





Forest Stewardship Council indicators: Development by Multi-stakeholder process assures consistency and diversity

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Abstract

In more than 80 countries, forest operations are certified as being managed in accordance with the standards of the Forest Stewardship Council (FSC). This paper explains how FSC addresses regional and national differences in forest legislation, environmental conditions, social and political contexts, and stakeholder expectations in developing forest management standards. It describes how stakeholders reached consensus on the first set of FSC Principles and Criteria, the foundation of FSC's framework for forest stewardship, and how indicators are now negotiated to fill the framework and ensure that national forest management standards fit their context. It concludes with a discussion of why FSC's certification system, though voluntary, has been able to improve forest management by engaging stakeholders in developing national standards that reflect local conditions and community interests.

Keywords: FSC forest management certification, indicator development, stakeholder engagement

Introduction

The Forest Stewardship Council (FSC) runs a certification scheme with the aim of achieving environmentally responsible, socially beneficial and economically viable management of the world's forests. The scheme is based on a set of Principles and Criteria (P&C) for responsible forest management and works with certification and labelling requirements and third party verification. FSC now has over 20 years of experience and recently initiated changes in its forest management standards and accompanying market tools, and taken a first step to seeking influence beyond the borders of FSC-certified forest areas, in particular in intact forest landscapes.

This article discusses how FSC forest management certification works, and examines the emergence and evolution of the P&C. It goes on to look at the challenges of ensuring consistency and integrity of forest management standards across different countries and forest types, and how FSC approaches the process of harmonizing indicators to ensure robust, nationally applicable standards.

Promoting responsible forest management

In the early 1990s, FSC developed a certification scheme that steers and controls forest management practices, and that stimulates and oversees the use of resources from FSC-certified forests by processing industries, retailers and end-users.

The FSC scheme is composed of four main elements.

- A set of Principles and Criteria (P&C) for responsible forest management worldwide, with locally appropriate indicators (national standards).
- 2. An international accreditation and certification system

- (including supply chain), operated through independent certification bodies. These bodies are accredited by one international organisation: Accreditation Services International (ASI)¹.
- A widely recognized trademark, with three specific labels for use on end-products and in communications.
- Balanced multi-stakeholder decision-making for setting standards and procedures at the international and national levels, accompanied by transparency and adequate complaints procedures.

Through this scheme, FSC generates incentives for forest owners / managers to conform to environmentally and socially responsible forest practices, facilitates the audit of those forestry operations for compliance with the FSC P&C, and grants those who use the resources from such forests the right to promote their products using the FSC certificate and labels.

Stakeholder engagement is an important part of the FSC scheme and determines the ways FSC strengthens standards, processes, assessments and other activities. One core group of FSC stakeholders is FSC members. The FSC membership operates at two levels: international, through FSC *Asociación Civil* Civil (FSC A.C.; currently about 850 members); and national, in about 50 countries. Membership is open to both, individuals and organizations / companies.

FSC individual and organizational members belong to one of three chambers, representing different

¹ ASI is a fully owned but independently acting subsidiary of FSC; it also provides accreditation services to a number of other international sustainability schemes [www.accreditation-services.com].

interests: environmental, social and economic. While FSC strives for consensus, the voting power of the chambers is balanced – each chamber has equal weight on each decision, irrespective of its size, and decisions need majority support from all three chambers (FSC Statutes, 2014).

However, discussions about FSC standards and procedures are not limited to members only. At international and national level, such discussions are open to non-members through open consultations, which can also extend to representatives of government institutions. With its balanced representation of economic, environmental and social interests, FSC has a readymade pool of expertise to critique and adapt its own work. Above and beyond the intense stakeholder engagement involved in developing its policies and standards (see below), members can challenge FSC at any time to review and revise its instruments ("normative documents") through its structures. Revisions of its policies and standards follow much the same path as development of new ones, except that the process is not starting from scratch. Typical triggers for change include, motions from FSC general assemblies, recommendations from FSC working groups and other bodies, changes in ISO standards, and routines set by FSC through FSC-PRO-01-001 The Development and Revision of FSC Normative Documents, and by ISEAL Alliance¹ codes. For example, the plantation working group has had a major impact on version 5 of the P&C (see below).

