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Forest certification in Africa: achievements, challenges and opportunities

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ACRONYMS AND ABBREVIATIONS

AAS	African Academy of Sciences
AB	Accreditation Body
ABC	African Business Community
ACSD	African Committee on Sustainable Development
AEM	African Ecolabelling Mechanism
AFF	African Forest Forum
AFORNET	African Forestry Research Network
AGREF	Associação pela Gestão Responsável das Florestas em Moçambique
AMCEN	African Ministerial Conference on the Environment
ARSCP	African Roundtable on Sustainable Consumption and Production
ARSO	African Organization for Standardization
ASI	Accreditation Services International
ATIBT	Association Technique Internationale des Bois Tropicaux
ATO	African Timber Organization
AUC	African Union Commission
BMU	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
BMZ	Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung
BREEAM	Building Research Establishment Environmental Assessment Method
BV	Bureau Veritas
BWI	Building and Wood Worker's International
CAB	Conformity Assessment Body
CAPAFC	Cameroonian Association of the Pan-African Forestry Certification
CAR	Central African Republic
CASR	Central Africa Sub-Region
CMO	Centre for the Modernisation of Operations
CB	Certification Body
CBFM	Community-Based Forest Management
CBD	Convention on Biological Diversity

CCC	Chain of Custody Certification
CEFDHAC	Conference of the Ecosystems of the Dense Humid Forests of Central Africa
CES	Centre d'Excellence Sociale
CF	Council Forests
CI	Consumers International
CIFOR	Centre for International Forestry Research
CIN	Consumer Information Network
CITES	Convention on International Trade in Endangered Species
CoC	Chain of Custody
COFRAC	Comité Français d'Accréditation
COMIFAC	Commission des Forêts d'Afrique Centrale
CSA	Canadian Standard Association
CSE	Centre of Social Excellence
CSO	Civil Society Organisation
CSR	Corporate Social Responsibility
CW	Controlled Wood
DANIDA	Danish International Development Agency
DGIS	Directorate-General for International Cooperation (UK)
DRC	Democratic Republic of Congo
EC	European Commission
ECOFORAF	L'Éco-Certification des Concessions Forestières en Afrique Centrale
ECOWAS	Economic Community of West African States
EDTA	European Dialysis and Transplant Association
EFI	European Forest Facility (earlier Institute)
EMA	Ecomark Africa
EMS	Environmental Management System
ENGOS	Environmental Non-Government Organizations
EU	European Union
EUTR	European Union Timber Regulation
FAO	United Nations Food and Agricultural Organization
FC	Forest Certification

FCS	Forest Certification Scheme/System
FFEM	Fonds Français pour l'Environnement Mondial
FLEGT	Forest Law Enforcement, Governance and Trade
FM	Forest Management
FMO	Forest Management Organisation
FMU	Forest Management Unit
ForCES	Forest Certification for Ecosystem Certification
FPIC	Free, Prior and Informed Consent
FSC	Forest Stewardship Council
FSC-ARO	Forest Stewardship Council – African Regional Office
FSS	Forest Stewardship Standard
GA	General Assembly
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GFTN	Global Forest and Trade Network
GHG	Greenhouse Gas
GIFMA	Gestion Intégrée des Forêts du Moyen Atlas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GNT	Groupe National de Travail (National Working Group)
GPP	Global Partnership Programme
GTZ	Gesellschaft für Technische Zusammenarbeit
Ha	Hectare
HCEFLCD	Haut Commissariat aux Eaux et Forêts et à la Lutte contre la Désertification
HCVF	High Conservation Value Forests
IAF	International Accreditation Forum
IEC	International Electrotechnical Commission
IFO	Industrie Forestière d'Ouessou
IFIA	Interafrican Forest Industries Association
IGI	International Generic Indicators
ILO	International Labor Organization

INPROBOIS	Industrie et Production du Bois
IPADE	Institut de Promotion et d'Appui au Développement
ISC	International Steering Committee
ISEAL	International Social and Environmental Accreditation and Labelling Alliance
ISO	International Standard Organization
ITTO	International Timber Trade Organization
IUCN	International Union for Conservation of Nature
JPI	Johannesburg Plan of Implementation
KAMP	Key Account Management Programme
KSLA	Royal Swedish Academy of Agriculture and Forestry
KVTC	Kilombero Valley Teak Company
LEED	Leadership in Energy and Environment Design
LEI	Lembaga Ekolabel Indonesia (Indonesian Ecolabelling Foundation)
LFMU	Local Farm Management Unit
MAI	Mean Annual Increment
MAP	Modular Approach Programme
MDGs	Millennium Development Goals
MDP	Market Development Programme
M&E	Monitoring and Evaluation
MP	Marketplace Programme
MTCC	Malaysian Timber Certification Council
NaFoRRI	National Forest Resources Research Institute
NASR	Northern Africa Sub-Region
NCP	National Contact Person
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
NI	National Initiative
NTFP/NWFP	Non-Timber Forest Products/ Non-Wood Forest Product
NWG	National Working Group
OLB	Origine et Légalité des Bois
P & C	Principles and Criteria

PAFC	Pan-African Forest Certification
PIPC	Permanent Indigenous People Committee
PPCC	Project Chain of Custody Certification
PCIs	Principles, Criteria and Indicators
PEFC	Programme for the Endorsement of Forest Certification Schemes
PEFCC	Programme for the Endorsement of Forest Certification Schemes Council
PPP	Public-Private-Partnership
PSC	Policy and Standard Committee
PSGE	Plan Stratégique Gabon Emergent
QAT	Quality Assurance Training
RA	Rainforest Alliance
RECs	Regional Economic Communities
RFM	Responsible Forest Management
RIFFEAC	Réseau des Institutions de Formation Forestière et Environnementale d'Afrique Centrale
ROC	Republic of Congo
SBL	Société des Bois de Lastourville
SCP	Sustainable Consumption and Production
SCS	Scientific Certification Systems
SDG	Standard Development Group
SDGs	Sustainable Development Goals
SFI	Sustainable Forestry Initiative
SFID	Société Forestière et Industrielle de la Doumé
SFM	Sustainable forest management
SGS	Société Générale de Surveillance
SLIMF	Small or Low-Intensity Managed Forest
SNBG	Société Nationale des Bois du Gabon
SODEFOR	Société de Développement des Forêts
SRWG	Sub-Regional Working Group
SSC	Svensk SkogsCertifiering
SWOT	Strength, Weaknesses, Opportunities and Threats

TAFMP	Tanzania Association for Forest Management and Products
TBT	Technical Barrier in Trade
TEREA	Terre Environnement Aménagement (Environmental Earth Management)
TFF	Tanzania Forest Fund
TFT	The Forest Trust
TID	Trade and Industry Department (of AUC)
TLTV	Timber Legality and Traceability Verification
TSP	Trademark Support Programme
UNCED	United Nations Conference on Environment and Development
UNECA	United Nations Economic Commission for Africa
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environmental Programme
UNESCO	United Nations Organization for Education, Science and Culture
UNFF	United Nations Forum on Forests
UNIDO	United Nations Industrial Development Organization
USA	United States of America
USD	United States Dollar
VLC	Verification of Legal Compliance
VLO	Verification of Legal Origin
VPA	Voluntary Partnership Agreement
WASR	Western Africa Sub-Region
WLR	Wild Living Resources Conservancy
WSA	Woodmark Soil Association
WTO	World Trade Organization
WWF	World Wide Fund for Nature
WWF-CAFTN	WWF Central Africa Forest and Trade Network
WWF-CARPO	WWF Central Africa Regional Programme
WWF-EARPO	WWF Eastern Africa Regional Programme Office
WWF-MedPO	WWF Mediterranean Program
WWF-TCO	WWF Tanzania Country Office

WWF-UCO WWF Uganda Country Office

WWF-WARPO WWF Western Africa Regional Programme

CHAPTER 1

INTRODUCTION

Forest resources and trees outside forests provide multiple benefits and have direct and measurable impacts on people's lives and national economies. Forests, trees on farms, and agroforestry systems play important roles in the livelihoods of rural people by providing employment, energy, nutritious foods and a wide range of goods and ecosystem services in most regions of the world (Njuki et al., 2004; Kowero et al., 2009; FAO, 2014). Well managed forests have tremendous potential to contribute to sustainable development and a greener economy.

The report produced by FAO (2014) entitled **“State of the World's Forests: Enhancing the Socioeconomic Benefits of Forests”** contains the following five *key findings*: (i) socioeconomic benefits from forests are the basic human needs and improvements in quality of life (higher order needs) that are satisfied by the consumption of goods and services from forests and trees or are supported indirectly by income and employment in the forest sector; (ii) the formal forest sector employs some 13.2 million people across the world and at least another 41 million are employed in the informal sector; (iii) wood energy is often the only energy source in rural areas of less developed countries and is particularly important for poor people; (iv) forest products make a significant contribution to the shelter of at least 1.3 billion people, or 18% of the world's population; and (v) a major contribution of forests to food security and health is the provision of woodfuel to cook and sterilize water.

In addition, the following *key messages*, which are relevant to the theme of the present report, have been included: (i) to measure the socioeconomic benefits from forests, data collection must also focus on people, not only trees; (ii) forest policies must explicitly address forests' role in providing food, energy and shelter; (iii) recognition of the value of forest services, such as erosion protection and pollination, is essential to sound decision-making; (iv) to meet rising and changing demands, sustainable forest management must include more efficient production; (v) providing people with access to forest resources and markets is a powerful way to enhance socioeconomic benefits; and, (vi) to make real progress in enhancing the socioeconomic benefits from forests, policies must be underpinned by capacity building.

The four Global Objectives on Forests, which were among the subjects reviewed in terms of the progress made in their achievements by the 11th session of the United Nations Forum on Forests (UNFF) in 2015, are: (i) reverse the loss of forest cover worldwide through Sustainable Forest Management (SFM), including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation; (ii) enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people; (iii) increase significantly the area of sustainably managed forests, including protected forests, and increase the proportion of forest products derived from sustainably managed forests; and (iv) reverse the decline in official development assistance for SFM and mobilize significantly increased, new and additional financial resources from all sources for the implementation of SFM (FAO, 2014).

Despite the critical importance of forest resources and the agreed international plan to implement the four global objectives on forests described above, the global rate of deforestation is still alarmingly high in many parts of the world (Njuki et al., 2004; IPCC, 2007; Kowero et al., 2009; Chidumayo et al., 2011), and the Millennium Development Goals (MDG) indicator on forests

has not been achieved (FAO, 2014). Over the last several decades, forest resources have been faced with different problems, which prevented them from realizing their potential contribution to economic and social development as well as environmental conservation. The most significant include reduction of forest area and quality, environmental degradation of forest areas, loss of biodiversity, loss of cultural assets and knowledge, loss of livelihoods of forest-dependent people and climate change (Njuki et al., 2004; Teketay, 2004-2005; Upton and Bass, 1995; Kowero et al., 2009; Chidumayo et al., 2011; FAO, 2014).

As highlighted by Njuki et al. (2004), various factors have an effect on, or shape, the forest sector in Africa. These range from demographic factors to institutional, climatic, societal and political factors. Because of the complexity of these factors, leading to economic, political and social problems, it has been difficult to achieve SFM in Africa. This is due to the high dependence on forests for livelihoods and basic goods and services, such as wood fuel, fodder, NWFPs and as potential expansion land for agriculture. For these reasons, forest utilisation is maximised often without due regard to sustainability. This is compounded further by the exploitation of forests usually by large foreign companies holding concessions with undue regard for the sustainability of their practices.

Most governments in Africa lack the funds and technical know-how to implement sustainable forest projects. The dual problems of forestry institutions - the low budgetary allocations and loss of staff - hamper efforts to co-ordinate forestry activities in most African countries. Most funding for forestry projects comes from external sources making it difficult for countries to coordinate these projects to achieve sustainability. Equally challenging is poverty. A lot of forest cover is lost by subsistence activities on a local level by people who simply use the forests as a means of survival. Large commercial enterprises sometimes depend on forestland. Hundreds of thousands of ha of forests are sometimes destroyed to pave way for commercial agriculture, irrigation projects, infrastructure development, such as roads and pipelines, and mining activities.

Logging is one of the best known causes of forest loss. In keeping up with demand for tropical wood products, logging companies have stepped up logging activities, especially in poor developing countries. Although logging can be carried out in a sustainable manner, many countries in Africa give large concessions to companies, which carry out their work for maximum economic benefits and little regard for sustainability. Most of these concessions are short-term, giving companies less incentives to conserve and use the forests sustainably. Corruption compounds the problem. Wars and conflicts have also played their part in the destruction of forests in Africa. The influx of refugees into often-fragile ecosystems, their dependence on forests for fuelwood and building material has had negative consequences for forests in some parts of Africa.

Hence, forest problems are the result of a syndrome of many causes, and action on only one front will rarely solve them (Upton and Bass, 1995; Njuki et al., 2004; Kowero et al., 2009). Many of the causes, which underlie most forest problems, arise outside the forestry and forest industry sectors. Consequently, activities from within these sectors alone are unlikely to solve forest problems. Basic market, policy and institutional failures tend to either 'push' groups into the forest, through marginalizing them in places outside the forest or to 'pull' groups into the forest, through attracting them into the forest by excess profits. Many of the policy failures concern agriculture and industrial development or are a result of inadequate macro-economic policies. The effect of these failures can be worsened by weak and/or inappropriate tenure, increasing population and the associated increasing demands for forest products, fragmentation of forests, increasing extent of infrastructure (e.g. roads and railways) - increasing easy access to previously inaccessible forests as well as inappropriate technology and skills applied to forest management.

In general, there are several causes of a specific forest problem, and these interact in complex and often unpredictable ways. Consequently it is not surprising that single-issue, single-stakeholder or single-tool solutions have failed to alleviate forest problems.

These forest problems triggered global concern, especially, over the last two decades since, as pressures increased on remaining forest areas, conflicts emerged between stakeholders, i.e. those who live in forests, forest industries, governments and the public at large who depend in different ways on the environmental, social and economic benefits provided by forests.

The traditional, usually government-led approaches to forest problems have been regulatory. In general, these efforts have proved insufficient to reduce either forest loss or forest degradation. At the country level, forest legislation may be inadequate to assure improvements in forest management, and customary rules governing local forest use may not be recognized. Alternatives are required to redress the deficiencies in existing mechanisms.

There is a need to recognize the wider asset value of forests throughout the world, and for new instruments to be developed which enable forest owners around the world to get the best return within a context of SFM (Upton and Bass, 1995; Nussbaum and Simula, 2005; Perera and Vlosky, 2006; van Kuijk et al, 2009).

In the meantime public impatience,

especially in North America, Europe and Australasia, with lack of progress and disillusionment over the effectiveness of existing forest initiatives has resulted in moves to look at the possibilities of market-based, voluntary approaches (Upton and Bass, 1995; Nussbaum and Simula, 2005; Perera and Vlosky, 2006).

