

Dear Agrarian Studies Readers,

Thank you very much for taking the time to read this paper in progress. I am in the middle of a book project titled *Contesting Legitimacy: The Role of Forest Certification in East Malaysia* that I have been working on this year in Agrarian Studies. The book analyzes the market-based environmental regulatory mechanism that limits rural communities' customary use of the forest as a result of the implementation of forest certification. Forest certification was invented as a response to control excess logging of tropical forests; however, it gave legitimacy to the government in controlling rural communities' customary use of the forest in the name of sustainable forest management.

Although not discussed in this paper, the book will also include chapters on the emergence of forest certification, the comparison of two forest certification schemes in Malaysia--the Forest Stewardship Council and Malaysia Timber Certification Council--the history of forest management in Sabah, the historical changes of subsistence activities of rural communities, and auditing practices.

This particular piece is an amalgam of different sections of the book, but draws primarily from a chapter on the implementation of forest certification and its impacts on a rural community. I have struggled with how to theorize as well as engage with ethnographic materials. I would be grateful for any suggestions you might have to better integrate and frame the paper. I look forward to your ideas and comments.

Best regards,

Daisuke Naito

Visiting Fellow, Program in Agrarian Studies
Center for Integrated Area Studies, Kyoto University
dnaito@gmail.com

Auditing Sustainability and the Rural Community: Social Impacts of Forest Certification in East Malaysia

Naito Daisuke

Visiting Fellow, Program in Agrarian Studies / Kyoto University

1. Introduction

In recent years, forest certification¹, one of the market-based approaches² to environmental regulation, has been introduced as a solution to global deforestation problems. Forest certification is an attempt to promote sustainable forest management by buying timber that is produced in an environmentally and socially sustainable manner. Certified forest is widely spread over 3.56 billion ha and it consists of 9.0% of the forest area in the world³ (UNECE/FAO 2010) . This approach now applies to agricultural products, marine products, and carbon credits; however, the outcome of the new environmental regulatory system has not yet been adequately examined. The social consequences of certification vary depending on its standards, audit procedures and stakeholders. This paper looks at one such scheme, forest certification, in Malaysia in order to investigate how its actual effects on forest management and rural communities⁴.

¹ Forest certification consists of forest management certification and chain of custody certification. In this paper, I only discuss forest management certification.

² Cashore (2002) uses the term “Non-State Market-Driven,” Vandergeest (2007) uses the term “Environmental Regulatory Networks.”

³ This figure includes certified forest by the Programme for the Endorsement of Forest Certification schemes (PEFC) and the Forest Stewardship Council (FSC). Less than 10% is located in tropical countries (Atyi & Simua 2002).

⁴ I use the terms “rural community” and “indigenous” interchangeably in this text. Where “indigenous” is the term originally used in documents, for example, I replicate that use. In the context of my field site, however, I use the term “rural community” for reasons that will become clear later in this paper.

Forest certification schemes emerged from an environmental movement against massive deforestation in the tropics during the 1980s (Counsell & Loraas 2002). Commercial logging, one of the main causes of deforestation during this time, has had a serious impact, not only on forest ecosystems and biodiversity, but also on the subsistence activities and cultural practices of rural communities. Scholars have documented how logging has a drastic impact on rural communities' livelihood (Brosius 1997, Dentan *et al.* 1997, Cooke 1999). In particular, Punan protesters setting up blockades on logging roads in East Malaysia brought wider attention to their struggle (Hong 1987, Brosius 1999). As a result, European NGOs organized campaigns to boycott tropical timber, introducing government procurement policies to avoid importing tropical timber. Many other countries followed with similar regulations (Vogt *et al.* 1999). Tropical timber producing countries, however, complained that these regulations were unfair trade barriers. Others argued that boycotts did not stop deforestation but rather promoted further forest conversion. Hence, some European governments reoriented their policies towards promoting consumption of timber produced from environmentally and socially sustainable forests. Forest certification schemes serve as a verifier of this kind of sustainability.

While there are several schemes of forest certification in the world (Viana *et al.* 1996), the Forest Stewardship Council (FSC)⁵ is well-known for its strict principles of rigorous social and environmental standards (Bass *et al.* 2001, Klooster 2006). The FSC was established in 1993 as an independent, non-governmental, and non-profit organization. Its goal was to promote responsible management of the world's forests by setting certification standards, trademark assurance, and accreditation services for companies and organizations interested in responsible forestry (FSC 2008). Its certified forests are spread across eighty countries, totaling 135 million ha (FSC 2011). The FSC

⁵ The FSC was established by concerned business representatives, social groups, and environmental organizations to improve forest management as environmentally appropriate, socially beneficial, and economically viable (FSC 2008).

Principles and Criteria⁶ consist of 10 principles and 56 criteria which certify forest management for the tripartite goals of economic sustainability, biodiversity conservation, and respect for indigenous peoples' rights (Nussbaum & Simula 2005).

Forest certification seems to make visible the social and environmental impacts of forest management and therefore solve problems in conventional forest management, or provide alternatives (Whatmore, Stassart and Renting 2003). In Sweden, the Sami people's rights to reindeer grazing were recognized in the certified forest (Matsui 2005). In Bolivia, community rights to harvest forest resources were strengthened by achieving forest certification (Markopoulos 2003).

Scholars and practitioners also argue that forest certification, which brought a market-based approach to environmental regulation, welcomes new forms of governance that are outside the sovereign authority of states (Meidinger *et al.* 2002, Cashore 2002, Cashore *et al.* 2004). They also argue that certification schemes decrease centralized state governance; therefore, many stakeholders such as NGOs and rural communities can become involved in resource management practices. However, few studies have documented how forest certification works to overcome continuing conflict between state and rural communities.

On the other hand, critical literature argues for equity issues in forest certification (Taylor 2005, Ponte 2008). Researchers have pointed out that a market-based approach imposes northern consumer and retailer views on

⁶ The FSC Principles and Criteria are global standards for forest management that are applicable to all FSC-certified forests throughout the world. They are accredited at the FSC General Assembly and are used for forests. For the purposes of this paper, the most relevant principles are: Principle 1. Compliance with all applicable laws and international treaties, Principle 2: Tenure and use rights and responsibilities, 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 and respect of worker's rights.

distant others in the global south. One of these issues is the lack of price premium for certified products. Without a price premium, producers have to pay for the cost of improving forest management and auditing that make it difficult for the small community forest owners to compete with large scale forest producers (Klooster 2006, Rametsteiner and Simula 2002, Morris and Dunne 2004) .