How certification works in practice

The initiative and application for certification always comes voluntarily from forest owners or managers, or, in case of chain of custody, from processing or trading companies. But the incentive for doing so may be internal or on the basis of market demand. The more recognition FSC has received as a valuable tool to ensure sustainable management of forests that are not devoted solely to conservation (e.g. WWF (2015) considers the FSC to be the best available tool), the more companies, consumers and public authorities have encouraged foresters to seek FSC certification. Moreover, smallholders and community forest owners who have faced financial, market and/or knowledge constraints to certification have been supported by companies and/or non-profit organisations because for these groups, FSC itself has eased the process with group certification and special, streamlined requirements for "small and/or less intensive managed forests" (see, for example, FSC, 2011; Karmann & Smith, 2008).

Any company that wants to become certified approaches a certification body, which will evaluate the state of its forest management unit and management plan. If these fulfil the FSC requirements, a certificate can be granted. Annual audits take place to maintain and renew that certificate. Stakeholder engagement is required for setting the specific management requirements and monitoring performance.

FSC in constant development – raising concerns about consistency and credibility

The FSC Principles and Criteria (P&C) for Forest Stewardship form the basis of the system. In the first few years of FSC's existence no less than four versions were developed. The fourth version, adopted in 1996, has been the backbone of the development of FSC for two decades.

From the start, the P&C were applicable to all types of forests, including plantations, in all parts of the world. The FSC P&C combine environmental, social and economic interests, with specific attention to high conservation values and the ecosystem services of forests – seeking to maintain, enhance and/or restore

¹ ISEAL Alliance was founded in 2002, by FSC and a number of other Voluntary Certification Schemes (VCS), to facilitate collaboration among VCS, such as for developing a common understanding of the best practices for setting sustainability standards. ASI is also a member of ISEAL Alliance.

such values and services from whatever the starting point may be. They also require compliance with all core International Labour Organization conventions regarding labour and Indigenous Peoples, but go beyond them with requirements for safe work and decent contracts and salaries, respecting and actively supporting customary rights for local and Indigenous Peoples, ensuring that they benefit from the forest operations. The P&C focus on forest management plans with verifiable dos and don'ts, addressing conversion, use of genetically modified organisms and pesticides, harvesting rates and practices.

From Principles and Criteria (P&C) to national forest stewardship standards

The Principles and Criteria (P&C) are not specific to any particular country or region, but are applicable to cultural, political and legal systems found worldwide. This means that the P&C need to be "translated" by interest-balanced stakeholder groups through appropriate indicators into national forest stewardship standards for use in certification assessments (see below for more detail). National standards form the locally applicable and workable versions of the P&C for each region and country and govern how forest management must take place in a given country in order to qualify for FSC certification. The development process and existence of these national standards contributes to a fair, transparent and systematic certification process.

Today, forest operations are certified as being managed in accordance with the P&C and their national indicators in about 80 countries.¹ And in each of these countries, there are diverse stakeholders with interests in forests and forestry, who often have conflicting needs and hold different views about how forests should be

Box 1. International general indicators

As the FSC forest certification started to grow rapidly after 1996 (from 10 million hectares in 1998 to 107 million in 2008, and to 190 million hectares in 2016), members became concerned about the increased diversity among national standards and certification bodies' standards. They also saw increased risks of abuse of FSC's good name in the loose supply chains and in the certification of tropical monoculture plantations combined with the use of highly hazardous pesticides.

Inconsistent interpretation of the P&C by different national Standard Development Groups (SDGs) is a challenge for FSC. For example SDGs in neighbouring countries may come up with different indicators for forest management in the same ecosystem. Significant variations in ecological and social indicators for similar ecosystems or social regimes could lead to the lowering of certification requirements. In an attempt to harmonise the interpretation of the P&C, a major revision of the P&C Version 4 began in 2009. In 2012, the FSC International membership approved the P&C Version 5 (FSC-STD-01-001 V5-0). Among other changes, this introduced "scale, intensity and risk" (SIR) as a new concept in the FSC system. A further step was the development of "International Generic Indicators" (IGIs). It was decided to postpone the transfer of national standards from P&C V4 to V5 until these indicators were agreed. This happened in March 2015.

The IGIs are meant to:

- ensure a more consistent application of the P&C worldwide
- improve the quality of national forest management standards
- support a faster and more efficient development and approval process for national standards
- replace the interim standards of certification bodies in countries that lack approved national standards.

managed. So, in reality, the national standards are not only different in response to natural circumstances, but also because of different stakeholder dynamics. This is always within a range that FSC International finds acceptable,

See the certification reports at www.info.fsc.org, and the list of countries with FSC certificates at https://ic.fsc.org/ en/facts-figures

as the national draft standards need approval by the Board of FSC International after they are endorsed by the national Boards, and reviewed by a special policy and standards committee.