The assumption behind these initiatives is that consumer interest in the forest dilemma is strong. It is further assumed that this interest may cause discrimination in favour of timber from sustainably-managed forests, and a willingness to pay any associated extra cost. It is also thought that public acceptability of wood and paper products from sustainably managed forests will help to maintain their market share against substitute non-wood products. This is based on the assumption that the public appreciates the inherent virtues of wood and paper products as deriving from a renewable resource and being ultimately biodegradable. However, the converse of this assumption worries some stakeholders, namely that consumer concern over forest conditions may result in a discrimination against timber and paper products that the consumer perceives to derive from unsustainably managed forests. These assumptions have provided the impetus for development of forest certification (FC).

This has four key parameters, i.e. forest certification:

- 1) has the twin objectives of: (a) working as a market incentive to improve forest management; and (b) improving market access and share for the products of such management;
- 2) is conceived as an economic, market-based instrument and, as such, participation in certification programmes should be, and currently is, voluntary;
- 3) takes place by assessing the effect of forest activities against standards previously agreed as significant and acceptable to stakeholders; and,
- 4) is undertaken by third party organizations, which have no self-interest in a specific forest activity, are not stakeholders in the forests being certified and can assure the public of independent and professional judgement (Upton and Brass, 1995; Nussbaum and Simula, 2005).

SFM, also referred to as responsible forest management (RFM), is an inherent aim of FC. It is aimed at improving the quality of forest management, i.e.: (i) *environmentally appropriate* - ensuring that the harvest of timber and non-timber products maintains the forest's biodiversity, productivity, and ecological processes; (ii) *socially beneficial* - helping both local people and society at large to enjoy long term benefits and also provide strong incentives to local people to sustain the forest resources and adhere to long-term management; and (iii) *economically viable* - structuring and managing forest operations so as to be sufficiently profitable, without generating financial profit at the expense of the forest resource, the ecosystem, or affected communities; the tension between the need to generate adequate financial returns and the principles of responsible forest operations can be reduced through efforts to market the full range of forest products and services for their best values (FSC, 2014a).

To provide consumers with a credible guarantee that materials and products come from forests in which their management is environmentally responsible, socially beneficial and economically viable, two types of certificates are being issued by forest certification schemes/systems (FCSs), namely *Forest Management (FM)* and *Chain of Custody (CoC)* certificates. These certificates relate to the different origins of forest products, stages of production and subsequent progress of forest products through the value chain. FM certification is awarded to forest managers or owners whose management practices meet the requirements of the standards used by the FCSs. CoC certification verifies certified material and products along the production chain and applies to manufacturers, processors and traders of certified forest products. Other types of certificates, discussed under Chapter 4 have also emerged.

While encouraging efforts have been and are being made to promote and implement FC in Africa, these efforts, which can be characterized as being scattered and uncoordinated, and the achievements made so far have not been documented properly, making the analyses of efforts and achievements, identification of positive and negative lessons, gaps, challenges/constraints very difficult.

CHAPTER 2

AIMS OF THE HANDBOOK AND HOW IT WAS COMPILED

Commissioned by the African Forest Forum (AFF), the general aim of this study was to compile and document, in one publication, the information on FC relevant to Africa scattered in various sources globally, including in the different sub-regions and countries in Africa, as well as review the current status of certification in the different sub-regions of Africa and the continent as a whole. It is hoped, among other things, that this will enhance the understanding of achievements made so far in FC in Africa as well as identifying gaps, challenges, constraints encountered and needs for capacity building, including training programme(s), that will be instrumental in the promotion and successful implementation of FC in Africa.

The specific objectives of the study were to:

- 1) briefly review the history of FC as well as assess and document FCS that have made footprints in Africa;
- 2) review accreditation and certification bodies and their roles, FC standards and the processes of their development and enabling conditions for FC;
- 3) describe how FC is actually implemented in practice and summarize the various contributions of FC;
- 4) review the status of FC in Africa through the:
 - i) reviewing of past and ongoing support programmes/projects for FC in the sub-regions;
 - ii) assessment of the current situation of FC in the different countries/sub-regions;
 - iii) assessment and analyses of the extent and scope of engagement of various national/regional/global FCS in the different countries;
 - iv) identification of the types and areas of forests certified and/or undergoing the processes of FC;
 - v) determining the types and numbers of forest certificates issued and certified forest products and/or services;
 - vi) investigation of availability, focus and scope of national/sub-regional/international FC standards;
 - vii) investigation of availability of capacity for FC in the sub-regions;
 - viii) assessment and documentation of the perceptions of stakeholders on FC and their involvement in and support to the FC processes;

- ix) assessment of availability/prospects of markets and market information systems for certified forest products/services from the sub-regions;
- x) documentation of positive and negative lessons learnt;
- xi) identification of gaps, challenges and/or constraints of past and ongoing efforts in FC in the sub-regions;
- xii) analyses of the strength, weaknesses, opportunities and threats (SWOT) of past and ongoing efforts on FC;
- xiii) assessment and identification of needs for capacity building for FC in the sub-regions; and,
- xiv) forward viable/feasible recommendations for promoting FC in the sub-regions in general and AFF engagement in FC in particular.

To achieve these objectives, different methods were employed, including: (i) synthesizing findings and information from studies commissioned by AFF in the eastern and southern, central, northern and western Africa sub-regions; (ii) reviewing and synthesizing relevant information from: (a) published documents (books, periodicals, manuals, scientific journals, reports), (b) unpublished documents, (c) websites of forest certification schemes/systems (FCSs), certified forest companies, countries with certified products as well as those active in FC, organizations offering training on FC and those who were/are active in supporting FC in Africa, and, (d) other internet resources; and, (iii) consultation with experts and authorities responsible for FC and certified forest companies.

CHAPTER 3

BRIEF HISTORY OF FOREST CERTIFICATION

The 1980s witnessed rapid and severe deforestation and forest degradation, with associated negative environmental, social and economic impacts, especially in tropical countries. During that time, standards or systems that could help to address these problems did not exist. Governments tried but failed to solve the problems. This opened room for dialogue among concerned stakeholders with the aim of finding a solution or solutions to halt or prevent the prevalent deforestation and forest degradation worldwide.

Two main policy approaches have been adopted, i.e. ‘top down’ and ‘bottom up’, to manage forest resources. In the top-down approach fundamentals of policies are formulated at higher levels of government, and implemented under the authority of the government. The success of these command and control methods heavily depends on strength of the governing body. The bottom-up approach, on the other hand, relies more on a participatory approach where the public agrees on the need for and forms of policy and implements it through tradition, cooperative agreement or local rule. However, in modern complex societies, common interests binding the members of smaller communities are lacking, which hinders the success of this approach. Past experiences of ineffectiveness and failures of both approaches have led to the third approach, *certification*, which introduced policy changes through commercial rather than central or local power and uses market acceptance rather than regulatory compliance as an enforcement mechanism (Naka et al., 2000; Vogt et al., 2000; FERN, 2001; 2004; Cashore et al., 2003; Nussbaum and Simula, 2005; Perera and Vlosky, 2006; Yadav et al., 2007; van Kuijk et al., 2009; ETFRN, 2010; Watts et al., 2012).

Certification is a procedure by which a third party (called certifier or certification body) provides written assurance/market labeling that a product, process or service conforms to specified standards, on the basis of an audit conducted to agreed procedures (Upton and Bass, 1995; Bass et al., 2001; Barklund and Teketay, 2004; Nussbaum and Simula, 2005). *Forest certification* is the process of inspecting particular forests or woodlands to see if they are being managed according to an agreed set of standards. It involves assessing the quality of forest management in relation to a set of predetermined principles and criteria as well as indicators and their means of verification. FC also gives consumers a credible guarantee that the product comes from forests in which their management is environmentally responsible, socially beneficial and economically viable¹ (FSC, 1994a; Upton and Bass, 1995; FSC, 1998; Bass et al., 2001; FERN, 2001, 2004; Cashore et al.,

2003; Meidinger et al., 2003; Barklund and Teketay, 2004; Nussbaum and Simula, 2005; Perera and Vlosky, 2006; Yadav et al., 2007; van Kuijk et al., 2009; ETFRN, 2010).

As stated above, during the 1980s, the general public in developed countries became sensitized to the seriousness of forest loss, particularly tropical deforestation. Frustrated by lack of progress through the governmental efforts discussed above, the NGO community started a range of actions against the tropical timber trade, perceiving this as the only way in which they could influence the situation. Actions included campaigning, demonstrations at the premises of traders and retailers as well as advocating total bans on the use of tropical timber. Some NGOs took the view that banning trade would result in reduced deforestation (Nussbaum and Simula, 2005).

Gradually, many NGOs involved realized that this was too simplistic since forests that do not have value for local populations are likely to be converted to other uses rather than protected in their natural state. Positive instruments were, therefore, needed to create such value in the marketplace and link it to responsible management. At the same time, as a result of the campaigns, a number of key retailers had realized that they had very little information about the sources of their wood and paper products, and had not taken any control over the environmental and social impacts of their purchasing decisions. They saw the value in a mechanism that would provide a straightforward and credible way for them to source wood and paper products from forests with acceptable social and environmental management. This was the breeding ground from which the idea of certification of forest management and related product labelling emerged (Nussbaum and Simula, 2005).

Concerned about the accelerating deforestation, environmental degradation and social exclusion, a group of timber users, traders and representatives of environmental and human rights organizations met in California in 1990. This diverse group highlighted the need for a system that could credibly identify well-managed forests as the sources of responsibly produced wood products. The concept of the Forest Stewardship Council (FSC) and the name were coined at this meeting. Two years later, in 1992, the United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit, was held in Rio de Janeiro. UNCED identified three factors indicating that action at an international level was necessary: (i) intolerable rates of deforestation and associated loss of environmental, economic and social benefits; (ii) threats to the livelihoods, culture and rights of forest dwellers and indigenous people in many parts of the world who live in and around forests; and, (iii) meeting the continuously increasing demand for forest products (Nussbaum and Simula, 2005).

The Earth Summit produced no legally binding commitments on forest management, but it did result in Agenda 21 and the non-legally binding Forest Principles. It also provided a forum for many NGOs to come together and gather support for the innovative idea of a non-governmental, independent and international FC scheme.

Following intensive consultations in ten countries to build support for the idea of a worldwide certification system, the FSC Founding Assembly, with 130 participants from around the world representing a wide range of economic, social and environmental interests (including many major environmental NGOs and global retailers), was held in Toronto, Canada, in 1993. In October 1993, an agreement was reached to launch FSC, and by August 1994 a definitive set of *Principles* and *Criteria*, with the *Statutes* for the Council, were agreed and approved by the votes of the Founding Members² (Barklund and Teketay, 2004). The FSC Secretariat, which has since (2003) been relocated to Bonn, Germany, opened in Oaxaca, Mexico, and the FSC was established as a legal entity in Mexico in February 1994. However, very importantly for subsequent developments, governments and a significant part of the mainstream forest industry were not involved (Nussbaum and Simula, 2005). Until 1997, the FSC remained practically the only operational certification system in the world, and served as a focus for policy discussions and promotion of certification. Without the FSC, certification would certainly not have made a fundamental impact on the setting of forest standards, auditing their compliance for forest management and labelling certified products in the international marketplace.

- » However, as indicated above, private forest owners and important players in the global forest products industry were not involved in the FSC and saw it as an actual or potential threat. Nussbaum and Simula (2005) attributed this threat to the following reasons:

- » concern among many tropical timber producers that certification would be a new barrier to markets, particularly in Europe and North America;
- » fears in parts of the forest products industry that the FSC, an organization strongly influenced by NGOs, would gain too much influence over the industry if FSC certification was widely embraced by the market giving the scheme a global monopoly;
- » concern among small-scale private forest owners, particularly in Europe, that certification would reduce their rights to control management of their forests, and that it was not adapted to small enterprises and would result in huge increases in cost and bureaucracy;
- » resistance amongst forest owners and managers to the concept that other stakeholders had an equal right to be involved in defining what is good forest management; and,
- » concern within some governments that the multi-stakeholder approach and international endorsement of national forest management standards required by the FSC would undermine national sovereignty over natural resources.

Initially, the reaction among the interest groups who did not support the FSC was to oppose certification completely. However, it gradually became clear that in a global economy where independent verification was widely accepted as a normal part of business, this was not a viable approach. Therefore, a number of other schemes began to emerge emphasizing the national context of certification. These initiatives were mainly promoted by interest groups who were dissatisfied with the FSC approach or even opposed to it. Hence, national-level schemes started to emerge in a number of different countries covering a wide range of forest types, including, among many others, Brazil, Canada, Finland, Indonesia and USA. These emerging schemes were developed by a wide range of different groups using a number of different approaches (Nussbaum and Simula, 2005).

However, the emerging national schemes were all faced with the problem of broader acceptance in export markets, which are concerned with the need for getting support from campaigning NGOs, global coverage of the schemes and sufficient supply (Nussbaum and Simula, 2005). This prompted the idea of mutual recognition among the different schemes, which could not be realized since the various interest groups tended to support their own schemes and set of assessment criteria while remaining critical of those developed by other interest groups. However, a number of national initiatives in Europe decided in 1997 to set up the Pan-European Forest Certification (PEFC) scheme, re-named Programme for the Endorsement of Forest Certification (PEFC) in 2003, as a mechanism to allow mutual recognition of their national certification schemes.

CHAPTER 4

FOREST CERTIFICATION SCHEMES

As stated above, following the establishment of FSC, there was a proliferation of national, regional and international forest certification schemes (FCSs) of which the main schemes are:

- (A) International FCSs: (i) Forest Stewardship Council (FSC) Scheme; and (ii) Programme for the Endorsement of Forest Certification (PEFC) Schemes;
- (B) Regional FCSs: (i) North American Sustainable Forestry Initiative (SFI); and (ii) the African Ecolabelling Mechanism (AEM), with its logo Ecomark Africa (EMA), is being developed as an African regional eco-labelling scheme initially focusing on four priority sectors, namely Agriculture, Fisheries, Forests and Tourism (UNEP, 2008; Teketay, 2012).
- (C) National FCSs: (i) CertforChile - National Certification Scheme in Chile; (ii) Canadian Standards Association (CSA): Canada's National Scheme for Sustainable Forest Management; (iii) Lembaga Ekolabel Indonesia (LEI): Indonesian Sustainable Production Forest Management Certification Scheme; (iv) Malaysian Timber Certification Council (MTCC); and, (v) the Gabon and Cameroonian Associations of the Pan African Forestry Certification (PAFC) scheme, which is affiliated to PEFC, are developing national FCSs in Gabon and Cameroon, respectively.

Of the seven main schemes mentioned above, those with their footprints in Africa include only FSC and PEFC through the endorsement of PAFC and the Cameroonian Association of PAFC (CAPAFC), which are being developed as national FCSs in Gabon and Cameroon, respectively, while it is expected that AEM will be up and running in the near future. Therefore, the following subsections will provide detailed accounts of FSC, PEFC, PAFC, CAPAFC and AEM.

