Progress of the Forest Certification Systems in the World and Japan

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Abstract: In response to claims of commercial harvesting as a factor contributing to forest destruction especially in developing countries, forest certification schemes, which label forest products that derive from sustainable managed forests and promote sustainable forestry through market demand have been established. Currently, the Forest Stewardship Council A.C. (FSC) conducts forest certification on a global scale; other certification schemes have also emerged, but operate on a regional basis. Certified wood products coming from these certification schemes have started to circulate in the market. FSC certification is conducted openly, in fairness and in justice, and is a scheme that bases assessment standards on performance levels. Other aspects of FSC that make it distinct from any of the other certification schemes lies in FSC's emphasis on community participation, environmental and social aspects and its universality. On the other hand, other certification schemes assess processes and require for the achievement of the minimum level of forestry in the subject region. These circumstances conduce to the current situation where some certification schemes have established systems for mutual recognition, whereas FSC has not taken positive positions on this issue. Forest certification is well-developed especially in countries with wood exporting markets, and recently, there has been expansion among the environmentally conscious markets as well. Japan, the world's greatest wood importer, has also been exhibiting interest in forest certification, especially towards FSC. However, recognition of forest certification among Japanese consumers is very low, and wood processing industries too have not shown outstanding interest. It is the forest owners and managers, as well as local forestry administration that are most active in the subject. This trend, a rare case on the global scale, stems from anticipation that certification—a value-added, will contribute to contending with stagnant forestry management in Japan.

Forest certification has the potential as a tool for adding value to individual management units on a microscopic scale; and on a macroscopic scale holds potential for uplifting forest management standards. However, the effects of certification only merit the subject management unit, and thus in order to have effects on broader scales, there is need for considering other certification schemes that put uplifting management standards as an objective.

Key words: forest certification, Forest Stewardship Council (FSC), mutual recognition, Japanese wood market

1 Forward
Deforestation of tropical rainforests became evident in the 1970s, and drastically accelerated in the 1980s, eventually leading to boycott campaigns for tropical wood, primarily in Europe. In 1986, the ITTO was established to promote tropical forest conservation and adequate usage of tropical timber, and in 1991, "The Year 2000 Objective", an objective which restricts the export of tropical timber in international trade to come from sustainable forest management produced materials by the year 2000, was adopted. In addition, the ITTO formulated the "Guidelines for the management of Natural Tropical Forests" in 1993, preceding others around the world. This operational guideline for tropical forests was insufficient in environmental and social considerations, but was epoch-making as a prototype of Criteria and Indicators. On the other hand, the United Nations convened UNCED in Rio de Janeiro in 1992. Here, Agenda 21 and the Forest Principles were adopted and confirmed that all countries would assume responsibility for forest conservation, thus clarified the direction and initiative for a sustainable forest management. The agreement at the UNCED generated formulation of international initiatives such as the Montreal Process and Helsinki Process, and the development of criteria and indicators for monitoring forests proceeded rapidly. Subsequently, the ITTO made an overall revision of the preceding Tropical Forest Operations Guidelines and thus became comprehensive criteria and indicators incorporating environmental, social, and economic aspects along the lines of the Montreal Process and the Helsinki Process.

Paralleling these international, or governmental and national movements, market-based initiatives by NGOs became active in the 1980s. Emergence of forest certification schemes was a representative movement. The tropical timber boycott campaigns that started in the late 1980s with European environmental organizations and later spread to the general public became a vital issue for not only the exporting countries, but also for the European wood processing industries, and distributors that handled tropical timbers. As a result, the timber certification system was conceived to distinguish those from other wood by labeling products produced from sustainable managed forests. However, as the market became swamped with various different types of labels, some whose claims were questionable, the market ended in disarray and credibility of the labeling and certification system itself was put at stake. In view of establishing a credible certification system that would resolve these confusions and contribute to forest conser-
vations around the world, WWF and other influential environmental organizations based in Europe played a central role in forming the Forest Stewardship Council (FSC), an international forest certification organization, in 1993.

This report outlines the FSC forest certification, known to be environmentally and socially stringent as well as being widely prevalent, and examines the effectiveness of forest certification as a tool to uplift forest management levels in addition to comparing certification systems in other regions and discussing the trends of development in Japan.

2 General Summary of FSC Forest Certification

The FSC forest certification system is explained in detail in the report by the Meridian Institute. This report was written for the purpose of comparing Sustainable Forestry Initiative (SFI), an American Forestry & Paper Association (AF&PA) certification system in the North America region, and that of FSC. The following six viewpoints introduced in the said report will be discussed here forth.