In addition, there are criticisms of the audit system itself. Power (1997) mentions the credibility of certification, illustrating audit as a ritual practice. He also points out the expectation gap of auditing—consumers think audits result in the detection of management fraud, whereas in practice audits are meant to verify best management practices (Ibid). This argument also applies to forest certification. In its early stage of implementation in Malaysia, Brosius (1999) critiques forest certification for its obfuscation of logging activities rather than its benefit to rural communities.

In this paper, I will explore how one forest certification scheme was implemented and whether it mitigated or buffered the social impacts of forest resource management. In the case of Malaysia, I will argue, the market-based forest certification does not weaken state sovereignty; rather, it strengthens state control over land and forest resources.

I conducted fieldwork in the Sandakan and Kinabatangan districts in Sabah, Malaysia, in an FSC certified forest and a rural village⁷ located on the fringe of the forest, primarily between 2006 and 2008. While there, I applied multiple methods to evaluate these effects: review of certification documents and government documents, and open-ended interviews with governmental officials, auditors, NGO staff members and villagers. As noted before, Malaysia is one of the countries where severe conflicts between state and rural communities led to the implementation of forest certification. This research examines the effect of forest certification on the rural community by looking at Forestry Department's response that resulted from the certification body's⁸

⁷ There are five villages near the certified forest, I mainly discuss on one village which is the closest to the certified forest.

⁸ This certification body will be addressed in more detail later. Briefly, the certification body is an independent third-party accredited by the FSC to audit the forest using FSC standards.

application of FSC standards.

I will first provide a general overview of forest management in Sabah and the process of implementing forest certification. Then I will explain how the certification body applied FSC standards to a forest reserve and the resulting Forestry Department responses to rural communities. I will investigate the impacts of forest certification implementation through looking at rural peoples' historical changes in uses of the forest. Finally, I will conclude by discussing state influences over forest certification in Malaysia, including why the Forestry Department and the certification body should account for customary rights.

2. Forest Management in Sabah

Sabah was once the center for export of tropical timber mainly of the *Dipterocarpus* species. From the late 1950s, timber logging rapidly increased, accelerating in the 1960s and 1970s, and peaking in the 1980s. Sabah exported timber to countries including Japan, Korea, and Taiwan. Since forest revenues go directly to the state, these revenues became the largest source for state revenue and continue to be important today (Jomo *et al.* 2004). Due to the state's patronage of timber logging, the Sabah Forestry Department (henceforth Forestry Department) was often criticized for not enforcing forest protection laws and regulations. A huge demand for tropical timber and patron-client relations characterized logging practices in Sabah, and unstable politics led to excessive logging and forest degradation (Dauvergne 1997).

As a result of forest resources becoming scarce, and also due to a logging ban in the 1990s, timber exports decreased. The rapid forest resource shortage and the increasing demand from European countries for sustainable forest products led the Forestry Department to make institutional changes to implement sustainable forest management in remaining forests and adopt several forest policies.

These changes paved the way for the introduction of forest certification in Sabah. In 1989, the Forestry Department started implementing a sustainable forestry management project with a German development agency, and the Deramakot Forest Reserve (henceforth the reserve) was chosen as its project site. In 1997, the reserve was awarded the first certification and is still the largest certified forest in Malaysia. The Forestry Department is now applying FSC

certification to other forest reserves.

The Deramakot Forest Reserve

The reserve is located near the midway point of the Kinabatangan River. The Kinabatangan River, which runs through the northeastern part of Sabah, is the longest river in the state at 560 km with a watershed area of 16,800 km². Wild mammals such as orangutans, Asian elephants and proboscis monkeys live in the forest (Azmi 1996), and many conservation and tourism activities take place in the area.

The Kinabatangan is a historically important waterway. The river basin was the center for non-timber forest product gathering. The rich timber resources along the Kinabatangan River have attracted logging companies since the colonial period. In the 1950s, commercial logging commenced in the area, and annual logging licenses were given to companies between 1956 and 1958. From 1959 to 1976, long-term logging concessions were issued to United Timbers, a timber company run by Sandakan based Chinese owners⁹, and large scale logging operations began. Demarcation of the reserve initially took place in 1961 (SGS 1999). Logging companies were obligated to follow the Sabah state forest regulations¹⁰, but these regulations were often violated as result of poor state supervision.

In 1989, the Malaysian-German Sustainable Forest Management Project was introduced in the reserve with the support of the German Agency for Technical Co-operation (GTZ¹¹). The reserve was selected because it had already been logged and there was no logging license assigned to logging companies for that area at the time. When the German Federal Ministry for Economic Cooperation and Development offered support for the project, it selected this previously logged forest due to its policy prohibiting logging in pristine forests. In addition, another reason is that there was no human settlement within the

⁹ United Timbers is owned by Khoo Shek Choo, a member of a Chinese political party at the time.

¹⁰ The Sabah Forestry Department applied the Malaysian Uniform System, which allowed logging of commercial trees above Diameter Breast Height (DBH) 60cm.

¹¹ GTZ stands for Deutsche Gesellschaft für Technische Zusammenarbeit.

reserve (Mannan 2002).

The aim of this project was to construct a sustainable forest management model in a logged secondary forest. This project sought to strengthen both research capabilities and resource management skills of the Forestry Department staff. Facilities included office buildings, conference rooms, employee accommodations, and some space for training. One aspect of building staff skills included the creation of a Forest Management Plan. The Plan involved modeling forest growth, performing a comprehensive resource assessment to determine the amount of resources, and conducting biological research on wildlife. A growth simulation model of commercial dipterocarp forests of Sabah was developed as part of the project and this model limited the annual allowable cut to 20,000m³ per annum, to ensure a 60-year rotation cycle. The Plan also defined forest work such as cutting vines of 1,000 ha per annum, and required reforestation of 200 ha per annum. This was done in compliance with the Forestry Department's Reduced Impact Logging policies that seek to mitigate logging impacts (Mannan 2002). The Reduced Impact Logging research carried out by the GTZ was particularly effective in reducing soil washout and led to the development of certification. Socio-economic research was conducted in two villages located around the reserve, and ultimately concluded that logging practices had almost no influence on villagers (Sabah Forestry Department 1991).

The Forestry Department decided to apply for the FSC forest certification in order to verify their achievements because the FSC had international recognition and better market access. The Forestry Department chose certification bodies such as the Société Générale de Surveillance (SGS)¹², which is an inspection, verification, testing, and certification firm that conducts auditing under the Qualifor Programme, the forest certification program accredited by the FSC (SGS 2007). The Forestry Department chose the SGS since they had worked with the Malaysian government to develop and audit for the

¹²This is one of the largest international inspection, verification, testing, and certification firms, and its headquarter is in Geneva Switzerland.