In addition, other FCSs dealing with the verification of legality of timber and timber products are being implemented in central and western Africa sub-regions.

FOREST STEWARDSHIP COUNCIL (FSC)

Brief History

As discussed in chapter 3 above, the history of FSC is closely linked with the initial history of FC. Concerned about accelerating deforestation, environmental degradation and social exclusion, a group of timber users, traders and representatives of environmental and human rights organizations met in California in 1990. This diverse group highlighted the need for a system that could credibly identify well-managed forests as the sources of responsibly produced forest products. The concept of FSC and the name were coined at this meeting. The FSC Founding Assembly was held in Toronto, Canada, in 1993, and the FSC Secretariat opened in Oaxaca, Mexico and the FSC was established as a legal entity in Mexico in February 1994. The FSC Secretariat relocated to Bonn, Germany, in 2003.

A chronologically arranged brief historical development of FSC is presented below (FSC, 2014b).

- 1990:** represents the year in which a group of timber users, traders and representatives of environmental and human rights organizations met for the first time in California, USA; participants identified the need for a system that could credibly identify well-managed forests as a resource of responsibly produced forest products; and the name Forest Stewardship Council (FSC) was born.
- 1993:** first FSC certificates issued, i.e. Forest Management certificate in Mexico and a Chain of Custody certificate in the United States of America (USA); first FSC Board of Directors elected; and FSC Founding Assembly was held in Toronto, Canada, with 130 participants from 26 countries.
- 1994:** FSC was officially born; FSC secretariat office was opened in Oaxaca, Mexico, with three staff members, and FSC A.C. was established as a legal entity in Mexico; and a wooden spatula was the first certified and labelled product available in the UK.
- 1996:** FSC National Standard endorsed in Sweden.
- 1997:** members of FSC ratified Principle 10 for plantations aimed at reducing pressure on, and promoting of the conservation of, natural forests.
- 1998:** over 10 million ha of forests certified to FSC standards.
- 1999:** the first book published on FSC-certified paper, namely “A Living Wage”; and first FSC-certified non-timber product produced: Chicle Chewing Gum in Mexico.
- 2000:** policies developed on group certification of Chain of Custody; and FSC Board of Directors endorsed the FSC Social Strategy, including a plan to increase access to and benefits from FSC certification for small and community producers and protect forest populations’ and workers’ rights.
- 2002:** companies allowed to label their FSC products following the Chain of Custody policy development and group certification in 2000.
- 2003:** FSC head office moved from Oaxaca, Mexico, to Bonn, Germany; 20,000 FSC- certified products in the market; and 40 million ha of FSC-certified forests worldwide.
- 2004:** standards created for smallholder forest owners (< 1,000 ha in size) came into force.
- 2005:** Accreditation Services International (ASI) created to manage the FSC accreditation programme.
- 2006:** FSC Controlled Wood Standard created; FSC started complying with International Social and Environmental Accreditation and Labelling Alliance (ISEAL) Code of Good Practice 4.
- 2007:** FSC Global Development created to strengthen FSC markets and trademarks.
- 2008:** more than 100 million ha certified, distributed in over 79 countries.
- 2009:** at the Winter Olympics, Vancouver, the athlete housing village and Olympic Village/ Paralympics Centre were built using FSC-certified wood; 15,000th Chain of Custody

certificate issued; and Forest Certification for Ecosystem Certification (ForCES) certification announced.

2011: compliance with the International Labour Organization's core conventions included in the FSC's Policy for Association with organizations,

2012: approximately 140,000 smallholders certified.

2013: Permanent Indigenous Peoples' Committee established to give a formal voice to indigenous peoples in FSC's principles.

2014: 184.6 million ha of forest FSC-certified; 853 members; and FSC celebrated its 20th anniversary (1994-2014).

Vision and Mission of FSC

Vision: The world's forests meet the social, ecological, and economic rights and needs of the present generation without compromising those of future generations¹.

Mission: The Forest Stewardship Council A.C. (FSC) shall promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

Type of Scheme

The FSC is an independent, non-governmental and not-for-profit organization, registered in Mexico as an association of members (*Asociación Civil* = AC). The membership consists of a diverse group of representatives from environmental and social groups, the timber trade and the forestry profession, indigenous peoples organizations, community forestry groups and forest product certification organizations from around the world (Nussbaum and Simula, 2005). The organization operates internationally and provides its services through the FSC International Center, based in Bonn, Germany, as well as through a worldwide network of national offices. The FSC offers an international accreditation programme for independent certification bodies and a labelling scheme for forest products serving as a credible guarantee that products come from well-managed forests, i.e. forests that meet the FSC's forest management standards, and its principles and criteria.

Scope

The FSC scheme is international in scope. Certification bodies from all countries can apply for accreditation and forest management or manufacturing operations from all over the globe can ask those bodies with an international accreditation to become certified against FSC standards. The principles and criteria for forest stewardship are intended to apply without discrimination to tropical, temperate and boreal forests or plantations worldwide that are managed for the production of forest products (Nussbaum and Simula, 2005).

Structure and Governance

Built upon the principles of participation, democracy and equity, FSC is an international membership association, governed by its members⁵. These members may be organizational – which means that they represent their institution or organization – or individual. The members are from diverse backgrounds and include representatives of environmental and social non-governmental organizations, the timber trade, forestry organizations, indigenous people's

organizations, community forestry groups, retailers and manufacturers, and FC organizations, as well as individual forest owners and interested parties. They apply to join one of three chambers, namely environmental, social and economic, which are further sub-divided into northern and southern sub-chambers. The northern sub-chamber comprises countries from high-income countries and the southern sub-chamber comprises countries from the low-, middle- and upper middle-income countries as defined by the United Nations (Nussbaum and Simula, 2005). Each chamber holds 33.3% of the weight in votes, and within each chamber, votes are weighted to ensure that north and south each hold 50% of the votes. This guarantees that influence is shared equitably between different interest groups and levels of economic power.

The decisions within FSC are made at three levels⁵ - (i) **the General Assembly of Members** is FSC's highest decision-making body. Motions are proposed by one member, and seconded by two more, voted on by members, weighted according to the north-south chamber structure; (ii) FSC **Board of Directors** is made up of twelve elected representatives, with two elected from each of the sub-chambers for a four-year term; and (iii) the **Director General** leads a multicultural professional team at the FSC International Center in Bonn, Germany; in collaboration with the Global Network, the DG runs FSC on a day-to-day basis.

Below the international level, the FSC is decentralized through a network of regional and national offices. The aims of these offices are to: (i) promote, locally and regionally, the FSC and its mission; (ii) make the FSC more accessible and more locally adapted; (iii) encourage further local participation; and, (iv) develop and test national forest stewardship standards (Nussbaum and Simula, 2005).

Certification System

The FSC FC is aimed at ensuring environmental, social and economic benefits from products coming from well-managed forests. Forest owners and managers may want to become FSC-certified to demonstrate that they are managing their forests responsibly. Along the supply chain, FSC certification can provide benefits, such as access to new markets.

Standards

The FSC Principles and Criteria (P & C)⁷, which were first published in 1994 and amended in 1996, 1999 and 2001, provide international guidelines to forest management and set out the best practices for forest management. A comprehensive review commenced in 2009, which resulted in major revisions to the wording, although not the substance, of the Principles and Criteria being proposed in 2011. The new version of the FSC Principles and Criteria was approved by 75% of the membership vote in January 2012. The P & C describe the essential elements or rules of environmentally appropriate, socially beneficial and economically viable forest management. There are ten principles, each of which is supported by several criteria that provide a way of judging whether the principle has been met in practice (Table 1).

All ten principles and criteria must be applied in any forest management unit (FMU) before it can receive FSC certification. The P & C apply to all forest types and areas within the management unit included in the scope of the certificate. They are applicable worldwide and relevant to forest areas and different ecosystems as well as cultural, political and legal systems. This means that they are not specific to any particular country or region.

Table 1. FSC Principles and Criteria for Forest Stewardship

Principle	Description
Principle 1	Compliance with Laws: The Organization shall comply with all applicable laws, regulations and nationally ratified international treaties, conventions and agreements
Principle 2	Workers Rights and Employment Conditions: The Organization shall maintain or enhance the social and economic wellbeing of workers.
Principle 3	Indigenous Peoples' Rights: The Organization shall identify and uphold indigenous peoples' legal and customary rights of ownership, use and management of land, territories and resources affected by management activities.
Principle 4	Community Relations: The Organization shall contribute to maintaining or enhancing the social and economic wellbeing of local communities.
Principle 5	Benefits from the Forest: The Organization shall efficiently manage the range of multiple products and services of the Management Unit to maintain or enhance long term economic viability and the range of environmental and social benefits.
Principle 6	Environmental Values and Impacts: The Organization shall maintain, conserve and/or restore ecosystem services and environmental values of the Management Unit, and shall avoid, repair or mitigate negative environmental impacts.
Principle 7	Management Planning: The Organization shall have a management plan consistent with its policies and objectives and proportionate to scale, intensity and risks of its management activities. The management plan shall be implemented and kept up to date based on monitoring information in order to promote adaptive management. The associated planning and procedural documentation shall be sufficient to guide staff, inform affected stakeholders and interested stakeholders and to justify management decisions.
Principle 8	Monitoring and Assessment: The Organization shall demonstrate that, progress towards achieving the management objectives, the impacts of management activities and the condition of the Management Unit, are monitored and evaluated proportionate to the scale, intensity and risk of management activities, in order to implement adaptive management.
Principle 9	High Conservation Values: The Organization shall maintain and/or enhance the High Conservation Values* in the Management Unit through applying the precautionary approach.
Principle 10	Implementation of Management Activities: Management activities conducted by or for The Organization for the Management Unit shall be selected and implemented consistent with The Organization's economic, environmental and social policies and objectives and in compliance with the Principles and Criteria collectively.

In order to help forest managers, stakeholders and certification bodies interpret them for a specific region, a set of International Generic Indicators are being developed. These are being produced following the most recent revision of the Principles and Criteria in 2012 and are based on the extensive explanatory notes that were developed to support discussion of the revised P & C prior to their approval.

In many countries, FSC Regional or National Standards are developed by FSC working groups. Regional and national standards transfer the P & C to the specific conditions and context found in each country or region and provide locally appropriate indicators for each criterion to show that compliance can be demonstrated in that national situation.

During its meeting in March 2014, the FSC International Board of Directors approved the FSC's International Generic Indicators (IGI) 8,9. The IGI are, therefore, now ready to be used by Standard Development Groups (SDGs) in their work to develop or transfer national or sub-regional Forest Stewardship Standards to the FSC Principles and Criteria (version 5- 1). At the same time, FSC-accredited certification bodies (CBs) can use the IGI in developing Interim National Standards for countries where no national SDG exists.

Requirements and Guidance: Policy and Standards Documents

The FSC Normative Framework comprises the collection of FSC policies, standards and procedures, which are mandatory for certificate holders and FSC accredited certification bodies. Advice notes, either stand-alone or compiled in directives, are also considered normative, but will be phased out over time. Additionally, FSC publishes guidance documents that contain technical information outlining some means of compliance with the requirements of a normative document. Guidance in the FSC system is not considered normative, but informative only.

Type of Certificates

The FSC issues three different certificates, namely Forest Management, Chain of Custody and Controlled Wood. The different types of certificates relate to the different origins of forest products, stages of production and subsequent progress of forest products through the value chain. Verification against all FSC requirements ensures that materials and products with the FSC label are from responsible sources. Forest Management (FM) certification is awarded to forest managers or owners whose management practices meet the requirements of the FSC Principles and Criteria. Chain of Custody (CoC) certification applies to manufacturers, processors and traders of FSC certified forest products. It verifies

FSC certified material and products along the production chain. Controlled Wood certification is designed to allow organizations to avoid the categories of wood considered unacceptable. FSC Controlled Wood can only be mixed with FSC certified wood in labelled FSC Mix products.

Accreditation Programme

The FSC does not issue certificates itself. Instead, independent certification bodies carry out the assessments that lead to FSC certification. It sets the standards for forest management and chain of custody certification, and defines the procedures that certification bodies should follow in their certification assessments. However, accredited certification bodies are checked regularly to make sure they operate in line with FSC's rules, and FSC is the only global FSC to have an integrated accreditation programme that systematically checks its certification bodies. ASI is responsible for checking certification body compliance with FSC's rules and procedures through a combination

of field and office audits. All FSC accredited certification bodies must meet the FSC accreditation requirements. In the same way that certification bodies carry out annual checks on holders of FSC FM and CoC, ASI also carries out annual checks on the certification bodies through office and field audits.

Steps Towards Certification

Three major steps are involved in the process of FSC certification.

- » Forest owners or managers need to contact one or several FSC accredited certification bodies. The CB will need some basic information about the operations in the forest to provide a first estimate regarding cost and time. The certification body, in turn, provides information about the requirements for FSC certification to the forest owners or managers.
- » The forest owners or managers choose a CB, and a certification audit takes place to assess the company's qualifications for certification.
- » After working with a CB towards achieving full compliance of FSC requirements, the operation will receive its FSC Certificate.

FSC certificates are valid for five years. The FSC accredited CB will conduct annual surveillance audits to verify the continued compliance of the operation with FSC certification requirements.

National Standards

The FSC P & C set out the global requirements for achieving FSC FM certification. However, any international standard for FM needs to be adapted at regional or national levels in order to integrate local knowledge into the FSC systems as well as reflect the diverse legal, social and geographical conditions of forests in the different parts of the world. The process for developing the FSC Forest Stewardship Standards follows the requirements set out in the FSC procedure document known as "Process requirements for developing and maintenance of National Forest Stewardship Standards".

The FSC FM Programme advises SDGs as they work through the process of developing a National Forest Stewardship Standard. This process requires the addition of indicators, verifiers, norms, guidance and, in some cases, interpretations to the FSC P & C. The FSC P & C with a set of such indicators approved by the FSC International Board's Policy and Standards Committee (PSC), constitute an FSC National or Regional Forest Stewardship Standard. When consensus is reached at national or regional level, the FSC FM Programme evaluates the National Forest Stewardship Standard to ensure that they fully reflect FSC's requirements on Structure and Content of National Forest Stewardship Standards and also that a credible process was followed. The FSC Policy and Standards Committee that has been delegated by the FSC Board of Directors to approve Regional and National Forest Stewardship Standards meets and makes a decision over a pre-approved standard.

Approved Standards

An overview of approved FSC National and Regional Forest Stewardship Standards, copies of which can be downloaded directly, are provided in the FSC website (<https://ic.fsc.org/national-standards.247.htm>) (accessed on 08-10-2014). Countries in Africa with approved national/regional standards include Cameroon (FSC-STD-CAM-01-2010 Cameroon Community SLIMF: approved

in December 2010 and FSC-STD-CAM-01-2012 **Cameroon** Natural and Plantations: approved in April 2012), **Central African Republic** (FSC-STD-CB-01-2012-EN **Congo Basin** Regional Standard: approved in 2012), Congo Basin (same as for CAR), **Democratic Republic of Congo** (same), **Gabon** (same), **Ghana** (FSC-STD-GHA-01-2012 Ghana Natural and Plantations Forest: approved in July 2012) and Republic of Congo (FSC-STD-RoC-01-2012 Natural and Plantations Regional Standard: approved in April 2012).

