Social dimensions of sustainable forest management in the Netherlands

A review on the present approach to assessing social dimensions in Dutch forest certification











Author: Simone van Santen de Hoog (830225-727-110)

Thesis code: FNP-80424
Supervisor: Dr. K.F. Wiersum
Examiner: Prof. Dr. B. Arts

Chair Group: Forest and Nature Conservation Policy, Wageningen University



TABLE OF CONTENT

Summary

Acknowledgements

1. Introduction and research objective	1
2. Conceptual framework and contextual considerations	3
2.1 Towards sustainable forest management	3
2.2 FSC forest certification	4
2.2.1 Introduction	4
2.2.2 Setting the standard: Principles and Criteria	5
2.2.3 Certification process	7
2.2.4 Impact assessment of certification	7
2.3 Forest certification in the Netherlands	8
2.3.1 Social dimensions of Dutch forest management	8
2.3.2 The Netherlands FSC criteria for assessing social dimensions	9
2.4 Conclusion	10
3. Research methodology	12
3.1 Research design	12
3.2 Semi-structured interview with key respondents	12
3.2.1 Interview analysis	12
3.3 Audit reports	13
3.3.1 Content analysis of audit reports	14
4. Results	15
4.1 Interviews	15
4.1.1 Importance of public participation	15
4.1.2 Incorporation of public participation in forest management	15
4.1.3 Large and small forest operations	16
4.1.4 Current practices efficient and effective?	17
4.1.5 FSC standards and auditors	18
4.2 Audit reports	19
4.2.1 Overview	19
4.2.2 Community relations: dispute resolution and stakeholder consultation	on 20
4.3 Conclusion analysis	21
4.4 Linking the results with FSC standard	22

5.3 Conclusion and recommendations			
Literature			
Annex 1	Overview FSC principles and criteria		
Annex 2	Main principles and criteria used for evaluation of social dimensions		
Annex 3	Interview guideline (in Dutch)		
Annex 4	Interviewees		
Overview of fi	gure and tables		
Table 1.1: Norms identified in principle of sustainable forest management			
Figure 2.1: Definition of performance- and system-based standards			
Table 2.1: The Dutch National Working Group			
Table 2.2: Principles, criteria and Dutch indicators on community relations selected for study			
Table 3.1: information available per management unit and category			

25

25

28

29

5. Discussion and concluding remarks

Table 4.1: Overview of social CAR

5.1 Discussion on main outcomes

5.2 Audit reports as monitoring tools

Summary

The objective of this study was to offer insight into the present state of thinking regarding social dimensions in Dutch forest management and how this is currently incorporated and operationalized in forest management and certification processes. Since one of the most important challenges of sustainable forest management is to recognize, facilitate, and respond effectively to diverse and dynamic perspectives about forest management of many different stakeholders ranging from local communities and environmental NGOs to forest industries, we focussed on community-related issues primarily, while only shortly touching upon labour issues.

To investigate this, I conducted semi-structured interviews with four key-informants. They were asked to reflect on the incorporation and operationalization of public participation in forest management and certification processes. The interview results were analysed by in order to identify how public participation was perceived to be included in forest management and certification. Besides semi-structured interviews we analysed the corrective actions requests found in 28 audit reports of Dutch forest operations. Finally, in the light of our results we took a closer look in to the current Dutch FSC standards, criterion 2.3 and 4.4 in particular.

I identified that incorporating public participation in to Dutch forest management is perceived to be highly important; especially in case of drastic changes. Many operations are perceived to include public participation in to their management practices. However, it is supposed to be incorporated to a highly variable degree. Considerable contrasts were identified whether current practices were perceived as being efficient and effective. Nevertheless, all interviewees indicated, directly or indirectly that current management is generally more reactive than proactive. FSC certification and individual auditors play an important role and made significant contributions in putting community related issues on the forest manager's agenda and formalizing public participation. On the other hand, FSC was perceived to mainly deal with procedural aspects of social forest management and to a lesser degree with the quality and realization of measures and their underlying intention.

The results of the audit reports reveal that the distribution of social NC and CAR are not skewed with respect to specific social issues. However, labour issues were more often assessed as requiring major corrections then community issues. Additionally, the audit reports give the impression that the audit process is based on a process that focuses mainly on assessing documents provided by the applicant rather than on an evaluation of social forest management practices on the ground.

Our results indicate that although labour issues and community issues are both mentioned in the audit reports as requiring further attention, incorporating community related issues can be considered as most critical.

Acknowledgements

The establishment of this minor thesis took more time and effort than expected. With my little experience in the field of social sciences, I came across some difficulties like writer's blocks, theoretical doubts and structuring problems. Nevertheless, I acquired a critical appreciation of how qualitative research is conducted. Like most things in life, this project would have failed dramatically without the help of others. In the following paragraphs I would like to thank the most important ones for their support.

First of all, I would like to express my gratitude to my supervisor Dr. Wiersum from Wageningen University, for going through the manuscript in detail and providing me with helpful suggestions and comments. Without his advice and support this minor thesis would never had become a reality.

Secondly, I would like to thank the people I interviewed; Mr. Pelinck, Mr. de Meijer, Mr. Ende, Mr. van Benthem. Their input has been truly indispensable. The high willingness to cooperate, and the hospitality I received at kitchen tables and offices were marvellous. I consider the interviews to have been the most interesting and pleasant part of this research project and the accompanying field tour through the Drents landschap and "Pelinckbos" was truly great as well.

It has been a pleasure for me to experience that friends and family are interested in the research I carried out the past few months. Most notably, I like to thank my parents and precious friends Sander van Bronswijk and Vincent van Bijnen for always following my work with great interest and their unwavering support.

Simone van Santen de Hoog, August 2010

1. Introduction

During the past decade certification of sustainable forest management has become acknowledged in Dutch forestry. Forest certification is a voluntary, market-based forest conservation tool designed to recognize and promote environmentally-responsible forestry and sustainability of forest resources through the verification of forest management practices and product labeling. Various management units such as the State Forest Service, municipalities and private forest owners have been certified by FSC as being well-managed. The Forest Stewardship Council endorses environmentally appropriate, socially beneficial and economically viable management of the world's forests through standards development and certification. The certificates are awarded on the basis of audits by independent certifiers using nationally developed FSC standards for sustainable forest management. Within forest management social issues have increasingly become important and many discussions have taken place to identify social issues in forest management, this has resulted in the identification of several common norms on the social dimension of sustainability. The certification standards and the result of their assessment in actual audits of Dutch forest management units can provide an interesting overview of the present state of thinking regarding what social principles need consideration in forest management certification and how they should be practically applied in forestry processes and management schemes. The manner in which social issues are incorporated within the Dutch FSC certification process might substantially deviate from the social needs expressed by 'civil society', forestry experts or NGOs. To know if and where potential discrepancies exist and how current incorporation and operationalization of social issues in FSC certification and auditing is perceived by different stakeholders would be valuable. It provides new insights into the present state of thinking regarding the importance of social factors in forest certification and it might provide suggestions on how incorporation and operationalization of social dimensions in FSC standard-setting and certification processes could be improved. Hence, I defined my research objective as follows:

"To offer insight into the present state of thinking regarding social dimensions in Dutch forest management and how this is currently incorporated and operationalized in forest management and certification processes."

On the basis of the conceptual and contextual considerations discussed in chapter 2, I formulated the following research questions:

- 1) What is the present state of thinking regarding incorporation of social issues in Dutch forest management and certification?
 - a. How are these important social issues incorporated in management processes in Dutch forestry according to critically selected experts and NGOs?

- b. What is their opinion about the incorporation and operationalization of these social issues in FSC standard setting and audit processes?
- 2) What comments on social issues are included in audit reports of FSC certified forests?
- 3) How do the current standards relate to the present state of thinking regarding social issues expressed in the audits and during the interviews?

In chapter two, I clarify the conceptual framework I used to construct my research project on. I will firstly present some background information on sustainable forest management and FSC certification, while the next part of the chapter then examines the social dimensions in Dutch forest management. In chapter three, I give a description of the methods that is used to answer my research questions. In chapter four, the collected empirical information can be found. In the last chapter I reflect on the research objective and questions, and conclude with some recommendations to improve incorporation of social issues in certification processes.

2. Conceptual framework and contextual considerations

This chapter presents background information related to the concepts used in this study. The first two sections briefly describe the concept of sustainable forest management and the development of forest certification as a tool for promoting sustainable forest management respectively. Since this study deals with social dimensions of forest certification in the Netherlands, the third section elaborates on the social dimensions of forest management and FSC's approach to assessing social dimensions in the Netherlands.

2.1 Towards sustainable forest management

Sustainability has been one of the central principles in forestry since the 18th century (Wiersum 1995). The concept of sustainability was first defined as the principle of sustained yield where attention was mainly focussed on regulating the yield of forest products. Gradually, as social values changed, the supply-oriented concept of sustained yield was thought to be no longer appropriate and should be replaced with a more inclusive principle of sustainable forestry (Schlaepfer and Elliot in von Gadow et al. 2000). The principle of sustainable development, often defined as 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs', was presented in the Brundtland report 'Our Common Future' (World Commission on Environment and Development 1987). The previous economic-centred paradigm of "sustained economic growth" changed to "sustainable development" and the concept of sustainable forest management emerged as the forestry component of sustainable development. Since then, the SFM concept became an important issue in international policy making. The United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992, was the first worldwide attempt to reach consensus on forest issues (Vogt et al. 2000). Even though the conference did not result in a legally binding treaty, the post-Rio forest policy debate has been characterized by a comprehensive reflection on the interrelations among social, ecological and economical dimensions of forests management. Recently, the General Assembly of the United Nations (2007) adopted the most widely, intergovernmentally agreed-upon definition of sustainable forest management. It stated:

"Sustainable forest management is a dynamic and evolving concept that aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations."

