jerome Lewis, et al. (2007))

ANNEX II: GOVERNMENTAL USE OF VOLUNTARY STANDARDS

Governmental use of voluntary standards – Concluding chapter from "R079 GUVS Governmental Use of Voluntary Standards: Innovation in Sustainability Governance (Report), ISEAL / Christine Carey / Elizabeth Guttenstein"

Conclusions & Recommendations (page 28 / 29)[429]

A common theme throughout this report is that the governmental use of voluntary standards is characterised by diversity: diverse governance and mission motivations for engagement, diverse institutional arrangements and implementation mechanisms, and diverse policy outcomes.

This diversity coupled with the evidence of widespread governmental use of voluntary standards around the world, in countries at different stages of economic development and under different policy environments suggests that voluntary standards have established themselves as effective, flexible tools to accompany and support governmental policy implementation.

Many of the case study governments developed their collaboration with voluntary standards though hearsay about what other countries are doing, for example in conferences (e.g. Tunisia, Israel), or through the advice and support of development agencies or international advisers (e.g. Bolivia, Guatemala). Only two (Belgium and South Georgia & the South Sandwich Islands) had a direct relationship with the voluntary standards systems they engaged with.

If the governmental use of voluntary standards is to further develop, the practice needs to begin moving away from being ad hoc, depending on the initiative and knowledge of a handful of individuals (both in government and internationally). Information on best practices needs to become commonly available, and opportunities for shared learning fostered.

At the time of writing, there exists no single entity at international level which brings together the variety of thematic voluntary standards systems as described in this report. Good examples exist in the organic and food standards sectors (the International Task Force on Harmonization and Equivalence in Organic Agriculture[430], and the Standards and Trade Devel-

[429] ISEAL, Carey, Guttenstein (2008): R079 GUVS Governmental Use of Voluntary Standards: Innovation in Sustainability Governance (Report)
http://www.isealalliance.org/document/docWindow.cfm?fuseaction=document.viewDocument&documentid=745&documentFormatId=1560

[430] www.unctad.org/trade_env/itf-organic/welcome1.asp

opment Facility[431] respectively). These provide some useful lessons on how to establish opportunities for governments and standards to come together, share information, and better understand how to collaborate.

As the collaboration between governments and voluntary standards systems is further mainstreamed, the importance of credibility and accountability of voluntary standards systems must also be maintained, strengthened where necessary and continue to evolve in response to new understandings and expectations. The proliferation of voluntary standards experienced over the past few years can be seen as a response to the success of the pioneering standards systems in achieving market recognition, and governmental and corporate uptake. Competition for market share and recognition provides a healthy check on the effectiveness of voluntary standards systems. It must not, however, lead to a "race to the bottom" in governance and operational best practices.

This is reflected in the mission of the ISEAL Alliance, and the commitment of its members in meeting ISEAL's credibility tools[432]. It is also laid out in the relevant WTO (Technical Barriers to Trade Annex 3) and ISO standards for best practice[433].

Governments need assurance that they can expect best governance and operational practices from the voluntary standards systems they collaborate with. They too have a critical role to play in this, and can: "...convene, participate in and collaborate with RSS [regulatory standard-setting] schemes, influencing their norms, structure and procedures through their terms for collaboration and ongoing negotiations (Abbot & Snidal 2008)[434]".

(From ISEAL R079 Governmental Use of Voluntary Standards: Innovation in Sustainability Governance 8. Conclusions & Recommendations (page 28 / 29)

[431] www.standardsfacility.org

[432] Credibility Tools refers to the guidance produced by ISEAL on making various aspects of the standards system credible. The ISEAL Code of Good Practice for Setting Social and Environmental Standards is an existing example of an ISEAL Credibility Tool. Further currently under development include a Code of Good Practice for Measuring the Impacts of Certification and shortly, on Systems of Verification www.isealalliance.org/credibilitytools

[433] These include: ISO Guide 59 Code of good practice for standardization, ISO Guide 65 General requirements for bodies operating product certification systems, and ISO Guide 17011General requirements for accreditation bodies accrediting conformity assessment bodies.

[434] Abbott, K. And Snidal, D. (2008): Strengthening International Regulation Through "Transnational New Governance" page 58

ABBREVIATIONS AND DEFINITIONS

ASI	Accreditation Services International (subsidiary of FSC A.C.)
BWI	Building and Wood Workers International
C&I	Criteria and Indicators
CAB	Certification Assessment body (formerly CB)
CAR	Corrective Action Request - equivalent to "conditions"
CB	Certification Body
CBD	Convention on Biological Diversity
CBFM	Certification system for community-based forest management
CH	Certificate Holder
CITES	Convention on International Trade in Endangered Species
CoC	Chain of custody
CW	Controlled Wood
EIA	Environmental Impact Assessment
ENGO	Environmental NGO
FAO	Food and Agriculture Organization of the United Nations
FCAG	Forest Certification Assessment Guide
FERN	Forests and the European Union Resource Network (major enviro. NGO)
FLEG	Forest Law Enforcement and Governance
FLEGT	Forest Law Enforcement, Governance and Trade
FLO	Fairtrade Labelling Organisation
FM	Forest Management
FMU	Forest Management Unit
FoE	Friends of the Earth (ENGO)
FPIC	Free, Prior and Informed Consent
FSC	Forest Stewardship Council
FSC A.C.	FSC Associacion Civil (membership organization in Mexico)
FSC IC	International Center (subsidiary of FSC A.C.)
GA	FSC General Assembly (the event and / or the entity of FSC members)
GATT	General Agreement on Tariffs and Trade
GFTN	Global Forest Trade Network
GMO	genetically modified organisms
GP	Greenpeace
GPA	Government Procurement Agreement
GTZ	Gesellschaft für Technische Zusammenarbeit (Project partner)
HCV	High Conservation Value
HCVF	High Conservation Value Forest
IAF	International Accreditation Forum
IIED	International Institute for Economic Development

ILO	International Labour Organisation
ISEAL	The Int.Social and Environmental Accreditation and Labelling Alliance
ISO	International Standards Organisation
ITTO	International Tropical Timber Organization
LEI	Lembaga Ekolabel Institute (Indonesian Ecolabeling Institute)
NGO	Non-governmental Organization
NI	National Initiative (of FSC)
NTFP	Non Timber Forest Products
NWG	National Working Group
P&C	FSC Principles & Criteria
RA	Rainforest Alliance
RIL	Reduced Impact Logging
SH	Stakeholder
SLIMF	Small and Low Intensity Managed Forests
TBT	Technical Barriers to Trade
TFT	Tropical Forest Trust
TM	Trademark
UNFF	United Nations Forum on Forests
WB	World Bank
WRI	World Resources Institute
WRM	World Rainforest Movement
WTO	World Trade Organization
WWF	World Wide Fund for Nature

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