2-1 Objectives and Structure of the System

The FSC is an international non-profit, non-governmental organization involved in forest certification that was founded in 1993. The Forest Stewardship Council’s mission is to “promote environmentally appropriate, socially beneficial, and economically viable management of the world’s forests” ; this has remained virtually unchanged to date.

The organization is an association of members consisting of various voluntary forest certification and conservation groups, businesses and individuals, and important issues are decided by member votes. Each member belongs to the Environmental, Economic or Social chamber. Furthermore, each member is categorized into coequal sub-chambers representing the interests of the developed “Northern” or developing “Southern” countries, depending on the countries they represent. The ballots are adjusted to have equal weight between the six sub-chambers, (Environmental, Economic, Social) \times \text{(Northern, Southern)}. The purpose of the chambers is to maintain a balance of voting power between different interests without limiting the number of members. The head office is based in the city of Oaxaca, Mexico; the location is said to imply the mid location between the Northern and Southern regions. The General Assembly, Board, and Secretariats, in addition to various Board Committees and Working Groups make up the FSC, which reviews the Principles and Criteria, supports formulation of certification criteria for the country or region, accredits certification bodies, and resolves disputes.

2-2 Certification Criteria

The FSC forest certification evaluation standard is based on the Ten Principles for Forest Management (FSC2001a). The Forest Management Principles have undergone several reviews since the establishment of the FSC. The most recent headings of the Ten Principles are as follows, and the next level of detail in the hierarchy is the fifty-six Criteria.

- **Principle #1**: Compliance with laws and FSC Principles
- **Principle #2**: Tenure and use rights and responsibilities
- **Principle #3**: Indigenous people's rights
- **Principle #4**: Community relations and worker’s rights
- **Principle #5**: Benefits from the forest
- **Principle #6**: Environmental impact
- **Principle #7**: Management plan
- **Principle #8**: Monitoring and assessment
- **Principle #9**: Maintenance of high conservation value forests
- **Principle #10**: Plantations

The FSC Principles and Criteria for Forest Stewardship shall be applied to all forest management regardless of country, region or forest type. The certification bodies develop generic certification evaluation criteria that comply with these Principles and Criteria to employ during assessments. Once a National or Regional Standard has been endorsed, the accredited certification body will use the endorsed standards itself as the basis for certifications and audits rather than the interim standards.

Performance based standards make the FSC certification standards unique. The concept of performance-based standards is used against the concept of process-based standards as exemplified in the ISO14000 series. Performance based standards require for not only system development but also for a certain level of control to be achieved at the forestry site. A forest management unit aiming to obtain certification may develop a system for management, but will require some time before the results are reflected on the forest's management levels. Moreover, certification bodies need qualified assessors who possess inherent forest and forestry skills required for site evaluations. Site evaluations require a certain number of days, which may result in rising certification costs. For these reasons, the performance-based standards of FSC are considered a major contributor to raising the hurdles for obtaining FSC certification.

2-3 Certification Bodies

There are eleven certification bodies accredited by the FSC as of December 2001, and are as follows (FSC 2001b): Silva Forest Foundation (Canada), GFA Terra Systems (Germany), ICILA (Italy), South African Bureau for Standards (South Africa), Institut fur Marktkologie (IMO, Switzerland), SKAL (The Netherlands), BM TRADA Certification (UK), SGS Forestry QUALIFOR Programme (UK), Soil Association (UK), Rainforest Alliance Smart Wood Program (USA) and Scientific Certification Systems (USA).
This includes organizations involved in forest certification even before the FSC was founded in 1993. For example, in 1989, the Rainforest Alliance established the Smart Wood Program to conduct forest management and Chain of Custody certifications; similarly, the Scientific Certification System established the Forest Conservation Program in 1991 under the name Green Cross, and independently conducted forest certifications (Meridian Institute, 2001b).

In addition to the above eleven certification bodies, five organizations from Canada, France, Italy, Mexico and Switzerland are applying for FSC accreditation (FSC 2001b).

### 2.4 Certification Process and Mechanisms

In the first place, certification is the process in which an independent organization will guarantee that certain sets of requirements are met. The FSC certifications emphasize this point and use the term "third-party certification", distinguishing it from other first-party or second-party verification procedures which are not certifications, technically speaking. Furthermore, FSC is a market-based voluntary scheme for certification. The above-mentioned fundamental nature is common to that of the ISO.

Within the FSC framework, the forest management certification and the chain of custody (CoC) certification will be evaluated under an FSC accredited certification body. The forest management certification evaluates whether the forest is well-managed according to the FSC Principles and Criteria for Forest Stewardship (Document 1.2), and grants certification if the requirements are met. Forest management certifications are usually carried out in the following procedures:

1. **Determine the Scope of the Potential Project**
   - An initial meeting with the accredited certification body and the client’s management is conducted in order to provide information pertaining to the certification program, and to clarify the potential client’s goals with respect to forestry certification.