(UN general assembly 62/98)

Sustainable forest management aims to ensure that the goods and services derived from the forest meet present-day needs while at the same time securing their continued availability and

contribution to long-term development. In its broadest sense, forest management encompasses the administrative, legal, technical, economic, social and environmental aspects of the conservation *and* use of forests. Table 1.1 summarizes the various norms involved in the principle of sustainable forest management.

Table 1.1: Norms identified in principle of sustainable forest management

- 1. Maintenance of forest ecological characteristics
 - 1.1 Production capacity of forest soils
 - 1.2 Vegetative renewal capacity
 - 1.3 Specific and unique forest components
 - 1.4 Biodiversity and natural forest ecological processes
- 2. Maintenance of yields of useful forest products and services for human benefit
 - 2.1 Production of a dominant commercial good
 - 2.2 Ecological benefits in relation to non-forest areas
 - 2.3 Production mix of diverse products and services for human benefit
 - 2.4 Production of goods for those who depend on forests for their basic needs
 - 2.5 forests as an insurance or buffer against possible ecosystem disasters
- 3. Sustenance of human institutions that are forest-dependent
 - 3.1 Cultural integrity of tribal communities
 - 3.2 Equitable distribution of forest products and services to different population categories
 - 3.3 Labour- and income-generating benefits derived from forests
- 4. Sustenance of human institutions that ensure forests are protected against negative external institutions
 - 4.1 Effective legal and organizational frameworks for forest protection
 - 4.2 Proper socioeconomic conditions for populations living near forest areas
 - 4.3 Involvement of local forest users in forest management

Source: table derived from Wiersum (1995)

Despite consensus on the definition and the general agreement on the need to realize SFM, implementation and verification of SFM remains troublesome. The challenge of sustainable forest management is to recognize, facilitate, and respond effectively to diverse and dynamic perspectives about forest management of many different stakeholders ranging from local communities and environmental NGOs to forest industries. SFM is thus a result of social and political processes; how different forest values are weighed is context dependent and subject to continuous change. Over more than a decade various approaches have been utilized to operationalize and verify SFM, including market-based forest certification.

2.2 FSC forest certification

2.2.1 Introduction

The key driver behind the emergence of forest certification was the growing concern about the ever-increasing deforestation and loss of biodiversity and its impact on the well-being and prosperity of human-kind (Vogt et al. 2000). The widespread concern about securing effective international protection of the world's forests has been argued to be one of the driving forces behind the idea of forest certification (Vogt et al. 2000). Initially, efforts to develop clear

standards and benchmarks for sustainable forest management were initiated by the ITTO. They were adopted by other NGO's and the private sector which resulted in the concept of voluntary timber certification. A series of forest certification schemes emerged worldwide and certification is now seen as one of the most important interventions of the past 20 years to help preserve the world's remaining forests and promote sustainable forest management from ecological, economic and social points of view (Vogt et al 2000). The Forest Stewardship Council (FSC), a membership-based independent non-profit organization founded in 1993, was the first certification scheme to be in place and up till now it is considered to be the most credible and transparent system (ISEAL Alliance 2002, Gullison 2003, FERN 2009, WWF 2010). FSC has developed a unique highly participatory governance structure, which underpins its commitments to democracy, inclusion, and transparency in its decision-making. Today, more than 125 million ha forest worldwide distributed over 80 countries is FSC certified (FSC international 2010).

2.2.2 Setting the standard: Principles and Criteria

FSC aims to promote sustainable forest practices through independent evaluation of forest management units (FMUs) against 10 principles (Annex 1) which are further defined by a total of 56 criteria dealing with legal, social, economical and ecological aspects related to forest management. The order of the principles is not prioritized but rather encourages a holistic approach for measuring forest management sustainability. Similar to the social norms identified to be involved in the principle of sustainable forest management (see table 1.1), the FSC social principles require maintenance and enhancement of long-term social and economic well-being of forest workers and local communities, indigenous people's rights and equitable use and sharing of benefits derived from forests. The FSC standard is typically perceived to be a performance-based standard and includes some elements of a system based standard (Bass et al 2001, FSC 2009).

Figure 2.1: Definition of performance- and system-based standards (FSC 2009)

• Performance-based standard

Specifies the level of performance or results that must be achieved in a forest. The standard provides a guarantee of quality and therefore it is appropriate to use a product label.

• System-based standard

No minimum level of performance that must be achieved in the forest is specified. Forest managers set their own performance targets and use a specified management system to ensure these are reached. That way two forest companies both certified by the same system based standard can achieve very different results in the forest. A label associated with this standard therefore is not a guarantee of good performance.

The standard setting process of FSC typically involves participation by a range of stakeholders to ensure balanced decision-making. In the governing body social, economic, and environmental interests are represented in three constituent chambers with equal voting power, each of which is further divided into a North and South sub-chamber. As of April 2010, FSC has 828 members. Notable is the under-representation of social dimensions relative to ecological and economical interests. Only 18% of the members belong to the social chamber, compared to 41% for the economic chamber and 41% for the environmental chamber. Although it has been difficult for FSC to engage members for the social chamber (Tollefson et al 2008) they now include various interest groups ranging from welfare and developmental agencies, indigenous peoples' groups and labour unions.

The FSC principles and criteria are designed to apply to a wide variety of forest types throughout the world. They thus provide a broad prescription and do not include sufficient level of detail to effectively guide certification in the field. The national standards have to be approved by the International FSC board before they can be implemented. The Dutch FSC-Standard is developed by the Dutch national working group, which modified the formulation of indicators and specifies norms to fit the local circumstances using a multi-stakeholder process. Within this working assembly various stakeholder-groups (for an overview see Table 2.1) are represented in either the economic, social or environmental chamber. It is interesting to note that currently only labour unions are represented in the social chamber.

Table 2.1: The Dutch National Working Group

Members economic chamber

Federatie Particulier Grondbezit

Staatsbosbeheer

Gemeente Ede

Unie van Bosgroepen

Algemene Vereniging Inlands Hout

Platform Hout Nederland

Vereniging Natuurmonumenten

Members environmental chamber

Vereniging Milieudefensie

Vacant

Vacant

Members social chamber

CNV Bedrijvenbond

FNV Bondgenoten

Vacant

Source: FSC Netherlands (A.Alkema, personal communication July 2010)

Every five years the national standards are revised, which allows for continuous reconsideration of the standards and incorporating changes in values and opinions of different stakeholders.

2.2.3 Certification process

Forest owners and managers who are interested in FSC certification initiate the process of certification voluntarily. Assessing the performance of FMUs is done by third-party certifying agencies accredited by FSC. Each of the 10 principles has a set of criteria, and each criterion has a set of nationally applicable indicators, which are used by certifying agencies to assess the FMU. From these assessments an evaluation report with major or minor Non-Compliances (NC) and Corrective Action Requests (CAR) becomes available. In the course of a given time period, improvements or changes need to be made by the FMU regarding these specific NC and CAR in order to obtain or maintain its certification. When the FMU fulfills the requirements defined by FSC, a certificate is granted for five years. Annual audits are carried out in this five year duration of the certificate to evaluate the performance of the FMU during this period.

2.2.4 Impact assessment of certification

With the increasing acceptance of certification as a tool in sustainable forest management, the number of certification audits has gradually grown. The results of these audits form the basis for studying the actual impact of the certification process. Following the definition of 'impact' as defined by Blankenburg (1995)¹, the changes or interventions resulting from the audits can be considered as the positive or negative impact resulting from FSC related activities. The approach that researchers have used to assess the impact of certification is based on a thorough review of the audit reports, specifically the list of CAR (a list of topics that need improvement) given to the FMU to address. If the FMU fails to solve the issues raised in the list, it will not obtain or lose its certificate. We can therefore assume that CAR are solved through time and therefore provide information on their positive impact of certification. Recently, a study has been carried out using the CAR listed in audit reports to assess the impact of FSC certification in the tropics (Peña-Claros et al. 2009). They found that FSC certification improved management of tropical forests over all three pillars of sustainability. Other approaches have also been adopted in assessing the impact of forest certification. Van Kuijk et al. (2009) for example, conducted a review on studies which compared certified with non-certified forestry practices, and found that forest management

¹ Impact as defined by Blankenburg (1995) Methods of Impact Assessment Research Programme: Resource pack and discussion. The Hague: Oxfam UK/I and Novib

[&]quot;...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."

practices associated with forest certification appear to benefit biodiversity in managed forests. At present, there is no doubt that certification has had a range of positive impacts on the long-term sustainability of many forest management units (Bass and Simula 1999, Bass et al. 2001). On the other hand, Guillery et al. (2007) based on their participatory impact assessment, found that various stakeholders consistently expressed their concerns on what is done and accomplished with regard to the social pillar of sustainability, with the accent mainly on issues in the global South. While the emphasis has until now been mostly on environmental issues (Nussbaum and Simula 2004), the social impacts of certification are likely to become increasingly important in the future, for the global South *and* North. Certification is a concept designed to embrace and reconcile the different interests on forests, it has to deal with diverging values of different stakeholders, including the importance placed on social dimensions relative to other aspects.