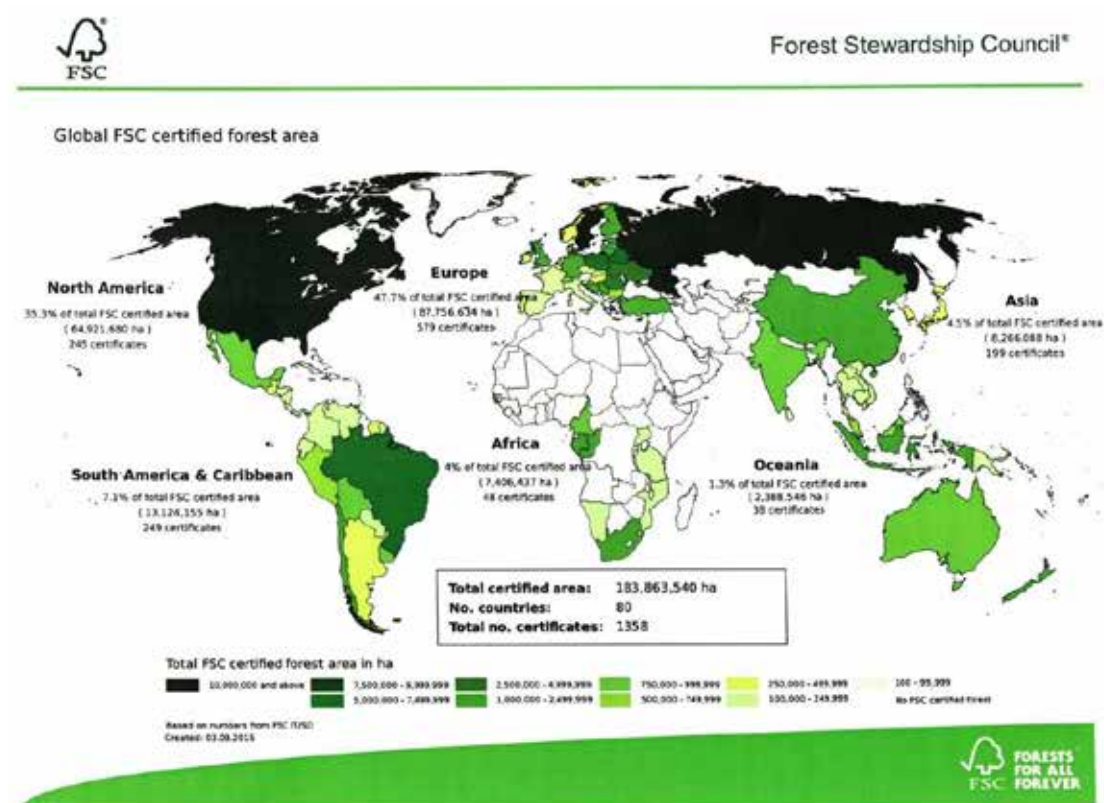
It has been indicated that the Community small or low-intensity managed forest (SLIMF) Standard approved for Cameroon and the Natural and Plantations Forest Standard approved for Ghana will be reviewed with the transfer process into the revised P & C while the Natural and Plantations Forest Standard approved for Cameroon will be transferred to the revised P & C at the end of the International Generic Indicators (IGI) development process. Similarly, standards approved for Central African Republic, Congo Basin, Democratic Republic of Congo and Gabon will be transferred to the revised P & C at the end of the IGI development process.

Current Status

FSC has an International Center located in Bonn, Germany, with 68 staff members, representing the International Secretariat. It has 48 Network Partners: (i) four Regional Offices in Africa, Asia, Latin America and Russia – to promote FSC at the regional level, and service provision to FSC clients and stakeholders at the regional level; (ii) three Sub-Regional Offices in Central America, Congo Basin and East Africa – for the promotion of FSC certification at the national level and service provision to FSC clients and stakeholders; (iii) 31 National Offices in five continents – for the promotion of FSC certification at the national level and service provision to FSC clients and stakeholders; (iv) two National Focal Points in Colombia and Uganda – to promote and raise awareness for FSC at the national level; and, (v) eight National Representatives in Argentina, Republic of Congo, India, Indonesia, Ireland, Latvia, Mexico and Ukraine - to promote and raise awareness for FSC at the national level (FSC, 2014c).

As of July 2014, FSC has 856 members from 85 countries, 32 CBs and about 140,000 smallholders worldwide (FSC, 2014c). Since September 2015, FSC has 183.9 million ha certified forest area worldwide with 1,358 FM certificates in 80 countries and 29,508 CoC certificates in 113 countries (FSC, 2015; Tables 2-6; Figure 1).

Table 2. Global FSC-certified forest areas by region



Region/ Country	Forest Management Certificates					Chain of Custody Certificates		
	No. of countries	Area certified ('000 ha)	Proportion of tot. area certified (%)	No. of certificates	Proportion of tot. No. of certificates (%)	No. of countries	No. of certificates	Proportion of tot. No. of certificates (%)
Africa	10	7,406	4.0	48	3.5	12	168	0.6
Asia	13	8,266	4.5	199	14.7	28	7,897	26.8
Europe	32	87,757	47.7	579	42.7	41	15,610	52.9
S.America/ Caribbean	17	13,124	7.2	249	18.3	19	1,490	5.0
N. America	3	64,922	35.3	245	18.0	5	3,890	13.2
Oceania	5	2,389	1.3	38	2.8	7	453	1.5
TOTAL	80	183,864	100.0	1,358	100	113	29,508	100

Source: FSC (2015)

Of the total FSC-certified forests, 0.01%, 2.13%, 10.02%, 22.87% and 64.94% are owned by the private/public sectors, communities, concessions, public organizations/governments and private sector, respectively (Table 3).

Figure 1. Global FSC-certified forest area by region (source: FSC, 2015).

Table 3. FSC certificates by ownership.

Ownership	Certified forest	
	Area (million ha)	Proportion of total certified area (%)
Private	119.41	64.94
Public	42.06	22.87
Concession	18.44	10.02
Community	3.92	2.13
Private/Public	0.03	0.01
TOTAL	183.86	100.00

Source: FSC(2015).

Also, 52.5%, 9.8% and 37.7% of the FSC-certified forests are boreal, temperate and tropical/subtropical, respectively (Table 4) while 62.59%, 8.49%, 28.87% and 0.03% of them are natural, plantation, semi-natural and mixed plantations and natural as well as semi-natural and plantations, respectively (Table 5). In terms of certificates by tenure management, 1.8%, 9.35%, 65.79% and 23.04% are under community, concession, private and public management, respectively (Table 6).

Table 4. FSC certificates by biomes

Biome	Certified forest		No. of certificates	
	Area (million ha)	Proportion of total certified area (%)	No.	Proportion of total (%)
Private	96.08	52.5	198	15.2
Public	68.97	9.8	769	25.8
Concession	18.05	37.7	336	59.0
TOTAL	183.86	100	1,303	100.00

Source: FSC (2014d)

Table 5. FSC certificates by forest type

Forest type	Certified forest		No. of certificates	
	Area (million ha)	Proportion of total certified area (%)	No.	Proportion of total (%)
Natural	114.62	62.59	542	41.5
Plantation	15.56	8.49	340	26
Semi-natural and mixed plantation/natural forest	52.87	28.87	420	32.2

Semi-natural and plantation	0.06	0.03	2	0.1
TOTAL	183.11	100	1,303	100

Source: FSC (2014d)

Table 6. FSC certificates by tenure management

Tenure management	Certified forest		No. of certificates	
	Area (million ha)	Proportion of total certified area (%)	No.	Proportion of total (%)
Community	4.01	2.19	109	8.3
Concession	17.41	9.50	64	4.9
Private	120.11	65.59	876	67.1
Public	41.57	23.70	254	19.5
TOTAL	183.11	100	1,303	100

Source: FSC (2014d).

Logos and Labelling

FSC has three registered trademarks (Nussbaum and Simula, 2005), namely: (i) the name Forest Stewardship Council; (ii) the acronym FSC; and (iii) the FSC Logo, comprising the tick (checkmark) and tree symbol and the acronym FSC (Figure 2)



Figure 2. The FSC logo containing tick (checkmark), tree symbol and the acronym FSC.

On 30 April 2015, the Forest Stewardship Council (FSC) launched its new global brand: Forests For All Forever (Figure 3) to extend its reach by targeting consumers directly. It has been emphasized that the new strapline - Forests For All Forever - reaffirms FSC's vision of saving the world's forests for future generations, while the visual identity, which includes the animals and people who live and interact in forests, reinforces the all-encompassing approach FSC takes to SFM.

Figure 3. The new global brand: Forests For All Forever launched by FSC on 30 April 2015.

The new branding was developed based on a market survey that reached 9,000 participants from 11 different countries in 2013. The online toolkit, containing the new branding assets, can be accessed by certificate holders, and will be available to trademark service providers and key accounts.



PROGRAMME FOR THE ENDORSEMENT OF CERTIFICATION SCHEMES (PEFC)

Brief History

PEFC was founded in 1999 in response to the specific requirements of small- and family forest owners as an international umbrella organization providing independent assessment, endorsement and recognition of national FCSs. PEFC responded to the need for a mechanism enabling the independent development of national standards tailored to the political, economic, social, environmental and cultural realities of respective countries, while at the same time ensuring compliance with internationally accepted requirements and global recognition. After the successful endorsement of certification systems in Europe, Australia and Chile became the first non-European national standards to be endorsed by PEFC in 2004. PEFC's certification criteria are based on globally recognized principles, guidelines and criteria developed by international and intergovernmental bodies with broad consensus from interested stakeholders. Today, PEFC is the world's largest FCS and the certification system of choice for small forest owners.

A chronologically arranged brief historical development of PEFC is presented below, taken from the PEFC website¹⁶.

- 1999:** PEFC was established by national organizations from eleven countries representing a wide range of interests to promote sustainable forest management, especially among small forest managers.
- 2000:** PEFC recognized the first national system, enabling forest owners and managers in Finland, Sweden, Norway, Germany and Austria to certify their responsible forest management practices.
- 2001:** in an effort to integrate social concerns more fully in its activities, PEFC became the first global FC organization to require compliance with all the fundamental International Labor Organization (ILO) conventions in forest management; and the year also marks when social and environmental representatives joined the PEFC International's Board of Directors.
- 2004:** Australia and Chile became the first non-European national standards to be endorsed by PEFC.
- 2005:** with the endorsement of the Canadian standard, PEFC became the world's largest FCS with more than 100 million ha of certified forest area; and Finland became the first system to be re-endorsed under PEFC's mandatory five-year re-assessment requirement.
- 2007:** PEFC reached the 200 million ha milestone of certified forests, bringing two-thirds of the world's total certified forest area under PEFC certification.
- 2008:** PEFC decided to move its international headquarters from Luxembourg to Geneva, Switzerland, in order to be closer to its international stakeholders in the United Nations, NGOs and other partners.
- 2009:** Gabon became the first African standard, and the first standard in the tropics, to be endorsed. A few months later, Malaysia's standard became the second PEFC- endorsed system in a tropical country.

- 2010:** PEFC became the first global FC to introduce social aspects in Chain of Custody certification and completely revising its international sustainable forest management requirements; and it also approved the Rio Forest Certification Declaration at its General Assembly in Rio de Janeiro, Brazil.
- 2011:** China joined PEFC; and PEFC also launched the Collaboration Fund, a competitive small grants programme that supports locally relevant advancements in the sustainable management of forests.
- 2012:** 15 additional FCSs were reported to develop or prepare for the development of a PEFC compliant national FCSs.
- 2013:** PEFC became the first global certification systems to align its Chain of Custody standard with the European Union Timber Regulation.
- 2014:** China become the second Asian country and Argentina the fourth South American country to achieve PEFC-endorsement of their national FCSs.

In the 15 years since it was created, PEFC has strengthened its approach which has been adopted by increasing numbers of stakeholders making it today the world's largest FCS.

It is claimed that PEFC remains the certification system of choice for small, non-industrial private forests, with hundreds of thousands of family forest owners certified to comply with its internationally recognized Sustainability Benchmark, making PEFC unique. It is further claimed that PEFC is the only global certification system that: (i) upholds highest standards without exception; (ii) level of stakeholder engagement equally high for all standards; and, (iii) builds on intergovernmental agreements and globally recognized processes (for details see [http:// www. pefc.org/about-pefc/what-makes-pefc-unique](http://www.pefc.org/about-pefc/what-makes-pefc-unique), accessed on 08-10-2014).

Vision and Mission of PEFC

Vision: A world in which people manage forests sustainably.

Mission: To give society confidence that people manage forests sustainably.

The PEFC bases its understanding of SFM on the definition adopted by FAO and originally developed by Forest Europe, viz. "the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems".

Under this definition, to achieve sustainability, forest management practices must result in outcomes that are economically viable, ecologically sound, and socially just. These three pillars cannot be divided, compartmentalized, or addressed individually. They are a unified whole. Without all three, forests cannot be protected, family foresters cannot thrive, forest- dependent communities cannot exist, illegal logging will not be abated, and carbon emissions will not be mitigated. FC provides a mechanism to address these and ensure that wood and wood-based products reaching the marketplace have been sourced from sustainably managed forests. PEFC works to implement its mission by encouraging FC.

Type of Scheme

PEFC is an international non-profit, non-governmental organization dedicated to promoting SFM through independent third-party certification¹⁹. It works throughout the entire forest supply chain to promote good practice in the forest and to ensure that timber and non-timber forest products are produced with respect for the highest ecological, social and ethical standards. Thanks to its eco-label, customers and consumers are able to identify products from sustainably managed forests. PEFC is an umbrella organization and works by endorsing national forest certification systems developed through multi-stakeholder processes and tailored to local priorities and conditions.

Scope

PEFC is an umbrella organization that endorses national FCSs. National certification systems that have developed standards in line with PEFC requirements can apply for endorsement to gain access to global recognition and market access through PEFC International. To achieve endorsement, they need to meet PEFC's rigorous Sustainability Benchmarks.

Structure and Governance

PEFC is an international membership association representing a wide range of stakeholder interests. To promote the widest possible participation, PEFC adopts a "bottom-up" approach to governance. It builds on national members whose local expertise is complemented by the experiences of internationally-active organizations²⁰.

There are two categories of membership with voting rights, namely: (i) national members (or "National Governing Bodies"), which are independent, national organizations established to develop and implement a PEFC system within their country; and (ii) international stakeholder members, which are international entities including NGOs, companies and associations committed to supporting PEFC's principles.