Malaysian Timber Certification Council¹³, which is Malaysia's national forest certification. Another reason is that the SGS was one of the few auditing companies that had a branch office in Kuala Lumpur at the time. To achieve FSC certification, the Forestry Department implemented the forest management plan, which they developed with GTZ. The cost of the certification audit was 110,000 RM¹⁴ over 5 years or approximately 2 RM per ha (Kugan 2000).

3. Certification Auditing and the Forestry Department's Response

Being certified by FSC means having to comply with FSC standards. The certification body is in charge of monitoring a certified forest. Each certification body has different auditing procedures. The SGS usually conducts a major assessment at the beginning of the process, and if it passes, there will be surveillance visits at least once a year and a re-assessment of the entire forest operation every five years. During surveillance visits, the auditor is required to check compliance with FSC standards. SGS issues Correction Action Requests (CARs) for non-compliance with FSC standards. A Major CAR must be dealt with immediately or else certification will be cancelled. A Minor CAR will also have to be dealt with by a certain deadline. If a correction is not implemented before the next inspection, it could change to a Major CAR. The SGS assessment reports provide details of CARs which indicate the correction points specified by the auditor and how the Forestry Department responded in each case (Table).

The process of localizing FSC Principles and Criteria has significant impact on the effect of implementation of forest certification. The regular procedure of FSC to set national standards is to establish a national working group with social, environmental, and economic stakeholders. When there is no national standard, certification bodies localize FSC Principles and Criteria through stakeholder consultation. In Malaysia, there is no national standard

¹³ Malaysian Timber Certification Council was established in October 1998, manages national forest certification schemes. The MTCC was quasi-government organization, funded by timber export taxes.

¹⁴ Ringgit Malaysia. In 2000, 1 RM was equivalent to 0.3 USD.

accredited by FSC. This was the case for SGS, and local standards were therefore created for the reserve. The SGS accepted already formulated Malaysian Criteria and Indicators¹⁵ as their local indicator. Although some NGOs were against this move, they did not have enough information to comment when SGS sent interim standards to stakeholders for feedback. Here is presented a case when a certification body such as SGS implements FSC Principles, the speed of implementation is very quick and the information regarding implementation is very limited, therefore, it is very difficult for small local NGOs to intervene in the process.

1st Assessment Period (1997-2002)

The SGS conducted the first major assessment in the reserve from June 2nd to 6th, 1997. The audit team consisted of four people: three forestry specialists and one wildlife specialist; there was no social science specialist on the team. In a major assessment, auditors began by assessing documents and ground-truthing surveys. In the case of the reserve, on the fourth day, two auditors went to the village and interviewed the villagers on their forest use.

After the major assessment, the SGS issued one Major CAR and seven minor CARs. The Major CAR concerned the Forestry Department's lack of management of its logging contractors: "Incidence of non-compliance with conditions of service contract, in absence of Forestry Department supervision" (SGS 1997). The Forestry Department worked to solve the problem, and the SGS re-visited and approved the correction of the CARs. On July 23rd, 1997, the reserve was certified under the FSC forest certification.

No CAR was issued for social aspects in the first major assessment. Their basic understanding was that villagers did not depend on the forest reserve for a living, which would imply that their impact on the forest was small.

¹⁵ In the beginning of setting this standard, many environmental NGOs and social NGOs were involved in the consultation process of developing standard, however when MTCC finalize their standard they dropped social and environmental criteria, as the result these groups resigned in 2001. Social NGO was asking for respecting native customary rights within forest reserve however, government only allow to codified law.

The gazetification of the reserve initially took place in 1961. Minor adjustments were then made, and the reserve was delineated as covering an area of 55,083ha in 1984 (SGS 1999). The SGS stated that “the reserve is classified as a commercial forest reserve that is to be managed for timber production.” Therefore, the reserve was legally demarcated as a forest reserve, and the forestry laws in Sabah prescribed that using forest resources in forest reserves without a permit was considered “illegal.” Regarding the land issues, the SGS stated “No such issues are present in the reserve”; on the other hand, related to forest use: “use of the reserve by villagers is minimal, although rattan and medicinal herbs are collected for subsistence purposes.” The SGS issued an observation¹⁶ to the Forestry Department that “Subsistence uses should be formalised through the appropriate licenses.” The SGS’s views on the villagers’ subsistence use of forest products were that these activities were not the customary practices which should be respected under Principle 3, but rather that the forestry department should monitor and regulate to ensure their sustainable management.

3rd Surveillance Visit

After the first major assessment in 1997, the SGS conducted two surveillance visits, and no major CARs were indicated. In 1999, however, the SGS was notified by the Forestry Department that there was extensive illegal logging in the reserve, including large scale timber felling with logging tractors. The SGS issued a Major CAR. This could have cancelled the certification. The report of the third surveillance visit, which was conducted on March 25th-27th 1999, stated that an external logging group had been logging without permission in the southern fringe of the reserve. The SGS issued a Major CAR stating an “inadequate programme for resource security to protect against illegal logging and encroachment. Area with illegal felling must be identified, surveyed, and volume subtracted from annual allowable cut” (SGS 1999). Since their certification was at risk of termination, the Forestry Department took drastic actions to solve this Major CAR. The SGS requested that the Forestry

¹⁶ The auditor issues an “observation” when they find small instances of non-compliance. If this is not solved satisfactorily for the auditor, it eventually becomes a minor CAR.

Department reinforce strict control on the boundaries of the reserve.

In order to resolve the Major CAR, the Forestry Department implemented various measures to prevent illegal felling. The Forestry Department seized logs and logging tractors and took them to the log auction. They estimated the area and the volume of illegal logging and subtracted the illegally logged volume from the annual allowable cut. The Forestry Department acknowledged that there was no system to monitor illegal logging, so they implemented measures to conduct strict monitoring and control over the forest reserve boundary. From August 1999, the Forestry Department began to monitor illegal logging within the reserve, enforce boundaries, and record border monitoring in order to prevent illegal logging. The Forestry Department established two monitoring observation posts beside the Kinabatangan River and appointed residential forestry staffs to monitor activities that occurred within the reserve. In addition, the Forestry Department implemented tree planting at logged sites.

The Forestry Department was committed to preventing illegal logging, therefore, the SGS closed the CAR in a surveillance visit in October 1999, and the Forestry Department succeeded in maintaining their certification status; however, the villagers' subsistence activities on the fringe of the reserve became strictly controlled, resulting in additional conflicts between the Forestry Department and the villagers regarding forest use. Long before the implementation of the forest certification, villagers had practiced swidden agriculture and gathered forest products in this area. The Forestry Department did not allow villagers to use the land or to collect forest products without official permits. Introducing strict boundary control of the reserve led to critical conflicts between the Forestry Department and villagers. The Forestry Department had to follow strict rules to secure the reserve from any encroachments; otherwise, they would have lost their FSC certification.