Not much is known about the present state of thinking regarding the importance of social dimensions and its interpretation in Dutch forest management certification. The publicly available audit reports provide an interesting example of the present approach of assessing the social dimensions of forest management in the Netherlands.

2.3 Forest certification in the Netherlands

The total forest cover in the Netherlands is approximately 360 thousand hectares (10% of the territory surface), currently 152 thousand hectares of Dutch forest is FSC certified (42% of total forest cover). Ownership is distributed over various forest management units: State Forestry Service, Koninklijke Houtvesterij het Loo, Natuurmonumenten, Unie van Bosgroepen and FACE Foundation. Dutch forest management practices have evolved over the past century to meet society's changing values and needs.

2.3.1 Social dimensions in Dutch forest management

In the beginning of the 20th century Dutch forests served a limited number of functions: mainly wood production, soil improvement and hunting (Schmidt et al. 1999). Industrialization and urbanization in Western European countries, such as the Netherlands, has considerably changed the relationship between society and the natural environment and over time, forest functions gradually diversified to serve a multiplicity of functions (Schanz 1999, Konijnendijk 2001). Increased leisure time and mobility resulted in growing importance of recreation, tourism and landscape quality (Schmidt et al. 1999). Most notably, recent social trends as growing environmental awareness and a shift from 'government' to 'governance' decision-making

structures (Wiersum and van Vliet 1999, Hajer et al. 2004) resulted in an increased demand for more consultation, participatory decision-making and transparency in forest management and planning. Consequently, Dutch multifunctional forests, in particular those in densely populated and urbanised regions, are confronted with high and increasing public demands for sustainable management (Konijnendijk 2000). Recreation is the most important function of forests in the Netherlands. Around 200 million trips are made to the forest each year. Approximately 75% of the Dutch citizens visit the forests from time to time, twice a month on average.

The interaction between forestry and society and the concept of public participation in management and planning have been recognized as important and integral parts of sustainable forest management (FAO 2000). Public participation is viewed as a potential tool to help enhance the social sustainability and acceptance of forest management. It increases mutual understanding between stakeholder's interests and values, increases social support and helps to avoid and manage conflicts between society and forest planning and management. It is therefore seen as a major requirement for solving a number of persistent problems, including degradation of nature and the landscape and social acceptance of forest management practices. In the opinion of the Dutch Ministry of Agriculture, Nature and Food Safety, public involvement in nature and landscape issues needs to be further increased (Ministry of LNV 2000). Examples where public participation has led to improvement in social conditions and forest management are abundant in literature (see for example Corten 1997, Schanz 1999, Konijnendijk 2000, Walter 2003). Nevertheless, critics also reflect concerns on participation stating it often simply becomes another means of pursuing traditional top-down agendas (Parfitt 2004). Ultimately, successful forestry practices will depend on successful co-ordination of social relations.

2.3.2 The Netherlands FSC criteria for assessing social dimensions

As discussed in paragraph 2.2.2, the international FSC principles and criteria incorporate various norms on social sustainability. They cover two major social dimensions of forest management; labour aspects and aspects regarding interaction with the social environment. This indicates that workers, as well as indigenous people and local communities are considered social constituencies of specific importance. On the basis of the international principles and criteria, the Dutch certification standard describe various indicators and norms to provide guidance to certification bodies on how to monitor FMU performance on labour and community issues. In general, the criteria on forest labour conditions are well recognized following the international ILO criteria. Therefore, in this study primarily the dimensions concerning local communities are explored while only briefly touching upon labour issues. FSC criteria related to the interaction

with local communities are primarily found in principles 2 and 4 (table 2.2), but also partly in principle 3 and 5 (Annex 2).

Table 2.2: Principles, criteria and Dutch indicators on community relations selected for study

Principle	Criterion	Dutch indicators
2. Tenure and use rights and responsibilities	2.3 Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights and outstanding disputes will be explicitly considered	2.3.1 In case of disputes over tenure claims and use rights, the forest manager has documents at his disposal in which the dispute resolution is documented and an appropriate procedure has been followed
4. Community relations and worker's rights	4.4 Management planning and operations incorporate the results of evaluation social impact and maintain consultations with those directly affected by management operations	 4.4.1 In the case of drastic changes in forest management or forest use on a scale exceeding that of usual management operations, the people concerned have been informed in advance and have got the opportunity to react 4.4.2 Demonstrate how wishes and complaints of the people concerned regarding forest management or forest use have been actively taken into account in the decision-making and implementation of forest management operations

2.4 Conclusion

In the early stages of the sustainability concept particular attention was paid to what was ecologically necessary and economically feasible. Gradually, during the past decade, social dimensions have been recognized as an integral part of sustainable forest management. In the Netherlands, communities living near forests may not necessarily depend on forest products for their income nor does it represent their main source of subsistence, nonetheless the forest resources provide services important for their well being most notably in the form of recreation. Multiple-use and sustainable forest management are now accepted and leading concepts in Dutch forestry and forest owners have placed more emphasis on community interests, conflict resolution, and the involvement of various stakeholders in forest planning and management. Although socio-cultural dimensions are now regarded as essential in forest management, conflict situations still occur probably due to the existence of many different ideas, values and perceptions on forest management and planning of various stakeholders. Possibly various important social issues are underrepresented or not comprehensively described in Dutch certification standards and might not receive sufficient attention during certification processes. In this study therefore, I will conduct interviews with forestry professionals and assess documented NC and CAR in audit reports to explore the present state of thinking regarding social dimensions such as participation, communication and conflict resolution, and its implementation in forest management and certification processes.

3. Research methodology

3.1 Research design

This explorative study aims offer insight into the present state of thinking regarding social issues in Dutch forest management and how these issues are currently incorporated and operationalized in the Dutch forest certification processes. Since the research questions concentrate on 'how', 'which' and 'what', rather than 'how much' or 'to what extent' I choose to develop a qualitative study. As no single method is really suitable to fully capture the complexity of the studied phenomenon, two types of data collection were used. The study consists of interviews with forestry professionals and an assessment of the publicly available FSC audits of certifying organizations. This multiple research approach allowed for methodological triangulation of information from primary - semi-structured interviews - and secondary - public summaries of certification audit reports – sources.

3.2 Semi-structured interviews with key respondents

In general, qualitative studies focus on gaining a general understanding of a phenomenon rather than about the distribution of specific characteristics. Hence, key-informants were used instead of a representative sample of respondents. By means of purposive non-random sampling key-informant interviewees were selected on the basis of their organizational role in forestry, their acquaintance with FSC forest certification and familiarity with social dimensions of forestry. Originally, eleven key-informants were selected but due to holidays and time constraints, eventually four selected key-informants could be interviewed. On the basis of the described conceptual framework I designed a semi-structured interview (Annex 3). Interviewees (Annex 4) were asked to describe their perception and opinion about the incorporation and operationalization of on social issues such as public participation and conflict management in forest management and FSC certification. Interviewees were invited to suggest to improvements or changes regarding social issues of forest management and certification process organization. All interviews were conducted between the 1st of July and the 1st of August at a location chosen by the interviewee. All interviews were tape-recorded with a digital voice recorder (Olympus VN-5500PC) after asking permission to do so, and then transcribed.

3.2.1 Interview analysis

The interview was designed to instigate relatively long answers in a way that would allow the interviewee to let the information flow on the subject, even when it might not have seem directly meaningful to the study. The interviews were carried out in Dutch and they were literally transcribed as "raw data". The summarized transcriptions were analysed and coded according to

the conceptual framework. As each interview was analysed, the issues mentioned were highlighted, or the initials of the interviewee added to an issue already identified by the previous analysis of another interview. The highlighting of the different issues was colour coded by categories, so that a thorough revision of the issues was made at the end to ensure nothing had been left out. I used open coding to identify main themes in the data. Then I reformulated them in to concepts or categories which were used to look for coherences, differences and structures to finally construct a model of understanding. Much of the information was relevant to more than one category, illustrating the interconnectedness between the different issues discussed. It is accepted that any kind of data analysis is limited to some form of processing in which some information is lost; I decided to include each issue where it was most relevant.

3.3 Audit reports

Public summaries of certification audits provide a tremendous amount of information on the actual state of forest management and certification. This information can be used as a certification system monitoring tool or for adjusting certification schemes and audit processes. In this study I used 28 audit reports of eight certified forest management units in the Netherlands (table 3.1). Two of the management units hold a group certificate while six hold an individual or single certificate. The reports were publically available and derived from the web pages of FSC international and the certification body 'Control Union Certifications'. Not all certification reports were available digitally and the first year of certification differs between management units. Hence, information was accessible from 2008 onwards for all management units, availability of reports from before 2008 varied greatly. The reports generally include information on basic characteristics of the FMU, the evaluation team and process, a list of NC (Nonconformities) and CAR (Corrective action requests), and the decision regarding certification.