PEFC has three decision-making bodies, namely: (i) the **General Assembly** (GA), which is the highest authority of PEFC; it includes both national and international stakeholder members with voting rights, and extraordinary members as observers; (ii) the **Board of Directors** supports the work of the GA and the organization as a whole; it is accountable to all members, and board members are elected by the General Assembly, and are chosen to ensure a balance between the major stakeholders supporting PEFC, the geographical distribution of members, annual cutting categories, and gender; and (iii) the **Secretary General**, supported by a highly dedicated team of eleven professionals, is responsible for the work of the PEFC Secretariat in Geneva, Switzerland.

Certification System

PEFC Sustainable FM certification provides forest owners and managers with independent recognition of their responsible management practices²¹. As consumers, businesses and governments become more concerned with their environmental footprints, markets for certified paper and wood products continue to grow. PEFC certification provides forest owners and managers - families, communities and companies - with access to the global marketplace for certified products. PEFC's Sustainability Benchmarks are based on broad societal consensus expressed in international, intergovernmental, multi-stakeholder processes and guidelines involving thousands of interested parties.

Obtaining PEFC Sustainable Forest Management certification demonstrates that management practices meet requirements for best practice in sustainable forest management, including:

- » biodiversity of forest ecosystems is maintained or enhanced; the range of ecosystem services that forests provide is sustained, i.e. they: (i) provide food, fibre, biomass and wood; (ii) are a key part of the water cycle, act as sinks capturing and storing carbon, and prevent soil erosion; (iii) provide habitats and shelter for people and wildlife; and (iv) offer spiritual and recreational benefits; in addition, chemicals are substituted by natural alternatives or their use is minimized;
- » workers' rights and welfare are protected;
- » local employment is encouraged;
- » indigenous peoples' rights are respected; and,
- » operations are undertaken within the legal framework and following best practices.

Chain of Custody Certification (CCC). In order to provide assurances that wood and wood-based products originate from sustainably managed forests, PEFC promotes CoC certification²². The CCC outlines requirements for tracking certified material from the forest to the final product to ensure that the wood contained in the product or product line originates from certified forests. It is essential for companies to implement and demonstrate ethical business behaviour and consumers to make responsible purchasing decisions. For a product to qualify for certification, all entities along the supply chain must possess a PEFC CCC. Only then are companies eligible to use the PEFC label on their products and in product marketing to highlight the responsible sourcing of the raw material.

PEFC CCC offers benefits to a range of business sector stakeholders. For the wood- processing industry, it can improve efficiency and production systems through enhanced traceability and accounting. Selling certified materials through a CoC system also improves the image of the sector and can promote products to consumers, particularly as an alternative to other less sustainable or more energy-intensive materials. PEFC CCC also offers important advantages to retailers and traders who purchase from the wood- processing industry, which can improve their licence to operate and enhance their image by promoting wood and non-timber forest products from sustainable sources. In addition, it can open up new markets and increase the customer base as more and more consumers demand wood from certified sources. Public and private procurement policies increasingly require wood and wood-based products to originate from sustainably managed forests.

While CCC is well suited for the on-going and continuous production of certified products across a wide range of areas, it is not always the most efficient option for short-term projects involving different, uncertified contractors, such as in the construction or shipbuilding industries, or the one-off production of a specific product²³. This can be exceptionally demanding for main contractors and large construction companies wishing to obtain PEFC certification for their projects. This challenge can now be solved by attaining PEFC Project CCC and, thereby, receiving bona fide credentials for the timber that is used.

Project Chain of Custody Certification (PCCC) is a specific form of CCC that allows companies to take advantage of PEFC certification for their projects. It enables companies to attain the highest level of certification available, giving the chosen project added environmental value and a 'solid green' reputation. PEFC PCCC recognizes that not all parties involved in specific projects are certified, even though forest-based material used for the project is covered by CCC. Usually, the fact that non-certified parties handle certified material would break the chain, which is where PEFC PCCC comes into play.

When it comes to individual construction projects, the construction industry faces specific challenges when proving that the timber specified and supplied is from certified sustainable sources. PCCC has been designed as a mechanism for gaining independent verification of the use of certified timber in a one-off project, such as a construction project which has a limited duration. The benefits of PCCC24 include:

- » *proof of traceability*: certification of the timber or timber-derived products within a construction project provides independently verified assurance that the wood used originates from responsibly managed forests with the material tracked through every stage of the process from forest to the project;
- » *independent third party verification*: certification represents a fraction of the cost of the overall build; independent third party verification proves that your project has been rigorously audited to an international standard so your clients can be assured of a higher level of certainty that your data is accurate and valid, setting you apart from your competitors;
- » *recognition that not all sub-contractors are certified*: many contractors will be involved on-site, and not all will have their own CCC; PCCC allows non-certified sub-contractors to operate under the ‘umbrella’ of the main contractors’ certification as long as all of their activities are confined to the certified site;
- » *promotion of the project*: PEFC’s globally recognized trademarks can be used to promote the project’s responsible sourcing credentials and enable public claims to be made about the use of certified timber during a construction project; and
- » *assurances that the project is contributing to environmental conservation and economic sustainability*: companies can provide assurances to both suppliers and clients that those managing the project have procured only legal and sustainable timber; in doing so they have reduced the risk to reputation which could be caused by seizure and or fines under the EU Timber Regulation.

Standards

The standards of PEFC promote environmentally sound, socially just, and economically viable management of forests globally²⁵. PEFC bases its sustainability benchmark on broad consensus by society, expressed in globally respected international and intergovernmental process and guidelines. Stakeholder engagement is an important feature of all of the processes of PEFC, including the development, revision of and assessment of national certification systems, and development of international standards.

Much of PEFC’s work on development or revision of international standards is carried out in Working Groups comprised of representatives from a wide range of stakeholder groups. This ensures that all interested stakeholders are able to engage directly in the standards development process, and are not limited to consultative roles. Working Group decisions are made by consensus, and all international standards drafted by PEFC require formal approval by all members. This is achieved through the GA. PEFC implements revisions of all national standards every five years, thereby fostering ongoing dialogue among stakeholders.

PEFC believes that its “bottom-up” approach provides a high degree of independence of national processes, and allows for the development of standards tailored to the political, economic, social, environmental and cultural realities of respective countries, yet in compliance with rigorous international benchmarks. This independence is also expressed by the mature relationship among

national FCSs that come together in PEFC. The PEFC framework allows for “sovereign” national systems to join forces to collaboratively promote SFM and the goods produced from SFM in the global market.

The endorsement process ensures that national standards comply with PEFC’s sustainability benchmarks, and all requirements are rigorously and consistently applied across all national certification systems. Mutual recognition among PEFC-endorsed national systems allows PEFC-certified wood to be identified and accepted globally under one, easily recognizable ecolabel. Any national certification system seeking to obtain PEFC endorsement or re-endorsement must submit to a comprehensive and thorough assessment process, including independent evaluation and public consultation. A full final report of this process is then made publicly available.

The endorsement process takes on average nine months and consists of the following steps:

- » a national certification system applies for assessment; an independent PEFC registered assessor is appointed, and PEFC announces the start of the assessment process;
- » all documentation about the system is made publicly available, global stakeholders are invited to comment and provide feedback on any aspect of the system and this public consultation lasts 60 days; it complements the national consultation process carried out as part of the standards development process;
- » the appointed assessor evaluates compliance of the national system with PEFC requirements; the assessment is based on all comments received, field trips and other available information;
- » a panel of experts reviews the assessment report to ensure consistency, quality and robustness;
- » the full assessment report, including all documentation and feedback from stakeholders, is evaluated by the Board of Directors, which provides a recommendation to the GA;
- » all the documentation and reports are then submitted to the GA for endorsement;
- » the GA votes on the endorsement of the national system, and a two-thirds majority is required for a system to be endorsed;
- » complete documentation relating to all endorsed systems, including full assessment reports and assessment of the panel of experts, is made publicly available;
- » PEFC is the only international FCS that gives all its members a voice in the endorsement and acceptance of national certification standards; and,
- » a permanent mechanism, the complaints and appeals process, is available to stakeholders at all times to enable them to monitor compliance of endorsed national systems with PEFC’s sustainability benchmarks and draw attention to non-compliance at any point in time.

Development of standards does not stop once a national standard has been finalized. PEFC requires and implements 5-year revisions of national standards. Consequently, PEFC recognition of national standards is time-limited, with national systems being required to apply for re-endorsement. This allows for continuous improvement of standards through the integration of new scientific research, experience and best practices. Equally important, however, it encourages

permanent ongoing dialogue among stakeholders, thereby enhancing understanding, support and development of the concept of SFM at national levels.

Types of Certificates

PEFC's CCC is a mechanism for tracking certified material from the forest to the final product to ensure that the wood, wood fibre or non-wood forest product contained in the product or product line can be traced back to certified forests²⁶. It is an essential part of the PEFC system, which ensures that claims about products originating in sustainably managed forests are credible and verifiable throughout the whole supply chain. It is used to certify entities all along the value-chain of forest-based products. The acquisition of CCC reinforces the sustainability commitments of businesses. It provides companies with a commercial advantage as it allows them to use the PEFC logo on products, making them the preferred choice, especially for responsible consumers.

CCC is carried out by accredited CBs that verify compliance of the wood flow accounting system applied by an enterprise complies with PEFC's International CoC Standard. All CBs certifying on behalf of PEFC meet the requirements for CBs defined by the International Standardization Organization (ISO) standards.

To prevent wood from controversial sources (illegal logging) finding its way into products, PEFC has put in place a stringent safeguard mechanism. The mechanism is a compulsory part of PEFC's CCC standard and puts in place safety checks, such as risk analyses, external assessments and onsite inspections to ensure the legality of the uncertified wood. These safeguard checks are scrutinized by the independent certifiers during their annual audits and provide companies with a "double safeguard measure" for their procurement. The CoC standard specifies as controversial sources those activities that do not comply with local, national or international legislation, in particular relating to the following areas:

- » forestry operations and harvesting, including conversion of forest to other uses;
- » management of areas with high environmental and cultural values designed and covered by the legislation;
- » protected and endangered species, including requirements of Convention on International Trade in Endangered Species (CITES);
- » health and labour issues relating to forest workers;
- » property, tenure and use rights of indigenous peoples;
- » payment of taxes and royalties; and,
- » areas utilizing genetically modified organisms.

Accreditation Programme

PEFC uses the internationally recognized requirements for certification and accreditation defined by the International Standardization Organization (ISO) and the International Accreditation Forum (IAF). Certification of compliance with PEFC-endorsed standards is not carried out by PEFC itself, but by independent third parties, accredited CBs. CBs also perform annual surveillance audits and periodic re-assessment audits to proactively verify that a certified forest owner or company maintains compliance with PEFC requirements. To ensure independence and impartiality, PEFC requires CBs to be independent from the standards development process and the entity they are certifying.

Accreditation serves as a quality control mechanism to ensure the credibility of the work of CBs. Accreditation bodies independently evaluate the work of CBs and assess them to demonstrate

their competence, impartiality and performance capability. PEFC requires national accreditation bodies to comply with ISO/IEC 17011:2004 to ensure that they operate in a consistent, comparable and reliable manner worldwide. Accreditation bodies need to be members of the International Accreditation Forum (IAF), the world association of accreditation bodies.

Although PEFC's safeguard mechanisms follow the best practices developed by ISO, it is clear that errors cannot be eliminated completely. To minimize risk, PEFC requires that summaries of certification reports on the auditee's conformity with the FM standard be made publicly available. Furthermore, information about all issued certificates, including information about suspended, withdrawn and expired certificates, is publicly available on the PEFC website.

Steps Towards Certification

The process for obtaining PEFC certification may differ slightly depending on country and type of certification²⁸. Key stages required to obtain SFM certification include:

- » become familiar with the certification options and requirements available in the country where the certification is planned to be carried out, which can be obtained on the website of the relevant PEFC-endorsed national certification system;
- » ensure that the management practices of forest owners/operators meet PEFC's strict SFM requirements;
- » locate a PEFC-recognized CB in the country (if the country is not listed, "PEFC Council" is selected) and initial contact is established by phone, e-mail or personal meeting;
- » arrange for an independent certification body to assess the forest management practices against the national SFM standard and check that all requirements are fulfilled;
- » this is done by making a formal application for SFM certification with the CB of your choice; based on this application, you will receive a proposal, including a cost estimate; costs of PEFC SFM certification are fixed by individual CBs and due to the competitive nature of the certification business, prices may vary by country and CB;
- » provide all relevant documentation as requested by the CB;
- » a field visit by auditors from the CB will be arranged; field visits include visits to selected sites in the forest and further documentation reviews, and interviews with relevant staff;
- » resolve, if necessary, any non-compliance issues, which is a pre-requisite before a SFM certificate can be issued;
- » if the management practices are found to be compliant with certification requirements, a PEFC certificate will be issued; the certificate is usually valid for a period of three years; then, an annual verification audit is carried out to ensure that the operations continue to comply with requirements; and,
- » upon expiry, renewal of certificate is required through undergoing a new certification audit.

National Standards

In keeping with the idea of “Think Globally, Act Locally”, PEFC requires that all national standards developed meet PEFC International’s Sustainability Benchmarks. The “bottom-up” approach of PEFC ensures that standards meet the expectations of stakeholders on the ground, address local conditions, and are consistent with national laws and regulations, while at the same time meeting international benchmarks and being internationally recognized. This ensures that standards are wholly adaptable to different sets of circumstances.

Forests are highly diverse around the globe, and adaptability is of major significance in forest management, for example:

- » SFM of temperate forests in Europe or North America requires different approaches from that of tropical forests in Africa, Asia or South America as different tree species and different climatic, socio-economic, cultural, and environmental conditions require different management methods;
- » functions and benefits that forests are expected to deliver vary widely; more than 1.6 billion people depend directly on forests for their livelihoods, especially in developing countries, thereby making shared access to forest resources crucial, while in some developed countries, recreational activities are essential benefits provided by forests;
- » traditions, culture and management capacities and systems differ, both within and among countries;
- » legislative, administrative and governance frameworks and capacities vary between and among countries requiring approaches that make best use of existing structures;
- » PEFC’s bottom-up approach to FC is well placed to respond to these challenges, with standards independently developed and owned by local stakeholders; this ownership is key to the success of FC as it empowers local people to manage forests in compliance with the standards in whose development they themselves were involved;
- » to ensure consistency across all PEFC-endorsed standards, all national systems wishing to be PEFC recognized undergo rigorous independent assessment to ensure their compliance with PEFC’s sustainability benchmarks;
- » this process ensures forests certified under the respective national standards are “certified once, accepted everywhere”, which is of vital importance for the trading realities in a globalized world; and,
- » PEFC criteria, regulations and guidelines also include provisions for standards development and implementation, and define requirements for stakeholder engagement in standard setting and scheme development, regional and group certification, certification and accreditation procedures, chain of custody, logo use and complaints and appeals mechanism.

Approved Standards

Thus far, only the national standard developed by PAFC Gabon has been endorsed by PEFC in Africa.