2. **Conduct a Preliminary Evaluation (Scoping Visit)**
   - A preliminary evaluation is optional under the FSC system, but is recommended on large or complex operations, or operations in regions where the certification body has little previous experience. The certification body will send an evaluator to inspect the forest sites and provide further information on certifications, the probability for a successful certification, the cost of ensuing evaluation, and the expected time frame necessary for completing a full evaluation.

3. **Execute the Contract**
   - An agreement will be exchanged establishing the geographic and subject matter scope of the desired assessment, and specifies the rights and responsibilities of each party.

4. **Assemble the Evaluation Team**
   - The team is comprised of staff from the certification body and contract/consultant field-level personnel with expertise in relevant disciplines such as forest ecology and forestry of the subject region. The evaluation team usually consists of one to four people depending on the scale or complexity of the forest.

5. **Reviewing/Revising Assessment Criteria and Indicators**
   - The evaluation team determines what modifications, if any, are needed in the numerical weights of the Criteria.

6. **Collect and Analysis Data**
   - Information collected, intended to be the basis for determining if a “well managed” claim can be justified. Resource condition information provides an indication of present and past management practices on the subject property, which is directly relevant to the evaluation, and is one of the most important issues. Interviews with the management, management records and other various documents as well as inspection of forest sites are the major sources of information.

7. **Consult with Regional Stakeholders**
   - The evaluation team is collectively responsible for soliciting input from interested stakeholders who may desire to offer input on the evaluation of the subject operation. This process will enable the evaluation team to acknowledge the local issues as well as be a source of information to grasp the strengths and limitations of the management unit.

8. **Assign Numerical Performance Scores**
   - Based on the data gathered, it shall be scored by a method that is objective, reproducible and comparable to other cases. Both accredited certification bodies located in the United States use a proprietary scoring system as part of the evaluation process for determining whether a forest management or forest operations entity should be awarded a certificate.

9. **Report Write Up**
   - The evaluation team prepares a report based on the criteria established by the FSC. The report may include “Preconditions” that must be met before a certificate will be awarded. “Conditions” that identify actions to be taken by the operation in an agreed upon time frame, or “Recommendations” which are non-mandatory suggestions.

10. **Solicit and Respond to Client Review Comments**
    - The certification evaluation report is submitted to the client for review and feedback. This process is to ensure that the client has no fundamental disagreement with the accuracy of the content of the report.

11. **Solicit and Respond to Peer Review Comments**
    - The peer reviewers review and comment on both the methodology as well as the role of specific
evaluation.

12. **Certification Decision** Should the evaluation results be positive, a five-year certification contract will be executed which includes, as a requirement, annual on-site audits. If granted, the evaluation report and information will be provided to the FSC. However, if an operation is not approved, the certification decision will clearly establish what needs to be done in order for the operation to achieve certified status in the future.

13. **Issue Certification and Public Summary Report** Concurrent to certification from the FSC, a summary report will be released on the website of the certification body. Only the client will receive the full report.

It is preferred that the certification evaluation report is written in English, or Spanish, the FSC official languages, and also in the local language. Evaluation transparency, fairness and reproducibility are assured through these certification evaluation processes.

### 2.5 Controls over Program Logo and/or Product Label and Supply Chain Verification

Products from FSC certified management unit are eligible to carry the FSC logo marks, provided that the conditions are met as stipulated in the rules and regulations. Products eligible to carry the FSC logo mark are categorized as:

- a) solid wood (log, sawn wood);
- b) collections of solid wood products (logs in a pile, lumber in a pack, moldings in a bin);
- c) non-timber forest products (mushrooms);
- d) chip and fiber products comprised of at least 17.5% by weight of the total chip or fiber used in manufacturing the product line, and at least 30% by weight of the new virgin wood chip or fiber used in the manufacturing of the product line is FSC certified;
- e) assembled products (furniture, packaged wood pieces that make up a single product) that include more than 70% certified material of the total weight.

All parties involved in processing, distributing or selling certified material under its ownership, and claimed as certified is subject to a chain of custody evaluation. This is with the exemption of material that will not enter any further links of the chain, meaning that retailers are not subject to an evaluation, if the labeled product will be sold unaltered from the previous chain holder.

In other words, the chain of custody confirms the status of the certified material from the “stump to the store”.