Table 3.1: information available per management unit and category

FMU	First year certification	Information available from (year)	Category (Single or Group)
Face the Future	2007	2008	Group
Koninklijke houtvesterij 't Loo	1996	2007	Single
Natuurmonumenten	2005	2004	Single
SBB Noord	1998	2005	Single
SBB Oost	2006	2005	Single
SBB West	2002	2006	Single
SBB Zuid	2006	2005	Single
Unie van Bosgroepen	2002	2002	Group

3.3.1 Content analysis of audit reports

I studied the audit reports by systematically assessing documented NC and CAR that forest companies, seeking FSC certification in the Netherlands, were required to address in order to obtain, or maintain, their certificates. To determine which social issues were covered in the audit reports I organized the data into coherent categories. I specifically focussed on the social themes and used two preset categories: *Labour issues* and *Community issues*. These two preconceived categories were elaborated into sub-categories (see 4.2.1) to further define topics. The issues mentioned in the reports were tabulated to provide an overview of the distribution of (major and minor) CAR between the (sub-)categories. Additionally, I examined whether individual CAR mentioned in the *dispute resolution* and *informing/consulting stakeholders'* sub-categories were system- or performance-based. System-based CAR request changes in processes or procedures that may or may not have on-the-ground impacts, depending on the outcome of the required change. Performance-based CAR included CAR that certainly does have on-the-ground impact, as it specifies the level of substantive results that must be achieved.

4. Results

In the sections to follow, I first examine the results from my interviews. Although some of the issues discussed during the interviews overlapped, the data still allowed for a full and balanced spread of the information gathered. I discuss 1) how public participation is perceived to be currently incorporated in forest management, 2) the difference between large and small forest operations, 3) whether current practices are perceived to be sufficient and effective, 4) any other challenges and considerations and 5) the role of FSC, their standards and auditors. Next, I provide an overview of the social issues addressed during the audit processes. I will then zoom in on community issues, principally on aspects dealing with *dispute resolution* and *informing/consulting stakeholders*. I discuss actual NC and CAR to give a richer description of the certification impacts. Finally, I link the interview outcomes and audit analysis with the current FSC standards, criterion 2.3 and 4.4 in particular.

4.1 Interviews

4.1.1 Importance of public participation

Three interviewees brought up some factors indicating the increasing importance of incorporating public participation in forest management, especially in case of drastic changes. First of all, the Netherlands is a densely populated country and for a considerable amount of people forests are the most important location for recreational visits. Many forest operations, mainly the FMU owning large areas of forest, are financed by public money or are membership-based organisations. Additionally, the interviewees agreed that Dutch forest management is in need of greater social support. One of the interviewees (A) mentiones: "Mensen zijn veel mondiger geworden en voelen zich ook mede-eigenaar van het bos om de hoek (...) als er een cirkelzaag aan te pas komt dan is het verkeerd, terwijl ze zelf een houten vloer hebben, daar moet nog wel aan gewerkt worden". The interviewees indicate that public participation can also work the other way around. Most importantly, public participation plays an important role in educating the public and increasing public support for active forest management and logging in particular.

4.1.2 Incorporation of public participation in forest management

All four Interviewees expressed that in their opinion forest management operations currently incorporate public participation in their practices. Interviewee (A) for example states that: "Communicatie en participatie, dat staat wel echt meer op de agenda (...) Je merkt dat er een soort protocol is (...) Zodra ze iets gaan doen of van plan zijn te gaan doen, dat ze dit eerst communiceren". Another interviewee (B) mentions a concrete example of public participation:

"...Er zijn bijeenkomsten geweest toen plannen in de besluitvormingsfase waren, en vlak voor de start van de werkzaamheden. Ook zijn er veel excursies geweest om het allemaal uit te leggen. Dus dat soort dingen zijn er wel". Later in the interview he ads a comment about a specific case: "Er is intussen een soort structureel overleg (...) Ze zijn het niet altijd met elkaar eens maar het betekent wel dat er overleg plaatsvindt in de sfeer van randvoorwaarden en hoe ze over elkaar praten". Nevertheless, all interviewees acknowledged that forest operations incorporate public participation to varying degrees. One interviewee stated (A): "(...) in een aantal gevallen wordt er rekening gehouden met de belangen van verschillende groepen, in een aantal gevallen niet". He continues: "Ik was echt verbaasd over hoe grondig dat werd aangepakt (...) maar dat het soms eenrichtingsverkeer is, ik kan me voorstellen dat het soms te weinig is". Overall, all interviewees expressed the idea that many operations include public participation, but to various degrees.

4.1.3 Large and small forest operations

The incorporation of public participation in management is perceived to be highly variable. Differences are for example seen between large and small operations. This idea is well expressed in the quote by one of the four interviewees (C) "Kleinere particulieren zijn daar veel minder mee bezig. Gemeenten en grotere beheerders die moeten dat bureaucratisch allemaal goed hebben (...) zij zijn daar ook professioneler en een stuk bewuster mee bezig". One interviewee takes it one step further and suggested (A) "Daar zit wel een heel groot verschil in, grotere beheerders zullen dat een stuk beter doen dan de kleine". The interviewees mentioned several explanations of the difference between large and small operations. On the one hand it was suggested that larger operations, as opposed to small forest owners, have more resources (e.g. qualified personnel, money and time) which allows them to put more emphasis on social considerations such as public participation. Interviewees also mentioned that larger operations are expected to put more emphasis on public participation as they are, to various degrees, financed by public money or membership-based organisations. On the other hand, interviewees suggested that small forest owners could be more apprehensive about public participation. This is illustrated by two statements: One interviewee (A) states: "Je merkt ook wel dat een aantal daarvan (i.e. particulieren) aanhinken tegen FSC certificering, die bang zijn voor inspraak en ook dat ze niet zozeer de middelen en de tijd enzo hebben", and another interviewee (C) mentions: "Kleinere eigenaren, die kom ik tegen, die staan er niet negatief tegenover, maar staan er ook niet om te springen. Welke eigenaar wil inspraak? Boeren willen ook geen inspraak van anderen over wat ze doen in hun bedrijf".

4.1.4 Current practices efficient and effective?

Despite agreement about the existence of some degree of public participation in many forest management operations and the differences between (large and small) operations, I found considerable contrasts about whether current practices were perceived as being efficient and effective. One interviewee (B) was particularly critical about how operations deal with social issues, he for example stated: "We hebben meer van dat soort projecten waarbij we bomen kappen voor natuur. Valt me op dat organistaties die dat doen (...) dat ze daar (i.e. participatie en inspraak) op zijn minst gezegd erg onhandig mee om gaan". He continues: "In de praktijk merk ik dat sociale argumenten pas gaande weg op tafel komen doordat bewoners gaan protesteren tegen het kappen (...) dat moet beter kunnen". In his opinion, large forest operations in particular "(...) behoren (...) veel meer moeite te doen om op meer manieren, van tevoren, niet alleen plannen uit te leggen maar ook draagvlak te verwerven en bereid te zijn om serieus plannen aan te passen". Apparently, he is not sure about the actual investments of operations to contact all interest groups and their readiness to fully acknowledge and take in to account stakeholder interests and thus considerably doubts whether current practices are sufficient and effective. Another concern with the process includes a general lack of interest within local communities and forest user groups, unless something affects an individual directly. Also, interviewee (C) suggested the forest managers attitude (quote: "(...) met een bepaalde arrogantie, van wij weten wat het beste is") as an unfavourable starting point for public relations. Another interviewee (A) brings up a similar but more implicit example "(...) dat er heel erg gecommuniceerd is vanuit kennis, van wij weten wel hoe het zit, hier is het goed voor (...) terwijl de recreant denkt van ja hè, nu hoor ik een snelweg (...)". He indicates that it is important for forest managers to create public support by in the first place more emphasis on the viewpoint of recreationists, their wishes and level of knowledge. Another interviewee assumes that forest managers with the right skills will take forest users in to account and indicates to have observed much public support after effective communication with stakeholders. He thinks current practices are quite effective and working with protocols leads to a proactive approach, but many lessons can still be learned. Working with protocols can indeed lead to proactive management. However, this very much depends on whether the standard requires proactive procedures or protocols. According to one interviewee (D) it is not required for forest operations to report on activities undertaken to proactively assess possible social impacts of interventions. He also states: "Eigenlijk gaat de hele communicatie en inspraak pas lopen als het mis gaat (...) Totdat iemand ontzettend dwars gaat liggen heeft niemand echt in de gaten dat het mis dreigt te gaan". Similarly, another interviewee (C) states: "Het hele idee van FSC is wel goed (...) dat je elk jaar moet bedenken (...) iets aardigs voor omwonenden gedaan (...) iets participatiefs (...) dus meer reactief dan proactief". All

interviewees indicated, directly or indirectly that current management is generally more reactive than proactive.

4.1.5 FSC standards and auditors

All interviewees had positive associations with FSC certification. They indicated that FSC and auditors play an important role and made significant contributions in putting community related issues on the forest manager's agenda and formalizing public participation. One interviewee also states that FSC plays an important role in counteracting the earlier mentioned arrogance of forest managers, but is however unsure whether FSC actually succeeds in doing so. Another interviewee (C) mentions: "het is essentieel (...) dat er iemand uit de praktijk langs komt, een toezichthouder (...) een outsider die komt kijken van dit heb je ondertekend, hoe vul je het nou allemaal in, hoe vertaal je het". Similarly, another interviewee indicates that certifiers play an important role in regulating good forest management. Two interviewees however doubt whether FSC is capable of taking an actual neutral and independent position and criticises the way in which certifiers notify stakeholders about a forest operation's (re-)certification process. Similar to what was found in the audit reports, one interviewee indicated FSC to mainly deal with procedural aspects of social forest management. Auditors do indeed seem to be particularly interested in procedural aspects and to a lesser degree in the quality and realization of measures and their underlying intention. This is nicely illustrated by several examples mentioned during the interviews including the idea that announcements in local papers for example are checked on presence but often not comprehensively read.