2nd FSC Assessment Period (2002-2007)

From Aug 12th-16th, 2002, the SGS visited for a second major assessment. A Minor CAR was issued under Principle 2. Auditors observed that there were

“inadequate procedures and system of communication for monitoring and enforcement of illegal logging” (SGS 2002). Consequently, the Forestry Department demarcated the boundaries by doing things such as putting signboards every 200m near the border and painting the border trees red. During the demarcation, the Forestry Department staff logged rattan planted by the villagers, which exacerbated the conflict.

At the same time, the SGS confirmed that there were disputes between the Forestry Department and villagers because of the implementation of strict border management. Based on Criteria 4.4 of FSC Principles and Criteria, which states that “consultations shall be maintained with people and groups directly affected by management operations,” the SGS indicated that the current system was insufficient to resolve conflicts and discuss border management. The SGS stated “an inadequate system of communication and dispute resolution in respect to boundary identification and marking” and requested the establishment of a committee, urging rural communities and NGOs to participate in forest management (SGS 2002).

In October 2002, the Forestry Department established the *Komiti Perhutanan Social Deramakot Selatan* (Deramakot Forest Reserve Social Forestry Committee) to improve communication between the Forestry Department and the villagers. The objectives of this committee were to promote social forestry and to set up a framework for cooperation between the Forestry Department and villagers. The organizational structure was, however, a top-down organization headed by the reserve director. A total of two people were elected from the five villages as committee members. Meetings were scheduled four times a year in one of the villages in the area. The proceedings of these meetings were prepared by the forestry officers and meeting minutes were distributed afterwards.

The committee members experienced difficulties attending meetings because the meeting places were far from their villages. The meeting date was often revealed at the last minute, therefore, it was also difficult for the village leaders to attend meetings as they often had to be away from their villages to conduct their regular work. In the meetings, the chairperson, who again was the director of the reserve, followed the meeting agenda with a question and answer

session. The Forestry Department would announce information about the forest operation and part-time job opportunities if there were any. This committee structure made it difficult for the villagers to express their feelings as it was all organized by the Forestry Department.

NGO Collaboration

Through auditing visits, the SGS recognized the conflict between the Forestry Department and villagers, so they issued the Minor CAR citing the necessity of a local development program for rural communities and requesting participation from a local NGO.¹⁷ In fact, the SGS had continuously encouraged the Forestry Department to monitor social elements in collaboration with a local NGO that was conducting programs with communities living in proximity of the reserve (SGS 2002). The Forestry Department began to work with the NGO, and the NGO trained some community organizers to start a kindergarten project to built a water pipe, which I will briefly describe.

The community organizers and the NGO had long recommended that the Forestry Department introduce a gravity-fed potable water system. In December 2002, this system was constructed within six weeks by the villagers and an international NGO with support from the Forestry Department. The Forestry Department permitted the drawing of water from the river in one of the forest compartments in the reserve. A small dam was constructed at 150 m above sea level, and the water was transported downstream through a 4 km network of pipes. It was a very simple design, but this watering system served half of the village. This could be said to be one of the benefits of forest certification for the community. In 2005, a new building for the kindergarten in the village was constructed with support from the Forestry Department. When the surveillance visits were conducted by the SGS, they assessed the current status of the pipe gravity water system and kindergarten.

Support from the NGOs is helpful to the community, and the certification body also encourages the Forestry Department to carry out further community development projects; however, financial limitations are an obstacle

¹⁷ Their main office was located in Kota Kinabalu, the state capital.

to continuing these activities. This village is far from the NGO head office, and the budget is inadequate. It is also difficult for the community to raise funds themselves. There is also the question of who is responsible for these projects. The potable water system is widely perceived as successful by village residents, but the pipes often became clogged due to sand or stones, and responsibility for their maintenance remains ambiguous. While the NGO involvement overall seems to be positive, its long-term involvement in the area is unclear for these reasons.

Table The List of Non-Compliance

Assessment	Year	Date	CAR	FSC standards	Non-Compliance
1st Period 3rd Surveillance Visit	1999	Mar/25-27	Major	1.5	-inadequate programme for resource security to protect against illegal logging and encroachment. -area with illegal felling must be identified, surveyed, and volume subtracted from Annual Allowable Cut
1st Period 5th Surveillance Visit	1999	Oct/19-20	Minor	Social Aspect	-absence of an official community development program to stop encroachment of the Reserve and provide social benefit to the local communities along the Kinabatangan River in the Reserve
2nd Period Major Assessment	2002	Aug/12-16	Minor	1.5, 4.4	-inadequate procedures and system of communication for monitoring and enforcement of illegal logging
2nd Period Major Assessment	2002	Aug/12-16	Minor	2.3, 4.4	-consultations shall be maintained with people and groups directly affected by management operations
2nd Period Major Assessment	2002	Aug/12-16	Minor	5.4	-inadequate system to train and manage the local community use of non-timber forest products

Source: SGS Forest Management Certification Report (1999-2002)

4. The Rural Community and Effects of Forest Certification

Up to this point, I have focused on the audit process and the Forestry Department response. Now I examine one village's effects from the FSC as a way of examining impacts of forest certification on people's livelihood.

Village Walad¹⁸ is located at the southern fringe of the reserve, near the midway point of the Kinabatangan River in the Kinabatangan Administrative District. Village Walad is a geographically isolated village. The nearest village in either direction is two hours away by a 30 hp boat. In 2005, the village became

¹⁸ The village name is a pseudonym.

accessible by car because oil palm plantations were expanded in the southern part of the village. It takes two hours to reach the small town of Bukit Garam, where the district office and a local market are located, and it is five hours to Sandakan, the former capitol. There are 38 households with approximately 326 people¹⁹ in the village. The majority of villagers are *Orang Sungai*²⁰ or People of the River in Malay, one of many indigenous groups that live in Sabah. Most of the villagers originate from this village, and 9.5% of the villagers come from outside. According to village elders, they have lived in this area at least since the early 20th century. A wider area including the current reserve area has customarily been used by people of Village Walad for subsistence activities. moved from place to place within the area until a school was built in 1968 and they started to settle.

Traditional subsistence activities of villagers were forest product gathering of rattan, swidden agriculture of products such as *padi* (hill rice), and fishing. In forest product gathering, main products were *damar* (resin) and rattan. They collected *damar* regularly to sell to Chinese brokers from Sandakan. Villagers went on one to two month trips on rivers to collect these products from the forest. Villagers no longer collect *damar*, but they still collect rattan occasionally.