The development of national standards – past and future

The national membership in roughly 50 countries usually follows the FSC *Asociación Civil* A.C. chamber structure and decision-making culture.¹ National members are normally coordinated by FSC national offices, which can play either a direct or an indirect role in the process of drafting national standards. National offices are usually directly involved in managing the process through:

- identifying stakeholders to be included in the Standard Development Groups (SDG) and consultation processes;
- developing and distributing information about certification and national (and, in few cases, regional) forest stewardship standards;
- promoting and initiating the formation of a national SDG;
- raising the funds necessary to support the work of developing the standard;
- communicating progress and problems between stakeholders, members and the FSC Secretariat;
- communicating with other national SDGs to facilitate the harmonization of standards within and between regions.

When they take an indirect role, national offices may just observe the establishment of an SDG that has balanced representation from economic,

environmental and social interests, which communicates directly with FSC International.

Standard Development Groups (SDG) members are usually 2 or 3 experts per chamber, appointed by and from the national membership, and endorsed by FSC International. Their key function is to help the different interest groups to reach a consensus on indicators for each of the global P&C and, through a consultative process, develop a draft FSC national standard on behalf of the entire national membership. They derive from the P&C indicators for each criterion, in accordance with the local ecological, social and economic circumstances. Their work is often moderated by an independent facilitator.

The consultative process should involve as many stakeholder groups as possible, including those that may not fully agree with or endorse the concept of certification. All FSC members in an area should be contacted. The consultation should also include, as far as possible, perspectives from different levels. The inclusion of international, national, regional and local stakeholder groups will help to ensure that these perspectives are represented, and to build trust in the process and ownership for the standard. Stakeholders involved should also cut across professional, ethnic, age, gender, educational and economic differences. Special efforts should be made to include stakeholder groups that are often excluded from decision-making processes, which may include marginalized social and ethnic groups, women, youth, rural communities, land owners, loggers and foresters. FSC places particular importance on including people whose livelihoods depend on forests.

Bowler et al.'s (in press) observation in New Zealand confirms what other authors (e.g. Synnott, 2005; Cashore et al., 2007; Conroy, 2007; McDermott, 2012) describe for other countries and constituencies: certified plantation management operations take collective action in standard development processes to influence the

¹ In exceptional cases, FSC International accepts an additional chamber (e.g. for Indigenous Peoples or forest-managing communities) at the national level.

current and future requirements of standards, in this case related to derogations for pesticide use. Bowler et al. (in press) conclude that "the higher engagement in negotiations with FSC, the higher likelihood that a firm withdraws from a certification if they are unable to gain the exemptions that they seek." FSC experienced this already in its early days. Synnott, the first director of FSC reflects:

[T]he success of individual FSC National Initiatives can be measured not only by the degree of consensus they have developed around the national standards, but also by their ability to develop a constructive dialogue among the national forestry stakeholders, even when these interests had a history of conflict. (...) depended heavily on a very few individuals with the right mix of enthusiasm, persistence and coordinating skills, and with the right back-up. (Synnott 2005, p.33)

Ensuring consistency

In order to ensure the consistency and integrity of standards in different regions, FSC International must endorse each set of national standards as meeting all the requirements established to ensure the credibility of the certification process (contained in FSC-STD-60-002 and FSC-STD-60-006). These requirements refer to both the content of the standards and the process used to draw up them

up, and include compatibility with the P&C, local field testing, a consultative design process, and compatibility with local circumstances (see box).

After preliminary feedback from FSC International, the Standard Development Groups (SDGs) proposes a final draft to the national board of directors and membership for approval, and then to the Board of FSC International for final approval. Once a national forest stewardship standard has been endorsed by FSC, all certification bodies must use this standard in their certification processes in that country.

In the absence of national indicators developed by an FSC SDG, certification bodies, by applying transparent and inclusive stakeholder procedures, must adapted their generic indicators to national conditions.² Today, FSC has endorsed one or more national forest management standards in 30 countries, and one regional Congo Basin standard. More than 90 per cent of all FSC certified forest area is based on national FSC national standards.

In the past, it was not unusual for the process of agreeing a set of national indicators to take four years or more. In the future, this process should be faster now that the International Generic Indicators (IGIs) are in place.