Two of the interviewees indicated that the current principles sufficiently support public participation and can probably be not more effective. On the contrary, the other two other interviewees indicated that FSC could and should significantly contribute to raising the social standards. They acknowledge that it is impossible but completely diminish or prevent conflicts. Three interviewees expressed their concern about incorporating public participation in voluntary certification standards. One interviewee (A) states: "Hoe meer je communiceert hoe meer reacties je krijgt. Ook al is dat wel de bedoeling, het is niet altijd handig". The other interviewees state that we should not forget about the voluntary nature of certification, "Het is op basis van vrijwilligheid, je kan het ook heel moeilijk maken voor boseigenaren, ze zitten niet te wachten op meer regeltjes en administratrie". Nevertheless, better defined indicators, preferably written in Dutch, are deemed necessary.

4.2 Audit reports

4.2.1 Overview

In total I extracted 249 CAR (147 minor and 103 major NC) referring to critical issues of forest operations as noted in FSC certification audits. For the purpose of this study, and due to time restrictions, I focus the assessments of these CAR and NC on the social issues found in the audit reports (Table 4.1).

Table 4.1: Overview of social CAR

Theme	Categories	Subcategories	Total CAR	Minor	Major
Social			49	26	23
	Labour issues		<i>25</i>	8	17
		- Erbo (contractors)	4	2	2
		- Work instructions	8	0	8
		- Worker safety	9	4	5
		- Training	4	2	2
	Community issues		24	18	6
		- Local economy	1	1	0
		- Dispute resolution	6	5	1
		- Public safety	6	2	4
		- Informing/consulting stakeholders	11	10	1

In total I found 49 social CAR (20% of total CAR found) of which 25 concerned labour and 24 concerned community issues. Hence, the social issues that operations were required to address were not focused disproportionately in any one category. Labour issues were distributed over four subcategories dealing with Erbo (Erkenningsregeling Bosaannemers), work instructions, worker safety and training. Community issues were distributed over four subcategories dealing with local economy, dispute resolution, public safety and informing/consulting stakeholders. The social issues that operations were required to address were not disproportionately focused at any one category. When looking at the distribution of major and minor NC however, nonconformities concerning labour issues seem to be evaluated more stringent as compared to community issues. In total 23 major NC are mentioned of which 17 refer to labour issues and 6 to community issues. In contrast, of 26 minor NC, 8 refer to labour and 18 to community issues. We did not find large differences in the distribution of labour- and community-related CAR between "single" or "group" certificate holders. In our further analysis I zoom in on community issues, more specifically on conflict resolution and stakeholder consultation. To our knowledge, there is no current social discussion on labour issues in forest management; I therefore did not include them in this study.

4.2.2 Community relations: dispute resolution and stakeholder consultation

One quarter of the community-related NC concerned dispute resolution. The CAR dealing with dispute resolution mostly required procedural and process changes; three out of six CAR required a conflict resolution procedure to be documented as it was not part of the protocol. One CAR was closed after "All incoming disputes, complaints etc. are registered and directed to the person responsible. In case actions have to be taken, work orders are documented and filed", another was closed after the requested procedure had been documented and approved. Two CAR required the conflicts to be registered, as complaints were only dealt with verbally. Reassessment results of these CAR were not documented in the reports. One out of the six CAR required a substantive, on-the-ground change: "SBB Gelderland should seek for active consultation between the critical stakeholders and the Management Units in question. Return copies of letters or e-mails with regard to the responsible Management Units to Control Union Certifications as proof that contact has been sought with the relevant stakeholders" as a result of actual complaints about the forest management. This CAR was closed during the re-assessment, the result stated: "Documents approved".

Nearly half of the community-related NC concerned stakeholder consultation; communication with and opportunities for stakeholders to participate prior to and during the development and implementation of (drastic) changes in forest management. Two NC dealt with informing the public. One required a group manager to add obligations on the aspect of public information to the group protocol. The other required monitoring results to be summarized and a report to be made available for publicity. The re-assessment result of the latter stated: "An instruction has been written and added to the protocol that deals with this issue (...)". It is unknown whether the monitoring report is actually made available. Four NC dealt with more procedural aspects of stakeholder consultation. A group manager had to adjust its' group protocol, and clearly mention how the stakeholder consultation is executed when new members enter the group. One operation did not consult stakeholders on the occurrence of HCVF's and had to adjust its' stakeholder letter. The other two NC dealt with a missing protocol that prescribes the possibilities of anticipation and informing of persons and organisations concerned with drastic changes in the forest management and respectively a missing procedure that prescribes the legally obligation to inform and consult interested parties. The former operation had to: "Document and implement the protocol. Implement the possibility for persons and organisations concerned to be actively involved in the process", while the latter had to: "Adjust the procedures so that it is guaranteed that all interested parties are involved from the plan phase in projects of drastic interventions". While the former is particularly asked to implement a possibility for

stakeholders, the latter needs to guarantee the involvement of stakeholders. Three NC dealt with the follow up after stakeholder consultation. In one of the operations a stakeholder advisory group has been established for a specific project. However, no reports and transcripts of the meetings are made. Similarly, during the audit for a group certificate it was found that "Findings and conclusions from stakeholder consultations are no part of the audit report/entry decision". Another NC mentions that it is unclear how an operation deals with comments from a stakeholder. These examples indicate that operations organize consultations, but results might not be documented or it is unclear how comments are handled. Obviously, this imposes the risk that operations do not follow through by actually taking into account the results of stakeholder consultations. Two NC required operations to deal with an actual issue that the assessment team had identified during stakeholder consultations. In one situation, neighbours were not informed about forest activities, the situation was resolved after much negative publicity for the operations had arisen. The operation was required to "Make a communication plan before activities with a large impact for neighbours and stakeholders (...)". In the other situation the responses of stakeholders indicated much obscurity in the communication with interested parties concerning planning and implementation of management. The operation was required to make a communication plan in which the reported matter is taken in to account and communicate with the parties concerned. They were also asked to show how the interests of all groups are incorporated in the plans.

4.3 Conclusion analysis

Overall, the interviewees indicated that it is important to incorporating public participation in forest management; especially in case of drastic changes public participation. Additionally, they assumed public participation to play an important role in educating the public and increasing public support for active forest management and logging in particular. Identified major benefits of public participation include increased trust among managers and stakeholders, reduction of forest-based conflict, community capacity building and employment, and incorporation of traditional knowledge in forest planning and management. On the other hand, concerns with the process include the absence of time and financial means, possible conflict of interest and questions as to whether all stakeholders are participating. All interviewees expressed the idea that many operations include public participation, although it is perceived to be incorporated to a highly variable degree. The interviewees showed considerable contrasts whether current practices were perceived as being efficient and effective. Nevertheless, all interviewees indicated, directly or indirectly that current management is generally more reactive than proactive. The actual investments of operations to contact all interest groups and their readiness

to fully acknowledge and take in to account stakeholder interests are questioned. All interviewees had positive associations with FSC certification and indicated that FSC and individual auditors play an important role and made significant contributions in putting community related issues on the forest manager's agenda and formalizing public participation. Nevertheless, interviewees indicated FSC to mainly deal with procedural aspects of social forest management and to a lesser degree in the quality and realization of measures and their underlying intention.

The results of the audit reports reveal that the distribution of social NC and CAR are not skewed with respect to specific social issues; NC and CAR were evenly distributed over both labour and community issues. Major and minor CAR were unevenly distributed; labour issues were more often assessed as requiring major corrections then community issues. Our results also reveal that forest operations were required to make important changes to social aspects of their operations as a result of the certification process. However, these assessments can best be considered as a first approximation only of assessing forest management practices. The publically available audit reports give the impression that the audit process is based on a process that focuses mainly on assessing documents provided by the applicant rather than on an evaluation of social forest management practices on the ground.

4.4 Linking the results with FSC standard

The results of the interviews and audit reports can be used as a basis to take a closer look at the content of the current national FSC standard, in particular criterion 2.3 and 4.4. I start by taking a closer look at dispute resolution and the corresponding criterion 2.3: "Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights (...) outstanding disputes will be explicitly considered (...)". The criterion states that forest operations shall employ "Appropriate mechanisms (...)". Without elaboration on what the appropriate procedure constitutes, this criterion leaves much room for interpretation. Probably it is too complex to specify an appropriate procedure which is applicable internationally. Nationally developed indicators could dissolve this complexity. Furthermore, the appropriate mechanisms are required to be employed "(...) to resolve disputes (...)". This suggests that appropriate mechanisms are required to be employed after disputes have occurred, proposing a reactive approach. On the basis of this internationally used criterion, the national indicator 2.3.1 states: "In case of disputes over tenure claims and use rights, the forest manager has documents at his disposal in which the dispute resolution is documented and an appropriate procedure has been followed". The single indicator present, similar to the criterion, addresses dispute issues no more

than reactively, after disputes have occurred. An indicator in which forest operations are required to actively maintain a relationship with (community) stakeholders and consult these groups in planning and implementation of forest management activities in order to identify disputes in early stages and effectively prevent or reconcile them in early stages. Additionally, the indicator primarily assures disputes to be documented. Similar to what was found in the analysis of the audit reports this procedural aspect indeed seems to be most important during the audits. Interviewees point out that similar disputes happen over and over again. Probably it would be useful to not only document evidence of dispute resolution and the followed procedure, but also by some means stimulate or require forest operations to use this gathered information to learn lessons for improving future prevention and handling of disputes. Although one CAR found in the audit reports was related to outstanding disputes, consideration of this aspect is not directly translated in to an indicator. Preferably the criterion requires an indicator on this issue with measurable activities, guaranteeing effective measures for sustainable forest management on the ground. No indicator further specifies what an appropriate procedure constitutes, which leaves much room for interpretation.