In the 1950s, large scale logging operations began in the reserve. Elder villagers said that many of the *damar* trees they collected from were logged at that time, and they were not compensated. It was impossible for villagers to stop logging companies because the companies had legal permits from the government. Demarcation of the reserve initially took place in 1961 (SGS 1999), which had a tremendous impact on their subsistence activities and their livelihoods.

When the reserve was established, villagers were initially unaware of it. Since their customary rights were invalidated if they had not claimed them in advance, the establishment of the reserve took away from villagers not only timber resources but also land rights.

¹⁹ This figure is based on the September 2007 Household Survey.

²⁰ There are only a few ethnographic studies on Orang Sungai.

Although the land was officially demarcated as a forest reserve, villagers still continued to collect rattan and plant *padi* in swidden fields. They were able to continue these activities as long as they did not interfere with logging activities. The area of land which villagers could use, however, decreased, because of its demarcation as a forest reserve.

Logging camps were opened next to Village Walad, with many villagers employed by logging companies as loggers and tractor drivers. Many villagers were also hired as crew of ships which transported timber from logging camps to log ponds in Sandakan. Some villagers gained benefits from selling fish and vegetables to migrant logging workers living in the logging camps.

In 1989, former logging contracts had expired, and the Forestry Department took over management of the reserve. Most logging companies moved to the upper Kinabatangan area. This move had a substantial impact on villagers because they could no longer work as logging workers or sell fish and vegetables in logging camps. The reserve was selected as a pilot site to implement a sustainable forest management project. Unlike previous commercial logging, villagers were not hired for logging. In addition, many villagers mention that management of the reserve became much stricter, since the Forestry Department prohibited villagers from using that area for subsistence activities such as gathering forest products, hunting, and engaging in swidden cultivation.

The villagers claimed that they were there before the reserve was demarcated. They knew the reserve was located in the northern part of their village area, but they were not aware of how close they were to the boundary. The reserve has two forest compartments across from the Walad village area, and the villagers were not aware of this fact. These compartments are called the "Legs of Deramakot (*Kaki Deramakot*)," and the use of this land and forest resources has become an issue. When the boundaries of the reserve were demarcated, this zone was secured to cover roads that had been used for transporting timber to the Kinabatangan River. This was not what the villagers were accustomed to. The upstream zone overlapped with the lands of six households, and the downstream zone overlapped with the lands of three households. These lands had long been used by the villagers. Some of the

villagers carried out swidden cultivation in the belief that the land belonged to them, but the Forestry Department came to prohibit these activities afterwards. With the enforcement of the forest reserve boundary, some households could no longer work in their fields or extend their homes.

On numerous occasions, villagers brought issues to the Social Forestry Committee regarding the aforementioned problems concerning border management. In the case of land issues, nevertheless, the Forestry Department presented a plan to give an occupation permit to villagers and offered to permit them to lease the land. However, the Forestry Department decided not to issue the permit in the end. The Forestry Department repeatedly altered decisions regarding the use of forest compartments, and it did not provide any resolution to the problems. Villagers had hoped that the Social Forestry Committee would serve to resolve problems, but they were disappointed. Furthermore, although the Forest Management Plan for the reserve defines the forest compartments as a community forest, villagers were not permitted to practice swidden agriculture or hunting and gathering of forest products. The Forestry Department offered part-time work for the planting of seedlings and fruit trees, but it was unclear as to whether villagers were permitted to harvest from these trees. Although the intent of this committee was far-reaching, there had thus far been no opportunity for the villagers to regularly communicate with the Forestry Department. It was clearly difficult to solve the issues of land-use and forest resources within the framework of this committee.

Decreases in wage labor in the village and stricter controls on the reserve led to a significant decrease in sources of cash income for the villagers. In 2005, oil palm plantations expanded in the south of the village. Some villagers worked on these oil plantations. The work was demanding for the low wages paid, and many villagers left their jobs. Other sources of income were digging scrap metal and rattan collecting, fishing, and swidden cultivation, but job opportunities in the area were limited. Many villagers started working away from the village. Some households moved to downstream areas such as Bukit Garam or Sandakan where county public offices were located.

State political cronyism also influenced the village. Officially, the village

is headed by a committee chairman (JKKK)²¹ and the village head (*Ketua Kampung*), who are appointed by local political leaders and are not necessarily supported by villagers. The former village leader was replaced because he was opposed to acquisition of land by oil palm plantation companies. All official statements and documents had to go through these leaders. The current committee chairman was not interested in working with NGOs or the Forestry Department. He used his political network to engage in development projects and apply land titles to himself and his supporters. The SGS argued that there were no official claims from villagers but in fact, it was difficult for villagers to voice official claims to the Forestry Department without approval from the committee chairman. This arrangement made it difficult for villagers to voice their concerns about the effects of the implementation of forest certification.

5. Uncertainties of Auditing in Forest Certification

As the experience of this community illustrates, there are many potential pitfalls with these schemes. It was originally expected that FSC certification would ensure customary rights, but in fact, it led to strengthened border management of forest reserves. It became clear that the manner in which the villagers were able to use the forests was severely restricted. I will discuss the reasons why the FSC process brought unexpected results.

Sidestepping Legal Pluralism

The implementation of forest certification may, in fact, cause strict enforcement of national laws because the FSC Principles and Criteria require compliance with these laws. Criteria 1.5 states that forest management areas should be protected from illegal harvesting, settlement, and other unauthorized activities (FSC 1999). The “protection” of forests from “illegal” activities, however, may create conflicts for communities living near forest reserves.

The Malaysian Constitution maintains that land and forest resources are under the jurisdiction of the State. As mentioned in the previous section, the

²¹ JKKK (*Jawatankuasa Kemajuan dan Keselamatan Kampung*) refers to the village security and development committees.

gazettification of the reserve initially took place in 1961, and covered an area of 55,083ha (SGS 1999). It was legally set aside as a forest reserve, and the forestry laws in Sabah assert that using forest resources in the reserve without a permit is illegal. The SGS report states that the “reserve is classified as a commercial forest reserve that is to be managed for timber production. The status of the area is guaranteed under the Forest Enactment, 1968 and its amendments in 1984 and also the Sabah Land Ordinance of 1930” and that there are “no claims of legal customary tenure or use rights on the reserve by local communities” (SGS 2002).