The central role of indicators

The main intention of all forest stewardship standards is to minimise the negative impacts of forestry on forests and people as far as possible, while securing the financial viability of forest operations. But within this overarching aim, the national indicators for some FSC criteria have been different from country to country,

FSC indicator development is governed by FSC standards and policies, but also by external rules such as the ISEAL Code for Standard-Setting (ISEAL, 2014). According to these standards, members and other stakeholders are engaged in identifying the need for a new standard; in discussing, improving and promoting FSC standards; and are formally consulted about the various steps of standard development, field testing and review. Overdevest and Zeitlin (2014) describe ISEAL as having a new meta-organizational role which "may be important in an otherwise anarchic world of competing standards, by serving a virtual meta-center which does not specify first-order standards but instead sets second-order standards for their assessment".

The generic indicators set by certification bodies so far will be replaced by the Interim National Standards, which are based International Generic Indicators and adapted to the local conditions during the next few years.

Box 2: The consultative process and multiple standards

The design of the consultative process must include a mechanism for reaching decisions and resolving disputes, preferably through a dispute-resolution committee. In the absence of other local mechanisms, the FSC International Dispute Resolution Committee serves as the default mechanism for such disputes. The design of the consultative process should also include a "learning process" approach, in which new knowledge is incorporated into the implementation and redesign of the consultative process.

One of the first major decisions to be made is about the scope of the forest management standard. In some countries, the FSC national membership has decided to develop more than one forest management standard, for example with different sets of indicators (all within the P&C framework) for plantation forest management and for natural forest management, or for different eco-geographical zones in large countries. Canada, for example, has four standards: for the boreal forest region, for British Columbia's forests, for the maritime forest region, and for small and/or low-intensity managed maritime forests. There can also be standards for certain types of key forest species, like the Colombian bamboo and the Bolivian Brazil nut.

There is also an option for developing regional standards, covering comparable forest ecosystems across different countries. A slightly different case is the development of sets of indicators for low-intensity forest management standards and/or for small forest operations, for which FSC might allow less demanding documentation requirements. Nevertheless, all indicators for these different standards are developed within the framework of the global P&C.

and region to region, according to differences in forest ecosystems, legislation, the intensity of forest management, culture and stakeholder expectations. An obvious example is Principle 1, which requires that forest management respects all relevant national and local laws, regulations and international conventions to which a country is signatory. There are considerable differences between forest laws from country to country; for example, regarding public access rights to publicly or privately owned forest, or the rights to use non-timber forest products. There can also be differences between the FSC P&C and national laws; for example, if FSC national indicators suggest that forest owners grant certain use rights to local communities, but this is not required by national laws. Such conflicts between national laws and regulations and the FSC P&C are evaluated for certification on a case-by-case basis, by the certifiers and the affected parties. Such differences, driven by different circumstances, will continue to exist in future national standards.

Differences can also arise in countries where stakeholders are accustomed to intense plantation forest management with short rotations, and have a different understanding about the use of exotic species and the need to apply pesticides and fertilizers compared to those from regions with large areas of unevenly aged natural forest managed under low-intensity systems. Table 1 highlights this via the extremely different approaches to criteria 6.6 and 6.9 of the FSC standards for natural forest management in Germany, and for plantation management in New Zealand.1 However, applying the FSC International Generic Indicators (IGIs) will allow for less diversity in such instances, and it will be interesting to see how this will work out in practice.

The comparison illustrates that there can be a different acceptance of the use of pesticides

¹ The full list of national standards is available at: https:// ic.fsc.org/en/certification/national-standards

Table 1. Examples of differences between national indicators for the same FSC criteria, Germany and New Zealand