Criterion 4.4 states: "Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations". Operations are required to incorporate results of social impact evaluations; however, no indicator is provided dealing with conducting such impact evaluations. Similarly, principle 8 (Monitoring and assessment) several times mentions social impact evaluation in its criteria but does not follow through by providing appropriate indicators on how such evaluations should take place and what is needed to be done to incorporate it's results. A striking example can be found in indicator 8.2.1d where operations are required to have research results available on the social impact of harvesting and other operations. At the same time it only requires "Stakeholder consultations, if available". Criterion 4.4 also indicates that forest managers should consult stakeholders "directly affected (...)"; the criterion however lacks a definition or description of directly affected stakeholders. On the basis of criterion 4.4, the national indicator 4.4.1 states: "In the case of drastic changes in forest management or forest use on a scale exceeding that of usual forest management operations, the people concerned have been informed in advance and have got the opportunity to react". The indicator requires stakeholders to be informed "(...) in advance (...)". At what stage of the process stakeholders should be involved is left open to interpretation. Indicator 4.4.2 requires forest managers to demonstrate how wishes and complaints have been actively taken into account in the decision-making and implementation of forest management operations.

However, an indicator that requires a proactive approach to identifying potential negative impacts that activities might cause and plans on how to mitigate these negative impacts is missing. Most interviewees propose that proactive management should play a larger role in socially sound forest management. Socially beneficial forest management is probably a combination of proactive and reactive measures. How they are incorporated in certified forest operations very much depends on whether the indicators requires both, proactive and reactive procedures and actual on the ground changes. Most of the FSC principles and criteria are described in a performance-based manner, but the further translation into concrete and verifiable measures is often incomplete or and therefore does not guarantee sustainable forest management. I suggest that the current Dutch National standards on the aspect of community issues currently are primarily concentrated on system-based indicators with little performance based thresholds. System-based indicators can be very powerful tools for helping organisations understand and improve their performance. However, in this case they do not specify minimum level of performance targets that must be achieved. Instead, they require forest management organisations to set their own performance target and to use the management system to ensure they are reached. Therefore system-based indicators by themselves do not provide sufficient guarantee of forest management quality. Performance-based indicators specify the level of performance or results that must be achieved. Performance and system indicators are therefore complimentary but cannot be considered equivalent and deliver totally different benefits.

5. Discussion and concluding remarks

The previous chapter showed how social issues, dispute resolution and stakeholder consultation in particular, are incorporated in forest management and certification processes according to four critically selected interviewees and included in audit reports of FSC certified forests. Moreover, it showed how these results relate to the current standards. This last chapter tries to give some reflections on the objective of this study and the results found. Before ending with a final conclusion, we will shortly reflect on using audit reports as monitoring tools. But first, I will discuss the main outcomes of my study while reflecting on my scientific objective and research questions.

5.1 Discussion on main outcomes

The scientific objective of this research project was formulated as follows:

"To offer insight into the present state of thinking regarding social dimensions in Dutch forest management and how this is currently incorporated and operationalized in forest management and certification processes."

In order to reach this objective I formulated the following three research questions:

- 1) What is the present state of thinking regarding incorporation of social issues (dispute resolution and stakeholder consultation) in Dutch forest management and certification?
 - c. How are these important social issues incorporated in management processes in Dutch forestry according to critically selected experts and NGOs?
 - d. What is their opinion about the incorporation and operationalization of these social issues in FSC standard setting and audit processes?
- 2) What comments on social issues are included in audit reports of FSC certified forests?
- 3) How do the current standards relate to the present state of thinking regarding social issues expressed in the audits and during the interviews?

In the following section I will reflect on these research questions.

What is the present state of thinking regarding incorporation of social issues in Dutch forest management and certification? Including public participation in forest management was perceived to be very important because the Netherlands is a densely populated country and for a considerable amount of people forests are the most important location for recreational visits. Many forest operations, mainly the FMU owning large areas of forest, are financed by public money or are membership-based organisations. Additionally, the interviewees agreed that Dutch forest management is in need of greater social support. Overall, the interviewees mainly perceived participation as a way to get informed and a possibility to bring forward stakes and values. However, some participants expected more from public participation and perceived

public participation as a possibility to bring forward specific (ecological) knowledge and creative ideas, and as a way to disclose and manage conflicts and create larger public support.

What becomes clear from the interviews is that many operations include some form of public participation in their forest management practices, but to various degrees. Differences in incorporation of public participation are for example seen between large and small operations. This however is suggested to be acceptable since public participation is indicated to be of greater importance in large forest operations. Despite agreement about the existence of some degree of public participation in many forest management operations and the differences between large and small operations, the effectiveness of incorporation of public participation in management is perceived to be highly variable. It has been suggested that actual investments of operations to contact all interest groups and their readiness to fully acknowledge and take in to account stakeholder interests is questionable, and the attitude of forest managers toward stakeholders is suggested to play an important role in the effectiveness of public participation.

Additionally, all interviewees indicated, directly or indirectly that current management is generally more reactive than proactive. Improvements can be made to the standards to improve stakeholder involvement and at the same time public participation can play an important role in educating the public and increasing public support for active forest management and logging in particular. Monitoring social impacts or evaluating other social issues can be a substantial burden for forest operations; it requires costly and time consuming research and monitoring activities. I suggest FSC and auditors to promote mutual relationships between FSC, forest operations and universities in order to increase cost-effective evaluation and research activities regarding social dimensions of forestry.

What comments on social issues are included in audit reports of FSC certified forests? The results of the audit reports reveal that NC and CAR were evenly distributed over both labour and community issues. However, major and minor CAR were unevenly distributed; labour issues were more often assessed as requiring major corrections then community issues. This could indicate that assessing community related issues are perceived to be of less significant importance. To our knowledge, there is no current social discussion on labour issues in forest management; we therefore concentrated on community related issues in this study. Our results reveal that forest operations were required to make important changes to social aspects of their operations as a result of the certification process. However, the publically available audit reports give the impression that the audit process is based on a process that focuses mainly on assessing documents provided by the applicant rather than on an evaluation of social forest management practices on the ground.

How do the current standards relate to the present state of thinking regarding social issues expressed in the audits and during the interviews? The results indicate that the current Dutch FSC standards play an important role and made significant contributions in putting community related issues on the forest manager's agenda and formalizing public participation, but is not perceived to be equally effective in forest management operations. Evaluation of the current standards using the results from our analysis indicates that the national indicators are not sufficiently inclusive and detailed or defined and leave much room for interpretation. Probably it is too complex to specify an appropriate procedure which is applicable internationally. Proper nationally developed indicators should dissolve this complexity. However, preliminary inspection of the FSC standards indicates that most social issues, such as usage and tenure rights, benefits from the forest, community relations and monitoring, are addressed in a broad sense while some are described more specifically. For example, indicator 5.2.3 states that "Forest management contributes to providing opportunities for outdoor recreation". In addition, a specific prescription is given on the minimum requirements for opening up to and accessibility for the public. By attaching a specific norm to the indicator the high importance and value attached to recreational use of Dutch forests is acknowledged. Most criteria however do not describe specific performance norms or minimum requirements. Hence, clarification on the minimum requirements for social consultation could possibly be improved. We argue that the standards have the potential to better indicate how local communities could be involved in FMU management and planning and to encourage their participation in discussions on forest management and certification.

Improvements can also be made to the Dutch standards by including more proactive indicators. Socially beneficial forest management is probably a combination of proactive and reactive measures. How they are incorporated in certified forest operations very much depends on whether the indicators requires both, proactive and reactive procedures and actual on the ground changes. Most of the FSC principles and criteria are described in a performance-based manner, but the further translation into concrete and verifiable measures is often incomplete or and therefore does not guarantee sustainable forest management. For example, indicator 2.3.1 states "In case of disputes...the forest manager has documents...in which the dispute resolution is documented and an appropriate procedure has been followed". Of course, management must be both proactive and reactive. Nevertheless, we argue that management should be proactive first and reactive second. Elaboration on social indicators such as participation, communication, conflict management and comprehensible proactive requirements could contribute to a more effective implementation of social indicators and therefore the delivery of socially beneficial forest management.

I suggest that the current Dutch National standards on the aspect of community issues currently are primarily concentrated on system-based indicators with little performance based thresholds. System-based indicators can be very powerful tools for helping organisations understand and improve their performance. However, in this case they do not specify minimum level of performance targets that must be achieved. Instead, they require forest management organisations to set their own performance target and to use the management system to ensure they are reached. Therefore, system-based indicators by themselves do not provide sufficient guarantee of forest management quality. Performance-based indicators specify the level of performance or results that must be achieved. Performance and system indicators are therefore complimentary but cannot be considered equivalent and deliver totally different benefits. Similar to what was found in the audit reports, FSC seems to mainly deal with procedural aspects of social forest management. Auditors do tend to be particularly interested in procedural aspects and to a lesser degree in the quality and realization of measures and their underlying intention. Nevertheless, when incorporating proactive public participation performance-based indicators in certification schemes, the voluntary nature of these schemes and the different nature of large and small forest operations must be taken into account in determining the level of requirements.