On the other hand, the laws designed to secure the rights of rural communities are very limited and weak. Native customary rights exist, but researchers point out the insecurity of native land tenure in Malaysia (Cooke 2006, Doolittle 2005, 2007). For example, according to native customary rights handled under the Land Ordinance, land that is left fallow as part of a larger swidden agricultural cycle cannot be claimed under native customary rights, and these rights are not taken into consideration when the government or companies open up land (PACOS 2008). This results in a discrepancy between the actual practices on the ground and what is protected under law and has led to many cases of land conflicts that have not yet been settled. The residents of Village Walad have lived there from the early 20th century and have continued hunting, gathering, and carrying out swidden agriculture throughout the area without knowing it had been gazetted as a forest reserve in 1961. Once the reserve was established, they were no longer able to claim their customary rights in the reserve.

Although the land titling in the village was conducted in the 1970s, this was limited in that the villagers registered only a few acres of land around their homes. They were not able to apply the land title for all of the distant land they used for the swidden fields. Logging companies had operated in the reserve until then, but control over the reserve boundaries was relatively loose. As a result, villagers were able to continue their subsistence activities as long as they did not disturb the companies’ operations.

After the SGS issued a Major CAR in 1999 regarding illegal logging, the Forestry Department had to enforce the boundary in order to stop encroachment. Officially, there are no legal customary rights within the reserve, even though some villagers use the fringes of the reserve for their subsistence activities. Strict

control of the villagers' subsistence activities caused conflict between the Forestry Department and the villagers. Strict enforcement of the law also brought the underlying conflict over land and forest use rights to the surface. These problems of legal pluralism in Sabah are highlighted by many practitioners and scholars, however, auditors have not considered these aspects, and the Forestry Department had only a few months to resolve the CAR in order to keep their certification. The Forestry Department then took action to enforce the boundary without consulting with rural communities near the reserve.

Recognition of Indigeneity

Different FSC principles apply depending on whether people are recognized as indigenous or local; this classification leads to a significant difference in the outcome, making the role of the auditor an important one. If the auditor recognizes that the people are indigenous, FSC Principle 3, which respects indigenous people's rights, is applied, and the people's customary uses will be respected even within the forest reserve. On the other hand, if the auditor defines the people as local, Principle 4 is applicable, and customary rights are not respected. Principle 3 is similar to what Li defines as a "tribal slot" in her analysis of an Indonesian case (2000). If people are recognized as indigenous, their rights will be respected. However, as was the case with the people in Sabah, rural communities often fail to acknowledge or are unable to claim their indigenous rights to the auditors.

Having adopted ILO Article 169, the FSC's official definition of indigenous people was determined by "self-definition." In the case of Village Walad, the villagers explained that they had lived in the area since long before the British came to Sabah. The Sabah state defines the *Orang Sungai* as the indigenous people in its law. Although the *Orang Sungai* are legally categorized as "indigenous," in order for Principle 3 to be applicable, they have to be recognized as "indigenous" to the particular forest area that is being certified. Therefore, it is the certification bodies that decide whether to apply Principle 3 to the people. This means the recognition of indigeneity relies heavily on the auditors' view or image of the rural community. Much like the case that Dove (1992) presents, where foresters believe farmers are illegal encroachers, the

Forestry Department staff and auditors also see rural communities as invading forest space.

In the Malaysian-German project, the Forestry Department conducted only a few studies on the rural communities, including a socio-economic analysis of two villages bordering the southern fringes of the reserve. The report concluded that there was little or no impact on the village at that time (Sabah Forestry Department 1991). The SGS accepted this report's finding as the evidence of social impact studies on rural communities. The SGS did not conduct prior consultation before certification. The first time the SGS interviewed villagers was at the first major assessment visit. The SGS assessment report stated that forest management only had a minimal impact on the villagers based on their interviews (SGS 1999).

Even though the auditors recognized the conflict was caused by strict boundary control, they stated that “[b]ased on an interview conducted on August 14th, 2002, they are NOT dependent on the reserve” (SGS 2002). Generally, it is very difficult to examine one's dependency on the forest. In this case, however, without conducting an in-depth study, the auditors concluded that the villagers were not dependent on the reserve. Moreover, with respect to the FSC Principle 3, which concerns indigenous people's rights, the SGS report states that “the reserve is legally a commercial forest reserve, which means that it is under the management of the Forestry Department, therefore local communities did not have claims over the area,” and “communities were allowed to use the forest under the law whereby licenses need to be obtained from the Forestry Department” (SGS 2002). It was obvious that auditors supported the legal status of the reserve and did not recognize its customary uses.

Until now, auditors have yet to apply Principle 3 in this reserve, and apparently, they have not taken into consideration the customary use of the villagers. For the auditors, they are not indigenous people entitled to protection under Principle 3; rather, they are local people who encroached on the reserve. This shows not only that auditors fail to recognize the customary use of the villagers, but also that it is their decision to define the villagers' subsistence practices as illegal and in need of regulation according to the state's forest law.

In other words, though the SGS is in compliance with the forestry laws, it has little understanding of the native customary rights of the villagers.

Practical Problems of Auditing Procedures

While there are well-established assessments of environmental impacts, the social impacts of forest management are rarely as thoroughly evaluated. In the auditing of this reserve, these interviews are not systematically conducted, in that they often use opportunistic sampling which is seldom representative of the community. Auditors spend less than a few days on the major assessment, which takes place every five years, and only a few hours in the village for their annual surveillance visit. Given that they haphazardly interview community members, this is not enough time for auditors to adequately understand effects of the FSC on the community.

During a surveillance visit²² in 2007, for example, an auditor came to the village without any prior notice to villagers, and the village head was out of the village at the time, so someone else had to take over the interview for him. Auditing schedules are roughly fixed; nevertheless, auditors often make visits without notification. This failure to notify key informants means that they regularly miss them during their visits.

The relationship between auditors and the villagers is also very important. In the case of the reserve, auditors always came with Forestry Department officers. Auditors asked questions in English, and a forest officer translated into Malay. Auditors relied heavily on the Forestry Department to plan logistics of their visits. The result of this is that villagers were unable to speak about sensitive issues. When I observed one such interview in 2007, I watched as auditor questions were mistranslated into Malay, changing the nature of the inquiry from one of general forest product use to one of whether such products were being taken from the reserve—an illegal activity. These interviews were further complicated by gendered norms, which prevent women

²² I observed the auditing process twice; once during a surveillance visit and once for a major assessment in the Reserve. I will not explain these experiences in detail in this paper, but I would like to make some brief points.

from being in the same room as men without the presence of their husbands. The overwhelmingly male auditors are therefore unable to access women for their interviews much of the time. When there is underlying conflict between the Forestry Department and the community, the auditors should take a neutral position. Predictably, villagers hesitate to criticize the government in front of officers who are translating what they are saying. This exacerbates rather than clarifies problems in the reserve.