German FSC Standard for natural forest management (2012)1	National indicators	New Zealand FSC Standard for plantation forest management (2013)2
FSC criterion 6.6 Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. WHO Type 1A and 1B [the most hazardous pesticides] shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.		
Fertilization to increase productivity is not applied. Liming is permitted when soil analyses recommend compensation.	6.6.1	Forest managers shall demonstrate a commitment to the goal of avoidance and minimization of chemical pesticide use and the promotion of environmentally optimal methods of pest management.
In principle, chemical biocides and biological control agents are not employed. Exceptions are official pest-control orders (see Principle 1).	6.6.2 (for New Zealand, also 10.7.1)	An integrated pest management plan shall form an essential part of the management plan.
Germany has more indicators related to the training of forest workers, which includes the handling of pesticides, under other criteria.		New Zealand has 14 more indicators and related verifiers striving to reduce any negative impacts of the application of chemicals.
FSC criterion 6.9 The use of exotic species shall be carefully controlled and actively more	nitored to avoid	adverse ecological impacts.
Tree species that are not part of natural forest associations (including exotic species) are positioned as single trees or small groups to an extent which does not jeopardize the long-term development of the stands into natural forest associations.	6.9.1	Forest managers shall comply with any applicable regional pest management strategy including where this identifies a wilding species as a pest.
6.9.1.1 If the proportion of tree species that are not part of natural forest associations exceeds 20% of the planned stocking goal for the specific forest management unit, the forest enterprise shall professionally confirm that the development is not a risk to the natural forest plant association.		
6.9.1.2 Such proof is not necessary for a nurse crop that is not part of natural forest associations, if at most 20% of the stocking unit is taken over as temporary mixture.		
Positioning of tree species that are not part of natural forest associations (including exotic species) in high conservation areas (Principle 9) is only feasible insofar as it is explicitly permitted by the respective environmental sector planning.	6.9.2	Forest managers shall have in place a Wilding Prevention Decision Support System.
On afforestation sites the proportion of tree species that do not belong to the natural forest association is limited to 20% in impermanent mixture.	6.9.3	Prior to planting of exotics, forest managers shall use the system in 6.9.2 to assess the risk of wilding spread.
	6.9.4	Where the risk is high, the forest manager will not plant without implementing ongoing control procedures.
	6.9.5	In the absence of a species being identified in the regional pest management strategy, the forest manager shall remove "wildings" in adjoining properties before seed production where: the adjoining property owner is agreeable to any wilding control activities required on his or her land, and wildings are clearly identified as the progeny of species planted within the plantation area; and wilding spread has occurred from plantations after the Standard becomes operative or from first certification.
	6.9.6	The enterprise shall monitor and/or carry out research to evaluate the potential invasiveness and/or other adverse ecological impacts of the species in the local area.

See: http://ic.fsc.org/download.fsc-std-deu-02-2012-german-natural-and-plantations.265.htm See: http://ic.fsc.org/download.fsc-std-nzl-01-2012-new-zealand-plantations-en.1112.htm

and of exotic species in two different national standards. In New Zealand, non-native species can be used in plantations, and the management of such species becomes an issue only if they are regarded as a pest (i.e. escaping from the planted area). The German national standard requires forest management to approximate the composition of tree species and the structure and dynamics of natural forests, and to utilise natural processes as much as possible, resulting in reliance on natural processes and consequently rejection of pesticides through a limit of a maximum of 20 per cent of the area for reforestation with non-native species.

Note that these indicators refer to the Principles & Criteria (P&C V4), as the national transition processes for P&C V5 and IGI-adapted indicators are still ongoing. The indicators in the example do not completely reflect the corresponding criteria, as there are many cross-cutting issues in the P&C V4. As such, indicators on one topic can sometimes be found under several different principles. For example, the requirement to "maintain or enhance biodiversity" is clearly spelled out in Principle 6, but also depends on criteria in Principles 5, 7, 8 and 9. Another example, shown in Table 1, is evaluating how a forest operation handles the application of pesticides. This evaluation has to consider the training of forest workers dealing with the pesticides (Principle 4), national legislation (Principle 1), and the monitoring of negative ecological or social impacts. Because in P&C V5 the former "Plantation Principle 10" (see below) became an integral part of the other principles, it can be expected that in New Zealand in the future two separate standards will be developed for natural forests and plantations, while for German forests the related indicators will not change much.

Broader critique

Over the years there has been general criticism on voluntary certification schemes (VCS) in general and of FSC in particular. It has been suggested that defining, requiring and enforcing of sustainable forest management (SFM) should be left to governments, as voluntary action is inadequate (see also Castka and Corbett, 2016 for the role of governments in voluntary certification). The FSC response is that it recognizes the essential role of governments, and that the rule of law is an essential element of sustainable development: that FSC was initiated in response of failure of the world's governments to agree on a legally binding framework for SFM (UNCED-Rio 1992): that it does not seek to replace government leadership but to provide an alternative for producers and consumers as long as governments around the globe do not guarantee SFM. We also notice that in some countries, the FSC approach to SFM has inspired forest law reforms, and that governments are using FSC (and often PEFC) as elements for standard setting for ecolabels and for green/sustainable public procurement.

Some critics see FSC certification as greenwash for companies with unacceptable practices. As FSC is an organization set up to halt deforestation and forest degradation, its activities obviously concentrate on that purpose. For companies producing and/or trading products with wood origin, FSC therewith contributes substantially to minimizing the environmental footprint of these products. It is also requiring, in all stages of production and trade, application of core ILO conventions and essential health and safety conditions for workers. Beyond that, with its Policy for Association, it can remove certificates from companies who do not violate the rules of the scheme directly but which are in other places involved in activities seen as negative to forests and the people who live in them.