Current Status

As of June 2015, PEFC has certified 268,331,160 ha of forests worldwide (PEFC, 2015; Table 7; Figure 4) owned by more than 750,000 forest owners. Currently around 16,361 companies around the world have achieved PEFC CCC certification. A total of 40 national members and 36 endorsed national certification systems have joined forces under the PEFC umbrella to collaboratively promote SFM. Gabon and Cameroon are the only two countries in Africa with PEFC endorsed and not still endorsed national systems, respectively (Figure 4).

Table 7. Global PEFC certified forest areas by region

Région	Forest management certificates			Chain of Custody Certificates		
	No. of countries	Area certified ('000 ha)	Proportion of total area certified (%)	No. of countries	No. of certificates	Proportion of tot. No. of certificates (%)
Africa	0	0	0	5	5	0
Asia	3	10,588	4	18	881	8
Central/ South America	3	4,738	2	7	161	2
Europe	23	84,986	31	16	8,912	84
N. America	2	157,621	59	5	421	4
Oceania	1	10,398	4	2	245	2
TOTAL	30	268,331	100	50	10,625	100

PEFC-certified forests are distributed in 30 different countries, representing 0, 2, 4, 4, 31 and 59 in Africa, Central/South America, Asia, Oceania, Europe and North America, respectively. A total of 10,625 PEFC CCC certificates have been issued in 50 countries worldwide with the largest (84%) and lowest (almost 0%) proportions in Europe and Africa, respectively (Table 7; Figure 4).

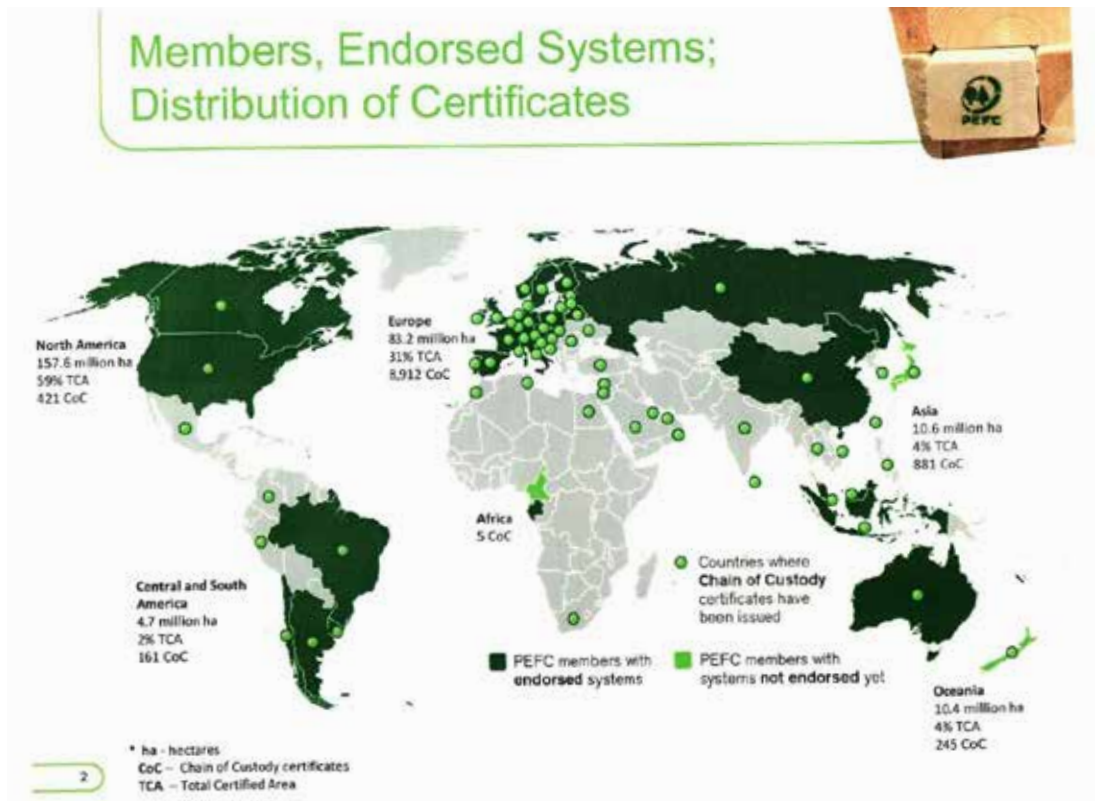


Figure 4. Members, endorsed systems and distribution of Certificates (source: PEFC, 2015).

Logos and Labelling

The PEFC logo and labels are globally trusted trademarks³⁰. They assist businesses, consumers, forest owners and managers, and other stakeholders to identify and promote merchandise and goods from forests that are managed sustainably.

Using the logo and label enables certified companies and forest owners to:

- » demonstrate their commitment to sustainable development and corporate social responsibility;
- » attract environmentally and socially-minded customers and consumers;
- » help generate awareness and demand for products from PEFC-certified forests; and,
- » highlight their engagement with sustainable forest management.

The standard PEFC logo and label includes a series of components that must be present whenever the label is used (Figure 4)³¹. Thus, the PEFC logo:

- 1) consists of two trees surrounded by a circle and the initials “PEFC”;
- 2) is a registered trademark and always needs to be accompanied by the TM symbol; and

- 3) licence number uniquely identifies the logo licence holder (note that the PEFC logo licence number is NOT the same as the SFM or CCC certificate number).

There are also some additional optional elements that can be used, i.e.:

- 4) indicates the percentage of PEFC certified material in the product (at least 70%) and is available for the “PEFC Certified” label only;
- 5) the label name and label claim communicate the meaning of the logo; and,
- 6) the PEFC website.



Figure 5. Logo of PEFC containing the various components

AFRICAN ECOLABELLING MECHANISM (AEM)

Brief History

African economies are among the most severely affected by the detrimental effects of climate change, such as prolonged droughts and flooding. Mitigation of climate change and adaptation to its impacts are, therefore, vital for the continent. One of the approaches that African countries could employ to combat climate change is through the establishment of sustainable consumption and production (SCP) programmes. Through the employment of sustainable production methods, those production activities that, for instance, require high energy inputs or consume large quantities of water can be targeted, and by means of effective management intervention, can result in a lower carbon footprint and reduced water use. However, apart from assisting countries and the private sector to combat climate change, SCP programmes can also assist African companies to tap into intra-African and international markets, where consumer demand for sustainably produced goods and services have grown significantly over the last decade. Eco-labelling of sustainably produced products and services, therefore, provides a market-based instrument to enhance access to international markets for African businesses and, thus, also provide an additional incentive to adopt SCP programmes. By meeting the standards required for eco-labelling, businesses are also able to track their environmental performance while communicating the environmental credentials of their products. Eco-labelling also benefits consumers by guiding their purchase decisions on the basis of social and environmental criteria and further assist governments by also guiding their policy decisions in support of their respective SCP programmes.

The Johannesburg Plan of Implementation (JPI) that was endorsed by the World Summit on Sustainable Development in 2002 encouraged the development of consumer information tools such as eco-labels. The African 10 Year Framework Programme (10-YFP) on SCP has been developed as part of the regional follow-up to the JPI. The 10-YFP was approved by the African Ministerial

Conference on the Environment (AMCEN) and its implementation was officially launched in 2006. As one of the five priority areas of the 10-YFP, the African Roundtable on Sustainable Consumption and Production (ARSCP) in cooperation with the United Nations Environment Programme (UNEP) identified the development of a continent-wide and cross-sectoral eco-labelling scheme, namely the African Eco-Labelling Mechanism (AEM), with its brand as Eco Mark Africa (EMA).

The concept and architecture of the AEM was further advanced by African experts and supported by the Marrakech Task Force on Cooperation with Africa, which was facilitated by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). This consultation phase was implemented in close cooperation with the Trade and Industry Department (TID) of the African Union Commission (AUC), the African Organization for Standardization (ARSO), UNEP, the United Nations Industrial Development Organization (UNIDO), the United Nations Economic Commission for Africa (UNECA), and the continent's Regional Economic Communities (RECs).

In 2006 and 2007, a comprehensive regional assessment was conducted on existing eco-labelling initiatives in the region with the purpose of building upon and learning from what is already existing in the region (Janisch, 2007). Organized in collaboration with AUC and UNECA, the first Regional Expert Meeting on Eco-labelling in Africa was convened in June 2007. Representatives of the Consumers Information Network (CIN), the South African

Cleaner Production Center, FSC, the African Organic Farming Foundation, IUCN, Clongen Laboratories, the New Partnership for Africa's Development (NEPAD) Secretariat, the Agro Eco Uganda Branch and UNEP reviewed the outcome of the regional assessment and made recommendations on how to develop the regional eco-labelling mechanism.

Consultations were held through the Regional Working Group on Eco-labelling. The summary outcome of the assessment and the regional meeting was printed as a booklet and distributed to different forums as a basis for consultation. The aim was to ensure the political buy-in from the relevant inter-governmental institutions and forums, including AUC, the African Committee on Sustainable Development (ACSD) and ARSO. The Fifth African Roundtable on Sustainable Consumption and Production (ARSCP-5) called for a continued political commitment for the effective implementation of the programme. As a follow-up of the Regional Expert Meeting and the consultation processes, a preliminary paper on the 'Structure and Function of an AEM' was prepared in November 2007. Facilitated by UNEP, the paper was further developed and finally endorsed as the Strategy Document of the AEM (UNEP, 2008).

In 2009, the Executive Board of AEM was formed, including further stakeholders, e.g. the continent's RECs and Consumers International (CI). Through a consultative process, the AEM's eco-label named Eco Mark Africa (EMA) was born. Through its EMA label, the AEM aims at promoting intra-African and international trade and enabling African economies to adapt and contribute to the mitigation of climate change. Striving towards these objectives, the AEM will establish standards for various sectors as well as a recognition system for other sustainability standards, which will function as a quality assurance mechanism. A set of threshold criteria have been defined, including ecological, social, economic and climate-relevant requirements as well as credible governance and implementation mechanisms. Producers and service providers fulfilling these requirements or those of AEM recognized standards will be able to use the EMA label.

The AEM will establish standards for sustainably produced goods and services as well as a recognition system for other sustainability standards that function as quality assurance mechanisms. Producers meeting the requirements, or those of other standards systems recognised under the AEM, will be able to use the EMA label. AEM has been designed to accommodate the large number of

smallholder producers and small businesses in Africa. Its planned capacity building programme will prepare producers and service providers as well as certifiers for the certification process, while a benchmarking and recognition processes will help producers that have already been certified. By minimising the cost of certification and marketing, AEM will promote cooperation with other voluntary ecological, economic and social standards organisations. It will also encourage them to apply tools for climate change adaptation and mitigation. The use of a single common label awarded on the basis of clear principles and criteria will ensure high credibility combined with valuable African brand recognition. This will enhance the image of sustainable African products and increase the opportunities for trading and marketing them.

African products and services from agriculture, fisheries, forestry and tourism sectors will be able to attain the EMA label. These key sectors have been selected on the basis of their economic importance for Africa as well as their contribution to global greenhouse gas (GHG) emissions and their GHG saving potential. While value-added agriculture makes up only 14% of GDP in Sub-Saharan Africa (World Bank 2013), it employs nearly 65% of the labor force in the region 33, and considering that more than about 20% of GHG emissions worldwide originates from tropical deforestation and forest degradation (IPCC, 2007), it was of paramount importance to include forestry as one of the key sectors of the AEM.

Vision and Mission of AEM

Vision: African products attain the highest environmental profile that would make them competitive in international markets and secure an expanded market access at national, regional and international levels (UNEP, 2008; Teketay, 2012 a and b).

Mission: To contribute towards the fulfilment of AU/NEPAD objectives on expanding the access for African products in regional and international markets; stimulate appropriate environmental and health related standards within the design and production of African products; develop a cohesive approach for the region on the effective management of trade and environment relationships; and create environmental, social and economic benefits for Africa by improving the environmental performance of African industries (UNEP, 2008; Teketay, 2012 a and b).

Type of Scheme

AEM is a non-governmental and not-for-profit organization being developed under the auspices of AUC in collaboration with relevant regional and international partners, namely RECs in Africa, African Roundtable on Sustainable Consumption and Production (ARSCP), African Organization for Standardisation (ARSO), African Business Council (ABC), Consumers International (CI), UNEP, UNECA, UNIDO and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) commissioned by BMU. AEM aims at promoting a culture of sustainable consumption and production in Africa and market access for Africa's products and services through the operationalization of an eco-label, the EMA (Teketay, 2012 a and b).

Scope

The scope of AEM is pan-African, covering certification of four different priority sectors, namely agriculture, fisheries, forestry and tourism in all countries of Africa. The four standards to be used for certifying operations in the four priority sectors have already been approved by the AEM Executive Board. At a later stage, the scope of the AEM shall be expanded to additional sectors.

Structure and Governance

The organizational structure of AEM builds upon existing capacities and structures within the region in order to effectively respond to African needs and priorities within the context of global trade and environment regimes. It includes: (i) an **Executive Board** composed of representatives of AUC (Chairperson), ARSO, ARSCP, eight RECs, the African Business Community (ABC), CI, UNECA, UNEP, UNIDO, BMU/GIZ (provides strategic and policy directions to AEM); (ii) a **Technical Board** composed of representatives of ARSO (Chairperson), ARSCP, Chairs of the four Sector Working Groups and three relevant technical institutions, including the African Forest Forum (responsible, mainly, for the evaluation of the conformity assessment of producers and the equivalence assessment of standards systems submitting to the EMA benchmarking process); (iii) the **AEM Secretariat** (operative body of the AEM, coordinating the development and revision of standards, steering marketing and capacity building activities, acquiring political support, promoting certification, label management and service provision, etc.); and, (iv) four **Sectoral Technical Working Groups**, one each for the agriculture, fisheries, forestry and tourism priority sectors (responsible for spearheading the development, field testing and getting the AEM standards approved) and a **Marketing Panel** (responsible for developing and assisting in the promotion of the AEM marketing strategy) (Teketay, 2012a and b).

Certification System

Standards

The AEM has developed, field tested and got approved the standards for the agriculture, fisheries, forestry and tourism sectors by its Executive Board.

Current Status

AEM is currently being elaborated with regard to the types of certificates to be issued, its accreditation programme, and steps towards its certification.

Logo and Labelling

The logo (Figure 6), EMA, to be used for labelling certified products and services by AEM has been developed and is being registered around the world (Figure 6).



Figure 6. The logo developed to label certified products and services by AEM.

PAN-AFRICAN FOREST CERTIFICATION (PAFC) GABON

Brief History

With the purpose of the rational management of African forests based on scientific methodology through a consensual and participatory approach, the ministers of member countries of the African Timber Organization (ATO) decided in the mid-1990s to establish a PAFC scheme specific to Africa based on regional Principles, Criteria and Indicators (PCIs) (TEREA, 2008). TERE (2008) has provided the historical development of PAFC Gabon, which is presented below.