5.2 Audit reports as monitoring tools

Public summaries of audit reports provide a wealth of information which can be used for longterm monitoring of forest operations, improving audit proficiency and strengthening prescribed indicators. For this study I have examined 24 publically available reports. No distinction could be made whether reports were main- or re-certification reports. Not all reports were available, many reports dating from before 2006 could not be traced. I advocate FSC and certification bodies both to ensure access to all public audit reports e to ensure its transparency. The CAR were listed in an organized format, they were however not always clearly related to one or more criteria. Moreover I had difficulties tracing CAR through time as they were re-numbered or not numbered at all. Some CAR could not be found in the subsequent audit report, so it did not become clear whether issues mentioned in the CAR were re-assessed and closed or not. Furthermore, if CAR were found in the subsequent report, the reason that auditors decided to close the CAR was often not given. This significantly reduces the possibility to conduct accurate certification impact assessments, impedes the use of this information as valuable knowledge to be learned from and greatly diminishes the value of public summaries as monitoring tools. Due to the above mentioned constraints on availability and comprehensiveness, I could not examine each operation's annual audit report, nor assess whether CAR given in the original assessment report were actually met. Generally, studies assume that CAR given during certification processes are equivalent to positive (social) impacts of certification. Hence, I suggest that using CAR as the only source of information might be ambiguous as it might not provide a complete overview of actual impacts and does not take in to account missing or unidentified issues in standards and during the audits. It is important to also focus on whether the right criteria (and indicators) were used, whether the values for these indicators were obtained in a correct way and whether the threshold values, which were applied, are justified or not.

5.3 Conclusion and recommendations

With this exploratory study I offered insight into the present state of thinking regarding social dimensions in Dutch forest management and how major social issues are currently incorporated and operationalized in forest management and certification processes. Our results indicate that although labour issues and community issues are both mentioned in the audit reports as requiring further attention, incorporating community related issues can be considered as most critical. While the FSC standards can still be considered a useful tool for monitoring forest management and defining sustainable management practices, in order to remain appropriate to guarantee socially beneficial forest management it is essential to update the current set of Dutch indicators to reflect the changing national context in which they function. Several important recommendations emerge from this study to help ensure forest certification remains a credible tool for improving forest management:

- National indicators should be more inclusive and detailed. They most importantly require
 more proactive and performance-based requirements on social dimensions of forest
 management
- I recommend FSC to take in to account the different nature of large and small forest operations in performance requirements for public participation
- FSC should improve its support to auditors in the evaluation of performance on-theground (rather than exclusively its procedural requirements) by defining proper indicators, verifiers and related protocols for inspection of forest management, and auditor training
- FSC should ensure its transparency by publishing all forest management audit reports on the internet
- Improvements should be made to ensure clear organisation and tracability of CAR in the reports
- The audit reports should be used for long-term monitoring of forest operations,
 improving audit proficiency and strengthening prescribed indicators

FSC and auditors should promote mutual relationships between FSC, forest operations
and universities in order to increase cost-effective evaluation and research activities
regarding social dimensions of forestry

Literature

- Bass S., Thornber K., Markopoulos M., Roberts S., Grieg-Gran M. 2001. *Certification's impacts on forests, stakeholders and supply chains*. Instruments for sustainable private sector forestry series. International Institute for Environment and Development, London
- Bass S. and Simula M., 1999. Independent Certification/Verification of Forest Management; Background Paper For The World Bank/WWF Alliance Workshop, Washington, D.C.
- Blankenburg 1995. *Methods of Impact Assessment Research Programme*: Resource pack and discussion. The Hague: Oxfam UK/I and Novib
- Corten I.M., 1997. *Ervaringen met locale participatie: bosbemoeienissen*. Nederlands Bosbouw Tijdschrift 69(6)262-269
- FAO/ECE/ILO Joint Committee Team of Specialists on Participation in Forestry 2000. *Public participation in forestry in Europe and North America*. ILO Working Paper No. 163. 2000. Geneva, Switzerland, International Labour Organization.
- FERN 2009. FERN's position on the FSC. http://www.fern.org/node/4587 accessed: June 2010
- FSC international 2009. FSC summary report Comparative analysis between the FSC Controlled Wood requirements and PEFC, PEFC Germany and SFI www.fsc.org accessed June 2010
- FSC international 2010. Membership list. ttp://www.fsc.org/membership documents /FSC Membership List 2010 04 01.pdf accessed: June 2010
- Guillery P., Marroquin H. R., and Hampton M., 2007. Ford Foundation Funding to the Forest Stewardship Council: A Qualitative Review of External Impacts. A confidential report to the FSC International Center. In FSC reflected in scientific and professional literature. Karmann M., Smith A., Forest Stewardship Council A.C. 2009
- Gullison R.E., 2003. Does forest certification conserve biodiversity? Oryx 37(2)153-165
- Hajer M.A., Tatenhove J.P.M. van, and Laurent C., 2004. *Nieuwe vormen van Governance: Een essay over nieuwe vormen van bestuur met een empirische uitwerking naar de domeinen van voedselveiligheid en gebiedsgericht beleid*. Project M/500013/01/DV, Duurzaamheidsverkenning 2004. RIVM rapport 500013004/2004.
- ISEAL Alliance 2002. http://www.isealalliance.org/portrait/forest-stewardship-council-fsc accessed: June 2010
- Konijnendijk C. C., 2000. Adapting forestry to urban demands role of communication in urban forestry in Europe. Landscape and Urban Planning 52:89-100
- Kuijk M. van, Putz F.E., Zagt R., 2009. *Effects of forest certification on biodiversity*. Tropenbos international, Wageningen, the Netherlands
- Ministry of LNV 2000. *Natuur voor mensen, mensen voor natuur*. Nota natuur, bos en landschap in de 21e eeuw, The Hague
- Nussbaum R. and Simula M., 2005. The forest certification handbook. London: Earthscan

- Parfitt, T. 2004. *The ambiguity of participation: a qualified defence of participatory development.*Third World Quarterly 25(3)537-556.
- Peña-Claros M., Blommerde S., Bongers F., 2009 Assessing the progress made: an evaluation of forest management certification in the tropics. Tropical resource management papers No. 95. Wageningen, the Netherlands
- Schanz H., 1999. *If timber production did not require cutting down trees ... communicating timber management in society*. In: Nederlands Bosbouw Tijdschrift 71(6)232 236
- Schmidt P., Kuiler E., Wiersum K.F., Filius B., 1999. *Country report the Netherlands.* In *Forestry in changing societies in Europe*, (eds.) Pelkonen P., Pitkanen A., Schmidt P., Oesten G., Piussi P., Rojas E., pp 229-254, Joensuu/Finland: University Press
- Schlaepfer R. and Elliot C. 2000. Ecological and landscape considerations in forest management the end of forestry? In Sustainable Forest Management, (eds.) Gadow K. von, Pukkala T., and Tome M., pp 1-68, Dordrecht: Kluwer Academic Publishers
- Tollefson C., Gale F.P., Haley D. 2008. *Setting the standard: Certification, governance and the Forest Stewardship Council.* Vancouver: UBC press
- Visseren-Hamakers I.J., Glasbergen P. 2007. *Partnerships in forest governance*. Global Environmental Change (17):408–419
- Vogt K.A., Larson B. C., Gordon J.C., Vogt D.J., Fanzeres A. 2000. Forest Certification: Roots, Issues, Challenges and Benefits. Florida: CRC press LLC
- Walter J., 2003. Omgaan met de wensen van het publiek. Vakblad Natuurbeheer 42(5)76-78
- Wiersum K.F., 1995. 200 years of sustainability in forestry: lessons from history. Environmental management 19(3):321-329
- Wiersum K.F. and Vliet G.J.M. van, 1999. Context and content of national forestry programmes in the Netherlands. In Formulation and implementation of national forest programmes. Vol. II: State of the art in Europe. EFI Proceedings No. 30, p. 175-189. (eds.) Gluck P., Oesten G., Schanz H., and Volz K.R.
- World Commission on Environment and Development 1987. Our Common Future. http://www.un-documents.net/wced-ocf.htm accessed: June 2010
- WWF 2010. WWF Position on Forest Certification.

 http://assets.panda.org/downloads/wwf forest certification pp oct07.pdf accessed: June 2010

Annex 1 Overview FSC principles and criteria

Principle 1

Compliance with all applicable laws, international treaties and FSC standards

Principle 2

Demonstrated and uncontested, clearly defined, long-term land tenure and use rights

Principle 3

Recognition and respect of indigenous peoples' rights

Principle 4

Maintenance or enhancement of long-term social and economic well-being of forest workers and local communities

Principle 5

Equitable use and sharing of benefits derived from the forest

Principle 6

Reduction of environmental impact of logging activities and maintenance of the ecological functions and integrity of the forest

Principle 7

Appropriate and continuously updated management plan

Principle 8

Appropriate monitoring and assessment activities to assess the condition of the forest, management activities and their social and environmental impacts

Principle 9

Maintenance of High Conservation Value Forests (HCVFs) defined as environmental and social values that are considered to be of outstanding significance or critical importance

Principle 10

In addition to compliance with all of the above, plantations must contribute to reduce the pressures on and promote the restoration and conservation of natural forests.