The FSC prescribes six principles on chain of custody certification (FSC 2001c). The headings are as follows:

**Principle #1**: Documented control system

**Principle #2**: Confirmation of inputs

**Principle #3**: Separation and/or demarcation of certified and non-certified inputs

**Principle #4**: Secure product labeling

**Principle #5**: Identification of certified outputs

**Principle #6**: Record keeping

In the FSC certification schemes, it is generally possible for certified forest products to be traced back all the way to the manufacturer.

Chain of custody certification ensures that the certified timber coming from a certified forestry management is not mixed with non-certified timber. Unlike the forest management certification, the chain of custody certification does not address environmental, social, or economic aspects.

### 2.6 Current Situation of Certified Forests

As of December 2001, the forests certified within the FSC forest certification framework total to fifty-one countries, 25,100,000 hectares (FSC, 2001d). This corresponds to approximately 0.7% of 3.4 million hectares, the total forest area around the world.

### 3 Regional Forest Certification Systems

The FSC has expanded internationally, steadily increasing its certified forest area since its foundation, but on the other hand, regional forest certification schemes have developed around the world especially among countries with wood export markets. Some representative examples are: the Sustainable Forestry Initiative (SFI) by the American Forestry & Paper Association (AF &PA); forest certification schemes by the Canadian Standard Association (CSA); Pan-European Forest Certification Scheme (PEFC) by the European Helsinki Process member countries including the Finnish Forest Certification Scheme (FFCS) and the UK Woodland Assurance Scheme; programs by The National Timber Certification Council of Malaysia (NTCC); and programs by the Indonesian Eco-labeling Institute (LEI). The following will address the similarity and differences between the FSC and the regional forest certification schemes, especially the U.S. and Malaysian programs.

### 3.1 Sustainable Forestry Initiative (AF&PA)

#### 3.1.1 Nature of the Certification Program

This forest certification program by the American Forestry & Paper Association, a merger between the American Forest Council and the American Paper Institute was developed in 1994. Subsequently, the Sustainable Forestry Board, independently established from AF &PA, assumed responsibility for the program, and has since taken on the responsibility of overseeing the SFI Standard and Verification Processes. AF&PA will retain six of the fifteen seats on the Sustainable Forestry Board, thus displaying a strong industry presence (Meridian Institute, 2001a).

Both SFI and FSC are rooted in the Brundtland Commission Report and the Agenda 21 from the 1992 Rio de Janeiro Environment Summit, and aim to improve forestry management practice. However, the origins of the establishment process differ among the two. An influential environmental NGO played a central role in setting up the FSC, whose purpose and the purpose of the organization is the conservation of the ecosystem.
from an environmental and social aspect in addition to economic aspects (sustainable management). It aims for versatility that has applicability to the various forest types and social or environmental circumstances around the world. On the other hand, SFI was founded by American industry groups in light of increasing consumer concerns toward forest management. Canada subsequently became a member of SFI, followed by environmental and social organizations from both countries, and became what it is today. As suggested by the fact that the Canadian Standard Association, an ISO affiliated organization, is the Canadian counterpart, the SFI is a process-based standard, similar to the ISO. It mainly targets North American forests and envisions to exert appropriate forest management performances under American regulations.

The purpose of establishment and the targeted levels vary between SFI and FSC. The SFI aims to secure minimum level of a broad scope of management units, whereas FSC focuses on granting market based advantages (premium, preferential treatment, competition) to well-managed management units.

3-1-2 SFI Certification Standards

For certification Criteria, FSC has ten Principles and fifty-six Criteria as opposed to SFI having five Principles, eleven Objectives and thirty-five Performance measures. The FSC program only permits third-party certifications and the Criteria are mandatory; whereas SFI offer selectivity for those apart from Objectives that are core to each Principle according to management environment or regional characteristics, and the evaluation process takes the form of self-certification, in which the manager conducts an annual self-audit and files to the AF&PA. Third-party certification by an independent auditor is optional. For the thirty-one significant issues that may be of concern for the interested parties, the comparative study report identifies noteworthy distinctions by comparing Principles and Criteria of the two programs (such as defining plantations, sustained yield requirements, Management planning framework, etc.) (Meridian Institute, 2001a).

3-1-3 SFI Logo Mark Control

The two programs vary somewhat in its usage policies for the certification logo marks. The SFI logo mark has been revised twice The third version being the most recent has not been put to use; only the second version is being used in the market. The third version logo mark is currently being prepared, and will be used only by the management units that have had third-party certification evaluations.