FSC does not favor any specific management and ownership model. A large part of FSC certified areas are government owned, and either run by government agencies or private concession holders. FSC offers group certification for smallholders and is supporting



community certification. The only conditions are that the property and/or use rights are clearly documented and undisputed, also not in terms of customary rights.

Besides such critique on the very existence of VCS, there is obviously critique on the specific requirements of the scheme and on how these requirements are validated and corrective action is taken. Some critics have specific concerns about FSC certifying primary forests and/or plantations. As regards primary forests: FSC has special requirements, as part of this High Conservation Value approach, that such forests do not lose out on biodiversity. FSC is against the conversion of (semi)natural forests into plantations, and does not legitimize this with certification if such conversion has taken place after 1994. However, it does see an important role for plantations and sees opportunities to improve the environmental and social qualities and services through certification.

Positions about plantation management reflected in the P&C

Plantation management was antithetical to the vision of some early NGO supporters, who envisioned the FSC as a tool to radically transform forest management into more naturalistic, locally-based production systems (McDermott, 2003). Others, however, viewed the FSC as a tool to rapidly tackle tropical forest loss, and argued that plantation management would take pressure off natural forests (Elliott, 1999). The FSC responded by creating a separate Principle 10 (P10) expressly focused on plantations, thereby focusing the plantation debate on a single principle and preventing it from stalling the rest of the standard-setting process. Principle 10 was endorsed two years after the other nine principles, reflecting conflict over whether and how plantation products should qualify for an FSC label (Auld, 2008; McDermott, 2011, p.8).

Triggered by a FSC general assembly motion requesting FSC to more clearly address how plantations can be managed in the spirit of the principle to maintain and enhance biodiversity, in 2004 FSC stakeholders started working in a number of thematic working groups on the "Plantation Policy Review" (http://plantations. fsc.org/). Some of the answers developed in long multi-stakeholder processes are the introduction of the SIR concept and the better integration of the "Plantation Principle" in all other principles.

From a more global perspective, the German government aid agency GIZ in 2005 refers to FSC in describing "The impacts of forest certification are not limited to the certified enterprises. The whole process of agreement and binding implementation of standards has institutional impacts on organizations, behaviour and culture throughout the entire sector, and beyond this in society it-self" (Burger et al 2005). And Mirjam Ros-Tonen (2004) provides a summary in the findings of

Box 3: Recommendations for other multi-stakeholder voluntary certification schemes

- Take your time with stakeholder engagement

 in general, the more diverse the positions the stakeholders represent, the more time the process will take.
- Do not measure success solely on the basis of degrees of consensus, but include the ability to develop and maintain constructive dialogue this may depend on having "the right mix of enthusiasm, persistence and coordinating skills, and with the right back-up" (Synnott, 2005).

an international congress on "Globalization, Localization and Tropical Forest Management in the 21st Century":

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

Conclusions

The FSC International Generic Indicators (IGIs) were developed to orient the Standard Development Groups (SDGs) in each country and help them to revise and transfer their existing indicators, resulting in the improved alignment of indicators between different countries. Once the transfer process is complete in each country, the P&C V5 will be used for certification audits. According to current work plans (June 2016), the last countries will turn to P&C V5 by 2018–2019. In March 2016, Portugal became the first country to establish a forest management standard based on P&C V5, and have it approved by FSC International.

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As FSC applies this approach for the first time, we cannot predict fully what complications the national standard setting procedures will face, and how it will impact on the readiness of forest managers/owners to (continue to) work with FSC certification. For that reason, FSC has decided to review of the IGIs and their impacts as early as 2018, to agree on possible changes from 2020. Subsequent reviews and revisions of the FSC P&C will occur in a five-year cycle, and will include full stakeholder engagement.

The characteristics of forests and forest stewardship are the result of a large range of factors, and these differ widely from one region to another. Yet the FSC P&C for forest stewardship are applicable worldwide, not any particular country or region, and lack



quantitative absolute indicators for certain criteria that are appropriate for the stakeholders in one country but may not be seen as acceptable in another country. However, all criteria within the FSC P&C strive towards reducing the negative impacts of forest management interventions and promoting responsible forestry.

With the proactive engagement of diverse stakeholder groups, at international and national levels, the FSC P&C helps to ensure that these many different interests and opinions regarding forest management are all considered via consultative processes which result in robust, nationally applicable standards.

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