6. Conclusion

In this paper, I have shown how forest certification was implemented in the case of a FSC certified forest in Sabah, Malaysia. One of the goals of forest certification is to attempt to secure the livelihoods of rural communities near forest reserves; however, in this case, implementation of the scheme strengthened the state enforcement of boundary control in the forest. As a result, rather than securing livelihoods, certification resulted in restricted forest use for villagers.

One of the causes of this was that the certification body did not cope with legal pluralism in Sabah. FSC Principle 3 states that “legal and customary rights of indigenous people shall be recognized and respected”; however, native customary use of land and the forest is not well respected by the statutory law. The certification body judged customary rights based on the present Land Law and Forest Law in Sabah and thereby concluded that forest use by villagers should be prohibited. This decision by the certification body prioritized compliance with the local law under Principle 1, while giving less acknowledgement and respect to the “indigenous peoples’ rights” under Principle 3.

Some scholars view forest certification as a non-state market driven environmental regulation intended to welcome multi-stakeholders into forest management. In the case of Sabah, the state did not use sovereign power directly but rather it used the certification body’s recommendation to legitimize its move to enforce a state forestry law that does not allow customary use of the forest. This consequence did not occur until auditors implored the state to enforce its forest laws. The state realized that forest certification might be useful

to enhance its power over the area in the name of promoting “sustainable forest management.”

This could also happen because the inadequate participation of stakeholders affected the audit result. Throughout the process of certification, stakeholders are allowed to observe the process of auditing, however, at their own expense. NGOs and rural communities are often not well funded, participation becomes inevitably limited. In addition, very few people are familiar with forest certification auditing procedures to begin with. If this had taken place in Sarawak, many NGOs would have been there to monitor things, which would have altered the result. It can be said that the lack of stakeholders looking after rural communities led to a lack of emphasis on the social aspect, although most rural areas in Southeast Asia face a similar situation as in Sabah. In addition, Forestry Department in general have a tendency not to provide an effective platform for community participation. Scholars and practitioners argue that community based natural resource management brings the community into forest management (Brosius *et al.* 2005) , but that community based management is not thoroughly integrated into forest certification procedures.

Power (1997) points out that audits provide an expectation gap between what is expected and what is delivered. However, audits are only able to check whether the best practices are being followed. In the case of forest certification, the FSC intended to give products the credibility of being socially and environmentally responsible; however, certification did not deliver equally on these aspects. In the case of Sabah, sustainable production of timber was prioritized over ensuring socially responsible practices. In short, discrepancies in the way the FSC principles were applied alter the result. Buying certified products may escalate exclusion of rural community from the forest, and this is not what consumers who buy certified timber expect to happen.

It is auditors who define sustainable forest management. Therefore, it is important to look at the details of audit practice. Although confidentiality concerns make it difficult to reveal actual decision making within a certification body, my research illustrates that auditing decisions depend heavily upon auditors’ perceptions and knowledge of sustainable forest management. Auditors are most often led by forest ecologists and, in general, their core principle of sustainable forest management is sustainable yields: the annual

allowable cut. Thus, their utmost interest tends to be policing rural communities' activities. The audit team in Sabah did not put too much emphasis on social aspects and nearly always took the standpoint of the foresters. Even auditors asked the Forestry Department to measure the subsistence forest use of villagers so that they could determine the sustainability of such use. The Forestry Department never violated Principle 3 because, the auditors did not consider the villagers to be indigenous. In spite of the socially responsible intent behind the FSC principles, they have no impact if they are not effectively applied. Forest certification plays a strong role in promoting scientific forestry. As Scott notes, scientific forestry strengthens state legibility (1998) and it does not allow multiple layers of rights over forests. The auditors and the Forestry Department agreed to pursue scientific forestry and enforced the forest law in order to keep protecting the reserve from encroachment. The auditing results were co-produced.

Auditing is a commodity, and hence, the certification body has to achieve cost-efficiency. Power (1997) addresses this topic in his discussion of cost-assurance auditing. He argues that there is a point beyond which the expense of auditing is wasted in low returns. I would argue that social audits require substantially more time to reach assurance and that this cost-assurance, therefore, peaks much later than in other types of audits. Furthermore, auditing is often based on a contract between the forest manager and the certification body. The certification body's rent-seeking behavior stimulates comfortable results for the forest manager and hesitance of the certification body to act in any way that undermines sovereignty.

In Sabah, the conflicts between the Forestry Department and rural communities resulted because of the poor recognition of access and user rights of people with traditional claims to forests. The FSC was expected to act as a voluntary system to encourage forest managers to respect customary rights beyond the statutory law by paying higher prices for these efforts. In reality, as long as the Forestry Department follows the Forestry Law, auditors did not ask for further social responsibility. It is, therefore, difficult to solve these conflicts by applying forest certification. Brosius (1999) critiques forest certification for making logging obscure. The FSC has strict standards; however, his criticism also seems applicable to the Sabah case, because, as I have illustrated in this

paper, the state uses forest certification as a tool to exercise sovereign power over the forest.

Proliferation of market-based natural resource management is intense. Besides land and forest resource, biodiversity and carbon also become the resources for the state that lead to further enclosure. Following forest certification are the Marine Stewardship Council, the Round table on Sustainable Palm Oil, and the Round Table on Responsible Soy Association. In the field of climate change there is also Reducing Emissions from Deforestation and Degradation in Developing Countries (REDD). These schemes have their own sustainability standards and involve third-party audits. They have the possibility to effect similar consequences in rural communities upon their implementation.

In countries where customary laws are not recognized, conflicts over land and forest use may still exist. The implementation of forest certification or other similar schemes may bring such conflicts to the surface. Certification bodies should acknowledge that local laws do not always respect the customary rights of rural communities. These rights should be acknowledged and respected even if they are not secured by conventional law. This is an issue that should be addressed in order to ensure socially responsible natural resource management.