For Chain of Custody Certifications, the SFI program makes a distinction between primary processors such as manufacturers and paper manufacturing facilities that source 50% or more of a manufacturing unit’s raw materials directly from primary sources, and secondary processors such as furniture or plywood manufacturers that source 50% or more of a manufacturing unit’s raw materials from secondary sources. For a primary processor to use the product label, the product must be sourced completely (100%) and certified by SFI accredited programs (SFI, FSC, American Forest Foundation’s American Tree Farm System, Canadian CSA, Swedish certification standard, European PEFC, UK Woodland Assurance Scheme and other certification schemes are included). For secondary processors, at least two-thirds of the material supplied by the primary processor need to be certified by SFI accredited programs (as above). In the United States, approximately 70% of the forest products are supplied by small and medium-scale Non-industrial Private Forest (NIPF) owners, and the NIPF owners conduct wood production through more than 50,000 loggers nationwide. As a result of these circumstances, the SFI program uses a two-pronged approach to Chain of Custody Certification: “direct certification”, which directly confirms its distribution route, and “procurement systems approach”, which estimates the certification ratio of the wood supply source based on random sample field checks (Meridian Institute, 2001c). The “procurement systems approach” does not require for attachment of proof of certification on each wood, but only that it exceeds two-thirds of the total certification ratio. Although there are differences in the requirement levels of documentation control, as a result, it varies little from the FSC rule that labeling is permitted if more than 70% of the total Assembled Product weight is certified wood.

3-2 Malaysia

3-2-1 Sustainable Forest Management Criteria and Indicators

Malaysia is one of the few countries that continue to export tropical wood in Southeast Asia. According to the 1998 statistics, forestry and the forest products industry make up 3% of the GDP and 5% of total exports, and accordingly is considered to be an important industry in Malaysia. For these reasons, Malaysia has shifted towards sustainable use of forest resources (Thang, 2000). When the ITTO Guidelines for the Management of Natural Tropical Forests were revised in 1998 and changed to a comprehensive guideline similar to the Criteria and Indicators under the international initiative, Malaysia revised its Criteria and Indicators for Sustainable Forest Management in line with the ITTO revisions. The Criteria and Indicators used the revised ITTO version and incorporated Required Activities at a lower level, and Management Specification at a further lower level, thus developing Criteria and Indicators with four levels in hierarchical structure. Required activities are listed to achieve issues written in Indicators, and Management Specifications describe detailed description explaining the Required Activities (for example, related laws and regulations, referred statistics, and quantities or items that define management). These Criteria and Indicators are built on two levels, the national level and
the management unit level, similar to that of the ITTO.

3-2-2 Certification Criteria

Malaysia showed strong interest in forest certification as a country with wood exporting markets. The National Timber Certification Council of Malaysia (NTCC) was established by representatives of governmental administrations, wood material related industries, researchers, and nature conservation groups at the initiative of the federal forestry commission in 1998 with the purpose of reviewing certification systems. The forestry commission asserts that they are entitled to be involved in the foundation of the certification system in Malaysia, where forests are all state-owned. The NTCC is responsible for forest certification related activities such as certification criteria review, certification body accreditation, certification grants, and promoting enlightenment, and considered to be independent from the state. Therefore, NTCC qualifies as an organization equivalent to the FSC with similar functions, and it can also be said that Malaysia aims to develop a different certification scheme other than the FSC.

NTCC revised the preceding Criteria and Indicators by liaising with the Peninsular Malaysia Forestry Commission to utilize for the primary objective of monitoring sustainable forest management; in addition to granting forest certification criteria functions (Thang, 2000). Specifically, the Management Specifications was amended to the Standards of Performance and the contents were amended from Specifications for monitoring forests to standards determining the performances. Examples of the relationship of Management Specifications and Standard of Performances can be illustrated as follows: “forest areas by various types” corresponds to Indicators that should be monitored; “periodically compiling forest statistics” are Required Activities; listed “various forest types” are Management Specifications; and “for natural forests areas to not drop below the planned scope” are Standards of Performance. According to such revisions, Malaysia developed the Criteria and Indicators for sustainable forest management under ITTO, as well as integrating certification criteria for forest certifications.

3-2-3 Relations to Europe

Europe is one of the important markets for Malaysia grown rare and high quality tropical timber. In order to export to European markets that are sensitive to environmental issues, NTCC has been liaising with the Dutch Keurhout Foundation to explore trading Malaysian material as certified wood. In 1997, the Dutch government established the Keurhout Foundation (Taiga Rescue Network, 2001) to evaluate imported wood to meet minimum requirements of the forest certification. The Netherlands may have intended to ensure its position as the agent for importing certified material into European markets by establishing this Foundation.