Annex 2 Main Dutch principles, criteria and indicators used for evaluation of social dimensions

The main principles and criteria used for evaluation of social dimensions. The content of each criterion has been summarized.

Principle	Criteria	Indicators
2. Tenure and use rights and responsibilities	2.1 Clear evidence of long-term forest use rights to the land shall be demonstrated	2.1.1 Tenure and usage rights are laid down in writing and its legal coverage is clearly indicated
		2.1.2 In the case that others, such as local communities, can also exercise a right to the forest management unit, the owner has documented everybody's rights and duties
	2.2 Local communities maintain control, to the extent necessary to protect their rights or resources, over forest operations	2.2.1 Tenure or use rights of local communities are identified and documented. If others, such as local communities, also exercise a right to the unit, the control over forest operations has been agreed upon and is documented
		2.2.2 If local communities can exercise legal or customary tenure or use rights, a written agreement is available, guaranteeing the local community the extent of control over forest operations needed to exercise their legal or customary rights
	2.4 Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights and outstanding disputes will be explicitly considered	2.3.1 In case of disputes over tenure claims and use rights, the forest manager has documents at his disposal in which the dispute resolution is documented and an appropriate procedure has been followed
3. Indigenous peoples' rights	3.1 Indigenous peoples shall control forest management on their	No indicators
In the Netherlands there is no such category as indigenous peoples as defined by the UN (1986). In the Dutch standard this principle.	lands and territories 3.2 Forest management is not detrimental to resources or tenure rights of indigenous peoples	criterion is self-explanatory
(1986). In the Dutch standard this principle refers to the Dutch Constitution under which	3.3 Sites of special significance identified in cooperation with such	
all people in the Netherlands have the same fundamental rights; which shall be recognised and respected	peoples, and respected by forest managers 3.4 Indigenous peoples shall be compensated as formally agreed upon before forest operations commence	

4. Community relations and worker's rights	4.1 The communities are given employment, training and other services	4.1.1 Opportunities for economic participation of qualified employees, suppliers and forest contractors provided
		4.1.2 Relevant instructions and regulations concerning employment, labour relations, the type of labour and working conditions, training and quality improvement have been implemented to improve the skills of the employees
		4.1.3 When contracting out works exceeding 2.500 euro, forest contractors have been employed who meet collectively established criteria of professionalism, quality and reliability
	4.2 Health and safety of employees and their families	4.2.1 The instructions covering health and safety are met with all activities that are undertaken in the forest management unit
		4.2.2 The relevant instructions and collective regulations concerning working conditions are implemented by or on behalf of the forest manager when contracting and carrying out activities
	4.3 Workers rights to organize and negotiate with their employers shall be guaranteed	4.3.1 No violations have been established of the rights of workers to organize and negotiate on their labour conditions
	S Comment of the comm	4.3.2 Employment contracts are based on the collective labour agreement for the forest sector, or equivalent arrangement
	4.4 Management planning and operations incorporate the results of evaluation social impact and maintain consultations with those directly affected by management operations	4.4.1 In the case of drastic changes in forest management or forest use on a scale exceeding that of usual management operations, the people concerned have been informed in advance and have got the opportunity to react
		4.4.2 Demonstrate how wishes and complaints of the people concerned regarding forest management or forest use have been actively taken into account in the decision-making and implementation of forest management operations
	4.5 Mechanisms to avoid or resolve grievances and for providing compensation	4.5.1 Provide evidence of measures that have been taken to avoid loss or damage affecting the legal or customary rights, property, resources or livelihoods of local peoples
		4.5.2 A written procedure is in place describing how to deal with grievances and compensation in case of loss or damage
		4.5.3 In case of grievances, or loss or damage, documents show how the case has been dealt with in which the resolution of the matter is laid down. Agreements about compensation have been documented and signed by parties concerned

5. Benefits from the forest	5.1 Forest management strives to economic viability taking into account environmental and social costs of production, and maintain the ecological productivity of the forest
	5.2 Optimal use and local processing of the forest products encouraged by management and marketing activities
	5.3 Forest management should minimize harvesting and processing waste and avoid damage to other forest resources

- **5.1.1** All money transactions concerning forest management operations should be documented in the business administration of the forest management unit.
- **5.1.2** The forest manager can provide documents showing that costbenefit analysis takes place periodically, preferably in cycle with the management plan. The analysis shows that the forest management plan is economically viable and the following factors have been taken into account: ecological, social and economic conditions, and the necessary investment to guarantee quality and productivity of the forest management unit in the long run
- **5.1.3** A yearly budget plan is available
- **5.2.1** Forest management aims at fulfilling several functions at the same time by the same forest management unit, proportionate to the allocation of specific functions
- **5.2.2** Forest management contributes to conserving and enhancing natural and landscape values
- **5.2.3** Forest management contributes to providing opportunities for outdoor recreation

norm: The forest management unit is open to the public during daylight hours on roads, paths and waterways for quiet forms of outdoor recreation, for at least 8 months per year (of which the period May-August is compulsory). Access may be regulated by zoning and financial measures (like membership or entrance fees) as tools of proper recreation management. Access may be restricted to prevent negative impact on endangered species or delicate forest ecosystems, to protect the privacy of people living in the forest management area, and to guard visitors from danger

- **5.2.4** Forest management contributes to the production, marketing and processing of timber
- **5.3.1** Waste from forest management operations such as oil and fuel containers is removed from the site and deposited in a safe and proper way
- **5.3.2** When performing harvesting and processing operations, measures have been taken to minimize damage to other forest

5.4 Forest management strengthen and diversify the local economy, avoiding dependence on a single forest product	resources such as remaining trees and undergrowth. 5.4.1 More than one single product and/or service is offered to the local community
	5.4.2 Income is generated from more than a single forest product or service. Sources of income are e.g. timber revenues, subsidies, hunting revenues
5.5 Forest management operations recognize, maintain, and enhance the value of forest services and resources	5.5.1 Areas with a high potential for forest services and resources such as watersheds and fisheries are identified and recorded on maps
	5.5.2 For all high potential areas the management plan provides information on how the value of forest services and resources such as watersheds or fisheries will be maintained and, where appropriate enhanced
5.6 The rate of harvest of forest products shall not exceed levels which can be permanently sustained	5.6.1 An estimate is available of the annual increment of the growing stock, based on recent inventories. Guidelines are available for the maximum average annual yield, based on the estimated increment. The average yearly harvest shall not exceed the maximum average annual yield

Annex 3 Interview guideline

Introduction:

Nogmaals hartelijk dank dat u mee wilt werken aan dit interview. Ik ben op dit moment bezig met mijn afstudeer-opdracht en wil met mijn studie proberen inzicht te krijgen in hoe momenteel invulling wordt gegeven aan sociale aspecten zoals participatie in bosbeheer en welke rol die FSC certificering hierbij speelt.

Introduction:

Kunt u kort iets vertellen over uw rol binnen het Nederlandse bosbeheer? Ervaring met maatschappelijk aspecten bosbeheer? En welke ervaring heeft u met FSC-certificering?

Main questions:

- 1. Er wordt al jaren over participatie in bosbeheer gesproken. Hoe vind u dat tegenwoordig invulling wordt gegeven aan sociale aspecten zoals participatie (communicatie, conflictmanagement) binnen het Nederlandse bosbeheer?
 - Idee over hoe invulling gegeven aan participatie?
 - Effectief? Voldoende aandacht?
 - Obstakels/moeilijkheden?
 - Hoe in toekomst voorkomen?
 - Waar ziet u verbeterpunten?
 - Meer aandacht nodig voor deze sociale issues?
- 2. Hoe vind u dat bij FSC certificering rekening wordt gehouden met sociale aspecten zoals participatie? (communicatie en conflictmanagement)
 - voldoende aandacht bij certificering?
 - Hoe uit zich dat / waar ligt dat aan?
 - voldoende eisen aan de invulling sociale dimensies? Mate/proactief?
 - Bieden ze voldoende houvast voor auditors? interpretatie?
 - Als u de iets in de standaarden mbt sociale dimensies zou mogen aanpassen, wat zou u veranderen? verbeter-mogelijkheden?
 - Welke rol kan FSC certificering spelen bij effectief invullen van sociale dimensies van bosbeheer in Nederland?
 - Verschil grote/kleine beheerders
- 3. De standaarden die gebruikt worden bij certificering in Nederland zijn ontwikkeld door de FSC landentafel bestaande uit drie "kamers" (ecologische, economische en sociale). Deze nationaal ontwikkelde standaarden zijn speciaal aangepast aan de Nederlandse situatie.
 - Denkt u dat bij de ontwikkeling van deze standaarden voldoende aandacht is geweest voor de maatschappelijke dimensies zoals participatie?
 - Naast de interactie met de sociale omgeving zijn arbeidsomstandigheden een andere belangrijke sociale dimensie bij bosbeheer, is er in de standaarden en bij certificering voldoende aandacht voor beide soorten sociale dimensies?
 - Denkt u dat de samenstelling van de landentafel invloed gehad zou kunnen hebben op de formulering van de indicatoren?

Annex 4 Interviewees

Dhr. E. Pelinck Small forest owner

Dhr. A. de Meijer Stichting Gelderse milieufederatie

Dhr. D. Ende Unie van Bosgroepen

Dhr. M. van Benthem Stichting Probos