The ATO and its technical collaborator, the Centre for International Forestry Research (CIFOR), have elaborated two groups of PCIs for the sustainable management of natural forests in Africa during the period between 1995 and 2001. These were the: (i) ATO PCIs for sustainable management of the natural African tropical forests to be used at a national level; and, (ii) ATO PCIs for a sustainable management of the natural African tropical forests to be used at the FMU level.

Field tests were conducted in different countries between 1995 and 2000 (Ivory Coast in 1995, Cameroon in 1996, Gabon and the Central African Republic in 1998, Ghana in 1999- 2000), resulting in further improvements to the initial sets of PCIs. These improvements have taken into account all management aspects as well as all commercial and social aspects while reinforcing the criteria and indicators relative to timber production, forest conservation, biological diversity and other social benefits. When these tests were published, an international validation workshop of the ATO PCIs took place in December 2000 in Libreville (Gabon), during which the sets of the P & C published by the FSC were harmonized (TEREA, 2008).

The collaboration between ATO and the International Timber Trade Organization (ITTO) resulted in “PCIs of ATO-ITTO in the sustainable management of natural African tropical forests” (ATO/ITTO, 2003), which was validated during the regional ATO/ITTO PCIs workshop that took place in Yaoundé, Cameroon, in May 2001. The validation policies of this group of ATO/ITTO PCIs were sorted out in Kinshasa, DRC, during the meeting of ministers of ATO member countries in November 2002.

In December 2000, the ATO invited member countries for a regional workshop in Libreville, Gabon, to establish some PCIs for good forest management adapted to the conditions specific to their own country and based on the common reference framework. Responding to this invitation, the “Groupe National de Travail (GNT)” [National Working Group] on SFM and FC established a reference base of good forest management, founded on the ATO reference base, intended for use in Gabon. Concerned with keeping a spirit of solidarity, all parties interested in sustainable management were invited to participate in the process (GNT members representing all stakeholders) and to a validation workshop, which took place in Libreville in November 2001.

The minutes of the workshop emphasize that “with regard to forest management certification and the certification of forest products from Gabonese forests, the PCIs provide a specifically adapted reference framework. Due to the wide-ranging consultation process via which they were developed, their compliance with regional proposals, the fact that they are adapted to the national socio-economic and cultural context and finally because of their future official approval, they should constitute the key reference framework for any certification initiatives in Gabon, whatever the system envisaged” (TEREA, 2008). The ATO/GNT PCIs were updated in 2004 in order to include the new harmonised ATO/ITTO PCIs - the “ATO/ITTO PCIs for the sustainable management of natural African tropical forests”. They were achieved after the national validation workshop that took place in July 2004 in Libreville under the direction of the Ministry of Forest

Economy. An official act of endorsement for these PCIs by the Minister of Forest Economy was signed in May 2006.

Organised by the ATO and allying the government representatives of ATO member countries, cooperating international and governmental bodies, professional timber industries representatives and NGOs, a regional workshop on the feasibility study of pan-African certification was held in Libreville in December 2002. Its mission was to study the needs and the potential actions to be undertaken at the pan-African level in order to promote certification. The workshop reaffirmed the necessity to put into place a pan-African certification system to promote SFM and meet the demands of the international wood market.

While an operational PAFC certification is pending, and to meet the growing needs of companies, a request was launched for ATO/ITTO PCIs recognition by an internationally recognized certification system. The PEFC responded favourably to this request and a comparative study of the ATO/ITTO PCIs was headed by the independent company INDUFOR, and conducted by the PEFC Council (PEFCC) that recommended the adoption of the ATO/ITTO PCIs as a reference base to build on for the national or regional FCSs in the ATO member countries.

In October 2004, a workshop - "PAFC Gabon, the opportunity for world promotion of the Pan-Africa certification and ATO/ITTO PCIs" - was held in Libreville. This workshop opened the way for the creation and institutionalization of an associate structure called "PAFC Gabon" (15 October 2004) destined to be the Gabonese instrument of support for the national certification PAFC Gabon. PAFC Gabon is "Pan-African Forest Certification Association of Gabon", in which the bylaws were submitted to the Gabonese Interior and Decentralization Minister in December 2004.

Different experts worked during the course of 2005 on the expansion of a technical document defining the rules and procedures of PAFC certification in Gabon. This document, called "the Gabonese Scheme for Forest Certification" was submitted to the PAFC General Assembly for advice and approval during the PAFC Gabon General Assembly held in June 2005. The Scheme was then validated during the national workshop, which took place in May 2006 in Libreville, reuniting all stakeholders in SFM and the protection of the environment.

In October 2004, PAFC Gabon submitted its candidature to become the Gabonese member of the PEFC Council. The candidature of PAFC Gabon was accepted following the General Assembly of the PEFCC in Chile (October 2004), which analyzed the official PAFC Gabon candidature as a new member of PEFCC and voted in favour by an electronic vote in December 2004. This international recognition of PAFC Gabon by the PEFC was in accordance with the wishes of the Ministers of the ATO. The recognition process by the PEFC Council began in April 2006. Form International, a consultancy firm, was appointed by the PEFC Council and assessed the Gabonese FCS. Form International produced a report in February 2007 listing the main points that needed to be corrected in the scheme. The PAFC Gabon General Assemblies held in April and September 2008 ratified the changes to the Gabonese FCS so that it fully complies with the requirements of the PEFC Council.

PAFC Gabon joined PEFC in December 2004, and in April 2009, its scheme became the first in Africa to meet PEFC's sustainability benchmark requirements³⁴. Based on the requirements of PEFC, PAFC Gabon has been re-endorsed by PEFC in November 2014, which is valid until November 2019. With more than two-thirds of Gabon covered by forest, as well as home to some of Africa's most biodiverse rainforests, the PAFC Gabon is an important step towards the development of SFM throughout the Congo Basin.

Vision and Mission

Vision: not provided.

Mission: To promote the implementation of the Gabonese system of PAFC based on the ATO/ITTO Principles, Criteria and Indicators (PCIs).

Type of Scheme

PAFC Gabon is a PEFC endorsed national FCS.

Scope

PAFC Gabon is FCS for promoting forest management and the chain of custody certification in Gabon. PAFC Gabon's objective is to obtain recognition from the large international FCSs in order to promote products stemming from the Gabonese forest on international markets (TEREA, 2008).

Structure and Governance

The National Governing Body recognised by the PEFC Council in Gabon is a not-for-profit association registered under Gabonese law - PAFC Gabon (PEFC, 2014a). It is a member-based organization made up of members who are divided into four colleges - the: (i) College of forest owners and beneficiaries (Ministry of Housing, Urban Development, Office in charge of Forests and the Environment and Village communities); (ii) College of professionals (Concessionaries/ Unions, Industrialists/Artisans, SNBG [Société Nationale Des Bois Du Gabon = National Wood Company]/ Traders); (iii) Social College (Concession and factory employees, Labour Unions, Spokespersons for citizens, representatives of consumers of timber and NTFPs, Social Science specialists, representatives of civil society); and, (iv) Environmental College (Scientists, managers, NGOs, environmentalists) (TEREA, 2008).

PAFC Gabon has the following governing bodies: (i) the **General Assembly** comprising all members of the PAFC; (ii) the **Board of Directors** (12 members) in which three members of each college sit; and, (iii) the **Executive Committee** comprised of a President, a Vice- President, a Secretary General and a Treasurer elected by the Board.

The body charged with achieving consensus in standard setting and revision processes is the PAFC Forum. The stakeholder representation in the PAFC Forum has to be balanced between the four interest groups (see four colleges above) and the Forum has to be accessible to all stakeholders, including disadvantaged stakeholders. All decisions have to be taken by consensus.

The General Assembly of members of PAFC Gabon has to approve the revised standards which are the output of the work of the PAFC Forum. The approval has to be made by consensus.

Certification System

Standards

As discussed above, PAFC Gabon is a FCS based on the Gabon PCIs adapted from the ATO/ITTO PCIs, which in turn has been recognized by PEFC as the principles, criteria and indicators to be a reference base for certification of sustainable management of African natural tropical forests.

Types of Certificates

The types of certificates to be issued by PAFC Gabon are FM and CoC certificates. FM certificates are delivered for a three years period while CoC certificates are delivered for five years.

Accreditation Programme

Forest management certification is delivered by independent CBs accredited by COFRAC (Comité Français d'accréditation) or any other accreditation body member of EA (European Accreditation) or IAF (International Accreditation Forum) according to a specific programme, which defines the requirements that CBs have to respect concerning PAFC forest management certification. This accreditation, which was adopted in June 2008, is based on the ISO 17021 norm (TEREA, 2008). Certification bodies have the responsibility to use competent auditors that have adequate technical know-how in the certification process and subjects related to tropical forest management.

Steps Towards Certification

The different steps to be followed to obtain certification through PAFC Gabon include Certification applicants, pre-audit, evaluation process, consulting external interested parties, definition of non-compliance and warnings, infractions of the PCIs, corrective actions, preparation of reports, certification decisions and formalities linked to these, surveillance audits/renewals (TEREA, 2008).

Current Status

PAFC Gabon started revision of its forest certification scheme through informing public authorities, economic operators in the timber industry, environmental NGOs, trade unions forest workers and forest managers, associations of consumers, representatives of local and indigenous people, elected representatives and other stakeholders in forest management in March 2013³⁶. ECOFORAF (Support for Ecocertification of Forest Concessions in Central Africa) provided funding for PEFC International for its support to the revision of the Gabonese national forest certification system. ECOFORAF is an initiative funded by the French Fund for the Global Environment (FFEM) aimed at encouraging and enhancing SFM in Central Africa and extending forest certification, especially in the Congo Basin region.

Five years after joining PEFC, PAFC Gabon submitted its revised scheme, which was developed with the technical support of TEREA, to PEFC for re-endorsement. This is because PEFC requires the regular revision of all national systems in order to ensure that latest scientific research, practical experiences and best practices from the field are systematically incorporated in these revisions and then implemented at national, regional and local level. In addition, regular revisions enable the inclusion of evolving values, expectations, and aspirations of society towards SFM.

After two years, i.e. in November 2014, PAFC Gabon has successfully achieved re-endorsement by PEFC with financial support from ECOFORAF, confirming that it continues to meet PEFC's globally recognized Sustainability Benchmarks³⁷.

Though more than 10 years have elapsed since its endorsement, no forest has been certified through the PAFC Gabon FCS as yet.

Logos and Labelling

Forest owners/operators that will be certified through PAFC Gabon will use the logo of PEFC (see under 4.2.6.8).

CAMEROONIAN ASSOCIATION OF THE PAN AFRICAN FORESTRY CERTIFICATION

PAFC Cameroon was created in October, 2007, and is currently in the process of developing a national certification scheme. PAFC Cameroon aims to develop, promote and implement a FCS adapted for Cameroon, based on the ATO-ITTO PCIs.

OTHER FOREST CERTIFICATION SCHEMES/SYSTEMS

In addition to the above FCSs, a number of other FCSs are actively engaged in the verification of legality of timber/wood and wood products traded in the international markets from the central and western African sub-regions. These include Origine et Légalité des Bois (Origin and Legality of Timber) (OLB) developed by Bureau Veritas, Timber Legality and Treacability Verification (TLTV) by Société Générale de Surveillance (SGS), Verification of Legal Origin (VLO) and Verification of Legal Compliance (VLC) developed by SmartWood, the Rainforest Alliance's certification programme for forestry, and the European Union's Forest Law Enforcement Governance and Trade (EU-FLEGT) Action Plan (see details under 6.1.1.2. and in Mbolle, 2015a and b; Olivier, 2015).

CHAPTER 5

ACCREDITATION AND CERTIFICATION BODIES

Accreditation and Procedures of Accreditation

Accreditation is a formal third party recognition that a body fulfils specified requirements and is competent to carry out specific conformity assessment tasks (ISO/IEC 17011:200438; FSC, 2005a). Organizations that provide certification, testing and inspection services are assessed by a third party against internationally recognized standards. Accreditation demonstrates the organization's competence, impartiality and performance capability and is the key to reducing risk and ensuring that consumers, suppliers and purchasers can have confidence in the services provided³⁹. It is the internationally accepted basis for confirming that certification bodies are credible, independent and operating properly. Accreditation prevents a situation where any organization can simply decide to become a certification body and carry out certification, whatever their experience or ability. Accreditation aims to ensure that all certification bodies operate above a certain level and that there is consistency between the approaches and, most importantly, the results, of different certification bodies. Thus, accreditation is the process of 'certifying the certifiers' (Nussbaum and Simula, 2005).

Accreditation is generally accepted as an essential component of credible certification. Without accreditation, any organization could claim to be a certification body and issue certificates. Accreditation stops this from happening and, if it is done properly, ensures a uniformly high standard of performance from all of the accredited certification bodies. This, in turn, gives value to the certificates awarded by such bodies. If the standard of accreditation is not high, this undermines the value of certificates. Traditionally, accreditation of certification services for most international standards has been carried out by national accreditation bodies. However, with the growth of international trade and increasing globalization, many certification bodies offer certification services internationally and they need accreditation that is recognized in every country in which they operate. Companies that are buying or supplying from more than one country need to be able to rely on the accreditation services available in those countries (Nussbaum and Simula, 2005).

The effectiveness of the accreditation process will depend upon the people involved, the way in which information is collected to ensure compliance with accreditation requirements and the final decision made. An additional issue of some importance to accreditation is the scope of the service. Accreditation follows a defined procedure (FSC, 2005a; Nussbaum and Simula, 2005; Table 8).

Table 8. The defined procedures of accreditation.

Step	Description
Application	The CB applies to the accreditation body (AB). A contract is signed that specifies the scope of the accreditation applied for and the terms and conditions under which the applicant is evaluated and accreditation is granted and maintained.

Document review	The applicant CB has to prepare and submit the documentation according to the scope of the application. The documentation shall provide evidence that the applicant is in compliance with the accreditation requirements.
Office audits	After a positive evaluation of the submitted documentation, arrangements will be made for the evaluation of their main office(s). On the basis of this evaluation a report will be produced, which is submitted to the applicant for comments. The evaluation process may then proceed or further information or changes to the CB's procedures may be requested.
Field audits	After a positive evaluation of the office(s) of the applicant, an arrangement will be made with the applicant for the evaluation of a sample of field audits. On the basis of these field audits, one report per audit will be produced, which is submitted to the applicant for comments. The evaluation process may, then, proceed, or further information or changes to the CB's procedures may be requested.
Evaluation	The accreditation body carries out an evaluation of the CB's organization, systems, procedures and certification assessments and decisions. The evaluation team collects objective evidence that demonstrates whether the requirements of accreditation are met. At the end of the evaluation, the evaluation team holds a closing meeting with the applicant CB to present its findings.
Accreditation report	The accreditation body prepares a report of the evaluation. A copy of the report is given to the CB applicant who is invited to comment on it. The report describes any non-compliance identified by the evaluation team and corrective action requested by the team.
Addressing non-compliances	The applicant CB may be required to close out corrective action requests before accreditation is granted. Alternatively, if non-compliances are minor, accreditation may be granted subject to corrective action requests being closed out within a specified time.
Accreditation decision	The accreditation decision is made on the basis of the report and the outcome of corrective action requests (if appropriate). Accreditation decisions must be made by a person or persons different from those who carried out the assessment. Following the accreditation decision, the accreditation body will prepare a public summary, that becomes an open document, which will be publicly available to anybody on request.
Accreditation contract	When the accreditation decision has been taken, an Accreditation Contract is signed with the applicant CB. Once the accreditation contract has been signed by the AB and CB, the CB is formally accredited. In addition to the accreditation contract, the applicant will also receive a signed accreditation certificate.
Surveillance	Following accreditation, the accreditation body maintains surveillance over the CB in order to ensure that any corrective action requests raised before accreditation have been closed out, and to ensure continued compliance with the requirements of accreditation and the close of subsequent corrective action requests.