Malaysia proceeded with the preparations through deliberations with the Keurhout Foundation, by selecting twenty-nine “prioritized standards” from Standards of Performances developed under the new ITTO Criteria and Indicators for forest certifications. The deadline for the Keurhout Foundation to determine whether to accept the Malaysia grown wood material certified within this framework, was set for March 2001 (according to author’s research). Further hearsay reports that the lumber is not being used as certified material but that Malaysia was requested to review the certification criteria (individual hearsay). On the other hand, Keurhout Foundation initially accredited the FSC followed by Finland’s FFCS, but did not go so far as to accredit numerous certification schemes. The Foundation draws criticism from the Dutch government that it “is not fulfilling it’s duty” on the basis that it does not secure sufficient certified wood.

4 Outlook for Mutual Recognition

Mutual recognition refers to an agreement by two parties to mutually recognize the application of certified logo marks from one program to a certified wood product of another program, provided that the two forest certification schemes recognize both parties as completely equivalent and compatible. Even if such agreements are not exchanged, one party may recognize the other when certification scheme requirements are met and is worthy of certification. Such one-side recognition is called an endorsement. With this framework, there is a possibility for a certification scheme from a certain region to be recognized in another region of the world, and thus promote substantial dissemination of the forest certification system.

In recent years, mutual recognition has become the topic of debate within the FSC as well as among various other certification schemes, leading to mutual or one-side recognitions in some cases. For example, the European PEFC endorsed certification schemes of the Nordic countries (Finland, Sweden and Norway) in May 2000. In addition, as previously mentioned, the American SFI endorsed seven programs such as FSC, PEFC, FFCS, CSA, UKWAS and others (Meridian Institute, 2001c). The FSC regards UKWAS as a national standard under the FSC framework for the reason that the UKWAS is a program jointly developed by the national forest management organization, UK Enterprise and the UK FSC members. However, the UKWAS proclaims mutual recognition with the FSC (Japanese Forest Agency, 2001). In addition, comparisons and reviews are actively conducted for various forest certification schemes by foreign governments and private organizations. Nevertheless, the numbers show that there are not many examples of mutual recognitions or endorsements in spite of increasing interest. Taking a look at the FSC’s perception of the UKWAS example indicates that FSC has not permitted mutual recognitions with other certification schemes.

In August 2000, European environmental groups met
in Belgium and criticized the PEFC certification scheme. The summary of the criticism can be described as follows (Fern, 2000).

- Certification schemes are not clear whether it will effectively link to the improvement of forest management
- UNCED spirit should be valued and all interested parties should be given equal participation opportunities
- A universal interchangeability should be secured

Subsequently, European environmental organizations convened in Rome in February 2001 to discuss certifications and released a joint statement. The statement mentions, “Mutual recognition means substantial equivalence of program components, and the credibility of the framework as a whole can never be any greater than the credibility of its weakest link.” No certification scheme is likely to intentionally sacrifice its credibility by accepting, as its own, the serious weaknesses of other programs. Wide disparities currently exist between forest certification schemes and mutual recognitions within the regional certification schemes may develop in time as the distinct, mutual recognitions within the regional certification schemes are process-based, with set minimum requirements for forestry management aiming to uplift the levels, and are considered to have many common objectives and procedures amongst the programs.

5 Forest Certification Development in Japan

The WWF Japan, the only FSC member at the time, played a central role in hosting forest certifications related symposiums and workshops in 1997 in Japan, and succeeded in attracting attention from forest owners and local governments. In October 1998, the American certification body SCS conducted a preliminary evaluation for Hayami Forestry, an independent forest owner in Mie prefecture, while visiting Japan to promote forest certifications. Hayami went through a full evaluation in September 1999, and obtained the first FSC certification in Japan in February 2000. In Yusuhara of Kochi prefecture, the Forest Owners’ Association obtained the first group certification in Japan as the resource manager. Yusuhara was evaluated by the SmartWood Program of Rainforest Alliance in May 2000, and obtained certification in September of the same year. In September 2001, Asahi Breweries, Ltd., which owns 2,169 hectares of forests in Hiroshima prefecture, was evaluated by the SCS and obtained certification. Subsequently, in October 2001, the university forest of the Tokyo University of Agriculture and Technology was granted certification by SGS’s QUALIFOR Program. The Tokyo University of Agriculture and Technology certification was the fourth case in Japan in addition to being the first of its kind in the world to obtain certification as a university forest, which primary objective is research and education (Fujiwara, 2001).

Yusuhara went through its first annual audit in October 2001, when more than 1,000 hectares of forests were additionally evaluated against as new members of the Group. As a result, the total certified forest area has grown to 3,335 hectares in Yusuhara. One of the contributing factors for this development is that there were initial apprehensions, in which the forest owners were hesitant towards FSC certifications fearing additional strict constraints on natural forests and secondary forest management; through the certification process, this apprehension proved to be groundless. Yusuhara’s inception of new projects involving subsidies for thinning is considered as another incentive (individual hearsay).