References

- Atyi, E.R., Simula, M. (2002). Forest certification: pending challenges for tropical timber, *ITTO Technical Series 19*, Yokohama: International Tropical Timber Organization.
- Azmi, R. (1996). Protected areas and rural communities in the lower Kinabatangan region of Sabah. *Sabah Society Journal*, 13, 1-32.
- 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*. London: International Institute for Environment and Development.
- Brosius, P. J. (1997). Endangered forest, endangered people: environmentalist representations of indigenous knowledge. *Human Ecology*, 25(1), 47-69.
- Brosius, P. J. (1999). Green dots, pink hearts: displacing politics from the Malaysian rain forest. *American Anthropologist*, 101(1), 36-57.
- Brosius, P.J. Tsing A.L., & Zerner, C. (2005). Communities and conservation, history and politics of community-based natural resource management. Lanham, MD: AltaMira Press.
- Cashore, B. (2002). Legitimacy and the privatization of environmental governance: how non-state market-driven (NSMD) governance systems gain rule-making authority. *Governance*, 15(4), 503-529.
- Cashore, B., Auld, G., & Newson, D. (2004). *Governing through markets, forest certification and the emergence of non-state authority*, New Haven and London: Yale University Press.
- Cooke, F. M. (1999). *The challenge of sustainable forests, forest resource policy in Malaysia 1970-1995*. Honolulu: Allen & Unwin and University of Hawaii Press.
- Counsell, S., Loraas, K.T. (2002). *Trading in credibility: the myth and reality of the Forest Stewardship Council*. London: Rainforest Foundation.
- Dauvergne, P. (1997). *Shadows in the forest: Japan and the politics of timber in Southeast Asia*. Cambridge, MA: MIT Press.
- Dentan, R. K., Endicott, K., Gomes, A.G., & Hooker, M.B. (1997). *Malaysia and the*

- “original people”: a case study of the impact of development on indigenous peoples.*
Boston, MA: Allyn and Bacon.
- Doolittle, A. (2005). *Property & politics in Sabah Malaysia, native struggles over land rights.* Seattle, WA: University of Washington Press.
- Doolittle, A. (2007). Native land tenure, conservation, and development in a pseudo-democracy: natural resource conflicts in Sabah, Malaysia. *Journal of Peasant Studies*, 34(3), 474–497.
- Dove, M.R. (1992). Foresters’ beliefs about farmers: a priority for social science research in social forestry. *Agroforestry Systems*, 17, 12-41.
- FSC. (1999). *FSC Principles and Criteria for Forest Stewardship.* FSC International Standard. HP: www.fsc.org
- FSC. (2008). HP: www.fsc.org
- FSC. (2011). HP: www.fsc.org
- Hong, E. (1987). *Natives of Sarawak: survival in Borneo’s vanishing forest.* Pulau Pinang, Malaysia: Institut Masyarakat.
- Jomo K. S.; Chang Y.T.; and Khoo K. J. (2004). *Deforesting Malaysia: the political economy and social ecology of agricultural expansion and commercial logging.* London: Zed Books.
- Klooster, D. (2006). Environmental certification of forests in Mexico: the political ecology of a nongovernmental market intervention. *Annual of the Association of American Geographers*, 96(3), 541-565.
- Kugan, F. (2000). Forest management certification: the Deramakot experience. Paper presented at the FSC-NTCC Malaysia Collaboration, Workshop on Forest Certification, December 6-7 2000, Kuala Lumpur, Malaysia.
- Li, T.M. (2000). Articulating indigenous identity in Indonesia: resource politics and the tribal slot. *Society for Comparative Study of Society and History*, 149-179.
- Mannan, S., Awang, Y., Radin, A., Abai, A., & Lagan, P. (2002). The Sabah Forestry Department experience from Deramakot Forest Reserve: five years of practical experience in certified sustainable forest management. (Paper presented at the seminar on practicing sustainable forest management

- lessons learned and future challenges, held at Shangri-La Tanjung Aru Resort Kota, August 20-22 2002, Kinabalu, Sabah.
- Markopoulos, M. D. (2003). The role of certification in community-based forest enterprise. In Meidinger, E., Elliott, C., & Oesten, G. (eds.) *Social and political dimensions of forest certification*, 105-131. www.forstbuch.de.
- Matsui, K. (2005). The indigenous peoples' rights on the forest certification. *International Public Policy Studies*, 9(2), 283-301.
- Meidinger, E., Elliott, C., & Oesten, G.. (2002). *Social and political dimensions of forest certification*. www.forstbuch.de.
- Morris, M. & Dunne, N. (2004). Driving environmental certification: its impact on the furniture and timber products value chain in South Africa. *Geoforum*, 35(2), 251-266.
- Nussbaum, R. & Simula, M. (2005). *Forest certification handbook 2nd edition*. London: Earthscan.
- PACOS. (2008). Indigenous peoples of Sabah.
HP: www.sabah.net.my/PACOS/people.htm
- Ponte, S. (2008). Greener than thou: the political economy of fish ecolabeling and its local manifestations in South Africa. *World Development*, 36(1), 159-175.
- Power, M. (1997). *The audit society, ritual of verification*. Oxford, UK: Oxford University Press.
- Rametsteiner, E. and Simula, M. (2002). Forest certification--an instrument to promote sustainable forest management? *Journal of Environmental Management*, 67(1), 87-98.
- Sabah Forestry Department. (1979). Annual Report 1979.
- Sabah Forestry Department. (1991). The social and economic conditions of two Deramakot Forest Reserve fringed villages, a preliminary report, 23-25.
- Sabah Forestry Department. (1998-2005). Annual Reports.
- Sabah Forestry Department. (2005). Forest Management Plan 2 Deramakot Forest Reserve FMU19, Sandakan.

- Scott, J. (1998). *Seeing like a state*. New Haven and London: Yale University Press.
- SGS. (1997). *Forest Management Certification Report 1997*. UK: SGS.
- SGS. (1999). Public Summary, Forest Management Certification Report. HP:
www.sgs.com/forestry
- SGS. (2002). Public Summary, Forest Management Certification Report. HP:
www.sgs.com/forestry
- SGS. (2007). http://www.sgs.com/about_sgs/in_brief.htm
- Taylor, P. L. (2005). In the market but not of it: fair trade coffee and forest stewardship council certification as market-based social change. *World Development*, 33(1), 129-147.
- United Nations Economic Commission for Europe (UNECE) & Food and Agriculture Organization (FAO). (2010). *Forest products annual market review 2009-2010*.
<http://timber.unece.org/fileadmin/DAM/publications/sp-25.pdf>
- Vandergeest, P. (2007). Certification and communities: alternatives for regulating the environmental and social impacts of shrimp farming. *World Development*, 35(7), 1152-1171.
- Viana, V.M., Ervin, J., Donovan R.Z., Elliott, C., & Gholz, H. (1996). *Certification of forest products: issue and perspective*. Washington DC: Island Press
- Vogt, K. A., Larson, B.C., Gordon, J.C., Vogt, D.J., & Franzeres, A. (1999). *Forest certification: roots, issues, challenges, and benefits*. Boca Raton, FL: CRC Press.
- Whatmore, S., Stassart, P., & Renting, H. (2003). Guest editorial - what's alternative about alternative food networks? *Environment and Planning A*, 35, 389-391.