The number of CoC certification issues is increasing, parallel to forest management certifications. Initially, at the time of Hayami Forestry certification, only a nearby sawmill and a processing plant had obtained CoC certification. However, during the annual audit an year later, there were seven CoC facilities including Forest Owners’ Association markets and pole timber processing plants that obtained certifications and helped to promote the regional CoC network. In addition, foreign timber import companies and paper mills that produce paper using certified foreign pulp chips began to obtain CoC certifications. As of October 2001, there are twenty CoC certification issues in Japan. Increasing interests from the supply side have brought about Forest Trade
Network movements by the distributors who handle priority certified products (The Timber Press, 2001). As of December 2001, there are four organizations that are FSC members in Japan, and a few other organizations that are anticipated to join shortly. Also, there are plans to start activities to develop National Standards in January 2002.

As stated above, the FSC forest certification developments are showing a steady growth after a slow start. However, activities are limited to the supply side such as forestry managements and the forest administration, thus the recognition of forest certification and certified wood materials among consumers are still low. There are distributors showing interest in certified wood products due to increasing environmental awareness, but they continue to be a minority.

6 General Prospects on Forest Certifications

6-1 Characteristics of Forest Certification Developments in Japan

There are generally two types among countries that have been actively working to implement forest certification systems around the world. The countries with wood exporting markets are one type, and the other, the environmentally conscious markets. Examples of the former are Malaysia, Indonesia, Finland, Sweden and Canada, and the latter are the U.K. and Germany. The U.S. contains both characteristics. Countries with wood exporting markets are considering forest certification as a means of verification of sustainable management when exporting its domestically grown wood. Whether the certified export wood material will display a positive force or have a negative impact, or no bearing at all, will depend on the circulation volume of certification material and the environmental awareness level of the importing countries. In either case, preparation for certification for countries with wood exporting markets is becoming unavoidable, in view of the future.

Environmentally conscious countries recognize special added value for “environmentally friendly” certified materials and promote its dissemination. In countries such as the U.K. and Germany, where there is a considerable amount of certified wood products in the market, there were no consumer demands initially for certified products. B&Q, a DIY franchise instigated this movement in the U.K., and similarly for publishing industry in Germany. It is to say that these retail stores and publishing industry exerted enormous initiative in purchasing certified wood products or paper, approached the consumers, which led to placing pressure on the forestry management and hence promoted the development of certified products market (Michael B. Jenkins & Emily T. Smith, 1999).

Japan, a country without a wood exporting market, is a rare case on a global scale. Interest towards certified wood is low for all stages of the wood market side, and it is the forestry managers that show the most interest. This stems from the never-ending structural recession the Japanese forestry industry is suffering from. The degree of lumber self-sufficiency has fallen to 20%; hence the wood price standard is determined by foreign wood. With low wood prices over the years and forestry costs relatively increasing, it is difficult to increase earnings from thinnings; and clearcutting alone cannot cover reforestation fees. There are small-scale part-time forest managers, whose incomes are not dependent on forestry, who have begun to abandon forest management.

A characteristic of the development forest certification in Japan is such that under these circumstances, forest owners and local self-governments with a sense of impending crisis are showing interest in certifications as a tool to differentiate by appealing its “environmentally friendliness” to the consumers. Two of the four cases certified in Japan produce only a small amount of wood from managed forests, and there seems to be a clear distinction between the foreign certification cases in that they anticipate compensation other than forestry means, although “environmental” appeal does not directly link to merits in forestry management.

It can be said for the Japanese forestry wood production industry, that the individual management units of the forestry and forest products industry, such as the forest owners, loggers, sawmills and processing plants are mostly small-scale, independently and separately operated, and not vertically consolidated. Such production structure hinders the dissemination of certifications.

In addition, many of the Japanese forestry management set their business objectives as producing constructional posts from Cryptomeria japonica (Sugi) and Chaemaeyparis obtusa (Hinoki) plantations. A majority of the wood consumption (including foreign wood) in Japan is consumed by the housing industry for construction use. However, a method for the house owner to choose the wood material being used is very rare in Japan and involves commission of the architect, and at the same time, the Japanese lifestyles does not take the consumers to DIY stores to purchase wood for themselves.

In summary, in order to contend with stagnant forestry management in Japan, the forest owners aim to obtain forest certification and aim environmental appeal in order to differentiate themselves in the market, but the CoC framework of forestry and forest production industry is small-scaled and complex, making the process between the producers and consumers long, thus it is not easy to promote the certification management chain. Even if new routes were to be developed and the certified wood conveyed to the wholesaler, there is no market mechanism for the consumers to prefer purchase of certified material. In addition, price competition is high in the residential housing markets, thus makes it difficult
for uncompetitive, and unstable supplies of certified material to circulate. In this way, Japan is a difficult market for certified material producers.

6-2 Forest Certification Potential as a Tool for Forest Management

Stephan (2001) lists forest certification objectives and benefits as follows:

1. improve forest management and enhance multiple values from forests
2. improve mechanisms for producer accountability
3. challenge policy/legal frameworks and improve government roles
4. reduce government’s forest monitoring burdens by bringing in independent certifiers
5. maintain or improve market access/share
6. obtain a price premium for certified products
7. obtain or defend the producer’s access to forests, resources and capital
8. reduce the producer’s environmental and social risk
9. improve the awareness, skills, or morale of staffs and stakeholders

Numbers one through four are government and the public benefits, and five onwards are managerial benefits. Of the managerial benefits, number five and six are relative and external benefits based on advantages and differentiation of certifications. These benefits tend to disappear if the majority of the management units obtained certifications, or through lapse of time. Numbers seven through nine are benefits that surface inside the management units and will contribute directly to the qualitative improvement of the management as well as being more absolute compared to numbers five and six.

Forest certification is an incentive for individual management units on a microscopic scale, but it also holds prospect as a tool to enhance forest management standards on a macroscopic scale. However, the effects of the certification as well as public side benefits only merit the subject management unit. In the Japanese market, which is contemplating certifications as a tool for differentiation, this can be a paradox because the more certifications obtained, the less advantageous and less different it will be from the others. In addition, as a country with a wood exporting market, there is little prospect of major forests obtaining certifications for the purpose of differentiation, since the present situation allows only a limited export of domestically grown wood.

Accordingly, there are two scenarios of consequences that can be foreseen in the long term for market based forest certification systems such as the FSC, in which certification can become a tool for preference and differentiation. The first scenario is that the burden of obtaining certification and the benefits generated will balance the percentage of certified forests. The second scenario is for the certification system to develop to a level where certification itself will become the new “norm”, and management units that do not have certification will be forced to withdraw from forestry management, thus only a certain percentage will continue to be managed. These may seem different at first glance, but the advantages and differentiations will diminish with time and reach the same conclusion. As a result, such certification process initially designed to implement a positive differentiation such as price premiums and advantages will transform into a process to question the qualification for forestry management as the system develops concurrent with the transformation of the society.

In this manner, uplifting levels of forest management, and measuring up social benefits of the forests to prospect level singly through forest certification is difficult, and that the forest certification systems be used concurrently with other programs aimed to uplift the level of a broader scope of forest management will become inevitable.

The same can be said for the tropical regions where there is progressing forest destruction. There are some cases of FSC certifications in developing countries, but these cases usually represent special exporting cases or pilot projects and most other forests are exposed to threats of deterioration. The reason for this is that the forests harvested for local consumption in developing countries are not linked to markets where there are “environmental” incentives, thus it is difficult for the forest certification system to function.

There are many levels of programs aimed to uplift the level of forests in both developed and developing countries, but the most direct method would be to enforce loose constraints on all forests by way of legal restrictions. Furthermore, it is possible to implement an optional voluntary certification system as that of the American SFI system. The accreditation system for forest management plans of Japanese private forests is positioned in between the two, as a highly universal system that contains a guided characteristic. Whether the program will function effectively will depend on the country, the society in the region, and the economic situation. By combining the appropriate program, it will be possible to see the path towards sustainable forest management that surpasses the individual management limits.

7 Conclusion

There are said to be four different roles in relation to forest certification, namely, the forestry management, the consumers, the intermediary processing distributors and those that have influence on the preceding three such as the mass media, government and environmental organizations. These four groups are interrelated to the forests and forest certification systems, and can all positively approach the forest certification system, at least from a macroscopic prospective. This is because the forest certification system is a framework fundamen-
tally based on justice and ethics. Consequently, the forest certification system will develop as a "self-driving" system in the foreseeable future.

There are many forest certification systems with a variety of objectives, styles, and methods, from extremely high standard such as the FSC (which may result as no one being able to achieve certification) to those that entail implementing minimum requirement, aiming to uplift the entire level of forest management. All have their advantages and disadvantages, history, necessity and raison d’être. It is not appropriate to determine the priority or force integration of certification system, or to link the certification to accessibility of wood trading.

In the extreme, the forest certification system is a verification of the accomplishment of a set standard for the individual management unit. In search for sustainable forest management, it is inevitable that it be applied in conjunction with other programs operating on a larger scale.

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