The Role of Accreditation Bodies

The main task of the accreditation body is to establish that both the certification body organization and the certification process are adequate. To do this properly, the accreditation body must have

clearly defined requirements for the organization and structure of the certification body, and certification process used. All of the requirements and issues discussed need to be documented by the accreditation body as the basis for accreditation. This can either be in the form of internal documents developed by the accreditation body or external documents developed by a certification scheme, but used by the accreditation body.

Certification Bodies

Independent organizations called CBs, also known as conformity assessment bodies (CABs) (ISO/IEC 17011:2004), certifiers, registration bodies and registrars (Nussbaum and Simula, 2005), regularly conduct audits to determine whether a given company or operation complies with the standard's criteria. CABs are organizations providing the following conformity assessment services: testing, inspection, management system certification, personnel certification, product certification and calibration 40. To be able to grant certificates, they need to demonstrate their competence both in terms of certification skills (for example according to ISO/IEC Guide 65:1996) and in relation to the accreditation standards at hand.

Most CBs are commercial companies, some of them large international organizations and some smaller national companies; but there are also non-profit organizations, such as research institutes or NGOs, which act as certification bodies. Some certification bodies certify against several, even hundreds, of different standards, while others specialize in a particular area. Any of these models can work well. The most important consideration for a certification body is that it must be completely independent of the organization which it is assessing in order to ensure a genuinely third-party assessment. The quality and independence of the certification body are critical to both the technical success and the credibility of the whole process (Nussbaum and Simula, 2005).

Upton and Bass (1995) emphasized that in all instances, CBs should demonstrate competence in forestry practices and have personnel who are qualified, trained and experienced in:

- » environmental assessment methodologies;
- » social matters;
- » management information systems and processes;
- » environmental forestry issues;
- » relevant legislation and standards; and,
- » forestry practice.

In all cases, CBs must not only be independent but also impartial and able to demonstrate that its organization and personnel are free from any commercial, financial or other pressures, which might influence its verification activities and judgement or endanger its trust. In addition to satisfying accreditation rules, CBs must, as a minimum, have: (i) documented procedures and methodologies to meet: assessment and verification requirements, quality control mechanisms and confidentiality provisions; and, (ii) publicly available information detailing structures and responsibilities in its organization, and a statement of legal status, ownership and funding sources (Upton and Bass, 1995).

Roles of Certification Bodies

Certification bodies have two clear roles, i.e. to examine and test the documented management system of the local FMU and validate that the site-specific standards being worked to by the local FMU, and documented in the management system, are being satisfied in the field (Upton and Bass, 1995).

Chan (2011) also noted that the roles of CBs are to: maintain complete integrity and impartiality in all circumstances of certification activities; make decisions relating to the granting, maintaining, extending, suspending and withdrawing of certification, extending or reducing the scope of certification and performing re-evaluation; and have the capability to performing and arranging testing, inspection, evaluation, and certification processes.

CHAPTER 6

FOREST CERTIFICATION STANDARDS AND PROCESSES OF THEIR DEVELOPMENT

A standard is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose. It is established and approved by a recognized body and sets out the requirements that must be met by any organization wishing to be certified and against which certification assessments are made (Nussbaum and Simula, 2005).

The content of the standard is fundamental to a FCS since it provides the basis for the level of forest management that will be delivered by the scheme (Nussbaum and Simula, 2005). Only those elements that are required by the standard are guaranteed in a certified forest.

TYPES OF STANDARDS

There are two types of standards that can be applied to forest enterprises, namely system-based and performance standards (Nussbaum and Simula, 2005). System-based standards apply to a particular forest organization (a company, a landowner, an association of owners) while performance standards apply to a FMU (a defined area of forest) and the quality of management in that forest. A variety of terms are used to describe quality of management, including 'responsible forest stewardship', 'good practice' and 'sustainable forest management'. The two types of standards deliver different benefits and are potentially complementary, but do not substitute each other.

Performance-Based Standards

Performance-based standards specify the level of performance or results that must be achieved, but do not necessarily specify how this should be done. Therefore, they do not require an organization to put in place any particular management system, but they clearly specify the minimum performance that must be achieved in a certified forest. The strength of this approach is that it provides a guarantee that a certified forest meets a defined level of performance. Since performance standards provide this guarantee of quality, it is normal to use them as a basis for a product label.

System-Based Standards

Management system standards, also known as process standards, specify the management systems that must be in place within an organization to ensure that they are managing quality, environment or even social performance consistently. Therefore, the requirements of management systems standards relate to elements of management that must be in place, rather than requirements about the outcomes or results of management (Nussbaum and Simula, 2005). The best-known management systems standards are the quality standard of the International Standardization Organization (ISO) (ISO 9000) and the environmental management system (EMS) standard (ISO 14001). It is the latter that can be used as an environmental standard for forest organizations.

The advantage of systems-based standards is that they can be applied to any sector or industry. Thus, ISO 14001 can be applied equally to a forest enterprise, a pulp mill or a furniture factory. This is particularly useful for integrated companies. In addition, they can be very powerful tools for helping organizations to systematically understand their performance and ensure that it is continuously improved. They are easily adapted to organizations operating in all types and sizes of forests since they specify generic systems and not specific performance requirements. Moreover, certification to a systems standard provides recognition of the organization's commitment to improve while the improvements in performance are still being achieved (Nussbaum and Simula, 2005).

However, system-based standards do not specify any minimum level of performance that must be achieved. Instead, they require forest organizations to set their own performance targets and then use the management system to ensure that they reach them. This means that two forest companies, both certified to the same system standard, can have very different levels of performance in the forest. As a result, although systems-based standards are very useful for providing a management framework within which improvements can be recognized and made, unlike performance-based standards, they do not give guarantee of actual performance in the forest (Nussbaum and Simula, 2005).

PROCESSES OF DEVELOPMENT OF FOREST CERTIFICATION STANDARDS

Contents of Standards

It is the requirements set out in a standard that actually determine what a certification scheme delivers in practice. Therefore, the content of the standard is extremely important. There are three main elements that need to be considered when developing or assessing a forest standard: (i) performance requirements - the requirements contained in the standard define what level of forest management has to be achieved in order to be certified and therefore what the certification scheme actually delivers in the forest; (ii) wording: standards are technical documents that should be written clearly and unambiguously to ensure that they can be consistently implemented and used for auditing; and, (iii) applicability: forests are enormously variable in type, location and size; therefore, forest standards need to be relevant to all forest types and local situations to which the certification scheme is intended to apply (Nussbaum and Simula, 2005).

For the system-based standards, there is broad international agreement on what these requirements should be, with ISO 14001 providing a working model. For performance-based standards it is less clear, with no single globally accepted set of detailed requirements. However, over recent years there have been a number of international processes that have made significant progress in identifying the range of issues which must be considered in defining responsible forest management and which, therefore, need to be addressed in a performance standard (Nussbaum and Simula, 2005). However, although there is considerable conformity between international initiatives and definitions, there are also some significant differences. In addition, the requirements that have been established are often very general or designed for national-level monitoring, rather than for implementation at the forest management-unit level, leaving scope for widely differing interpretations. As a result, there is no single international set of detailed requirements for good forest management with universal acceptance.

Nussbaum and Simula (2005) have provided a summary of the main issues considered relevant by one or more of the international processes as follows:

1) *Legal requirements include:*

- » resource rights: clear defined rights to the resource that do not threaten the rights of others;
- » operating legally: full compliance with all relevant national and international laws; and,
- » control of unauthorized activities, particularly those that could threaten the integrity of the forest.

2) *Technical requirements include:*

- » management planning, including both short- and long-term plans for the forest; forest inventory and resource assessment;
- » appropriate silviculture and ensuring sustained yield;
- » economic viability: forest management cannot be sustainable in the long term unless it is economically viable;
- » forest operations and operational planning;
- » monitoring both of operations and of the state of the forest;
- » training and capacity-building to a level sufficient to ensure that the requirements of the standards are met;
- » forest protection, including from pests, diseases, fire and other natural problems;
- » control, minimization and proper use of chemicals and biological control; and,
- » the proper design or restructuring of plantations.

3) *Environmental requirements include:*

- » full assessment of environmental resources and impacts and adequate planning to minimize negative impacts;
- » conservation and environmental protection, including the identification and good management of particularly important features and values; and,
- » waste management, including reduction, reuse and recycling wherever possible.

4) *Social requirements include:*

- » health and safety for both employees and contractors;
- » workers' rights, including issues such as fair pay, the right to organize and the control of child and slave labour; many standards defer to ILO requirements;
- » assessment of social impacts and interaction with stakeholders, such as local communities

and interested parties, including proper mechanisms for consultation and for dealing with complaints;

- » recognition and protection of the rights and needs of forest users, including both forest-dependent people and local communities; and,
- » encouraging and supporting employment and development for local communities.

Anyone developing or assessing a forest standard must consider each of the requirements in the list and either address them or justify why any may be ignored. An additional issue that forest managers are being asked to deal with in many standards is the need to ensure that there is adequate consultation with interested parties.

There is general agreement that standards are supposed to be precise, accurate and clear in technical documents that can be unambiguously understood, implemented and audited against. In addition, for forest management standards, it is also recognized that there needs to be adequate flexibility to allow managers to achieve responsible management in the most appropriate and cost-effective way.

Forests vary in their ecology, climate, geography and size, while forest owners and managers differ in their approach to management and the social, cultural and economic environments within which they work. Therefore, forest management standards must allow

for the range of ways in which forests can be managed while still achieving the level of performance envisaged by those developing the standard (Nussbaum and Simula, 2005).

Requirements

The process of developing FC standards is usually a relatively lengthy and complex one. ISO has developed a number of guidelines for developing standards, in particular Guide 59: Code of Good Practice for Standardization. This provides a widely accepted basis for the minimum requirements expected of a certification scheme in developing and using a standard. Some of the main requirements of ISO/IEC Guide 59: 1994, Code of Good Practice for Standardization have been summarized by Nussbaum and Simula (2005) as follows:

- » *Procedures.* Written procedures based on the consensus principles should govern the methods used for standards development.
- » *Transparency.* The procedures of the standardizing body shall be available to interested parties upon request.
- » *Complaints and appeals.* The procedures of the standardizing body should contain identifiable, realistic and readily available appeal mechanisms for the impartial handling of any substantive and procedural complaints.
- » *Approval.* Formal approval of standards should be based on evidence of consensus.
- » *Advancement of international trade.* Standards shall not be written so as to allow them to mislead consumers and other users of a product, process or service addressed by this standard.
- » *Participation.* Participation in standardization processes at all levels shall be accessible to materially and directly interested persons and organizations within a coherent process.

- » *Hierarchical framework.* In addition to the above, a key requirement of the World Trade Organization (WTO) is the existence of a hierarchical framework between international, regional and national standards.

As the demand for environmental and social standards develops, there is also growing experience of some specific issues relating to the development of these types of standards. The ISEAL Alliance, of which FSC is a member, has used this experience to develop 'The Code of Good Practice for Setting Social and Environmental Standards' (ISEAL, 2004). This incorporates much of the guidance from Guide 59, but also discusses some of the additional aspects that need to be considered for the development of standards, which address complex social and environmental issues.

Another important factor to consider in standards development and content are the requirements of WTO, which establishes international rules on trade and defines what constitutes a technical barrier to trade (TBT). Anyone developing a certification scheme needs to be aware of WTO requirements (Fern, 2003; Nussbaum and Simula, 2005).

However, while this provides a useful starting point, there are some particular issues that make the development of performance-based standards for forests particularly complicated and, therefore, raise additional requirements for the standard-setting process.

Processes

Since forest standards are very complex to develop, national standard development processes for forestry have taken several years to complete in many countries, e.g. Ghana and Congo Basin. The processes involved in the development of standards are lengthy. The following section describes briefly the lengthy process involved in the development of FSC standards.

- » Establishment of the Standard Development Working Group (SDWG) composed of stakeholders representing the environmental, social and economic interest groups.
- » Inform stakeholders that the SDWG is being established.
- » Development and adoption of rules of procedures.
- » Review and clarify FSC requirements and P & C, and identification of key forest management issues that the SDWG will need to address.
- » Establishment of sub-committees if and when considered necessary.
- » Inform stakeholders that the drafting of the standards is about to start. Preparation of the first draft standard.
- » Undertaking consultation of stakeholders on the first draft standard.
- » Preparation of the second draft standard, also based on the comments, concerns and inputs of stakeholders.
- » Undertaking consultation of stakeholders on the second draft standard.
- » Undertaking field testing of the second draft standard.
- » Reporting results of the field testing to the stakeholders.

- » Preparation of the third draft standard by taking into consideration results of the field testing as well as comments, concerns and inputs of stakeholders.
- » Preparation of the fourth and final draft standard, in some cases, with the help of consultant(s).
- » Submission of the final draft standard to FSC for consideration and endorsement.
- » Depending on whether or not issues will be raised by FSC on the final draft standard and the processes followed by the SDWG, some time may elapse before the final draft standard is endorsed by FSC.

Challenges

Nassubaum and Simula (2005) stated that performance standards for forests are unusually complicated to define when compared to standards in other sectors for three reasons:

- 1) *Incomplete information*: most standards are based on precise factual information. For example, a standard specifying the minimum strength of a motorcycle helmet is based on scientific and technical data that can be used to precisely define what is strong enough to be safe in the event of an accident. However, we do not have all the necessary information to understand and model in detail how forests function, or their response to management interventions. There are many gaps where information is incomplete or absent. Therefore, we have to base any standard on the best available information, combined with human decisions about what to do when there are uncertainties. Furthermore, forest management is an adaptive process in which knowledge is constantly being accumulated through experience that needs to be taken into account in drafting and updating standards.
- 2) *Conflicting requirements*: definitions of SFM vary, but all agree on the basic premise that it involves a balance of economic, environmental and social requirements. However, it is often impossible to achieve all of these simultaneously and sometimes conflicts arise. For example, it is not possible to simultaneously achieve in the same area an economic desire to harvest trees with an environmental desire to set it aside as pristine forest. Similarly, it may not be possible to simultaneously protect wildlife for conservation purposes while meeting a social requirement to allow hunting for subsistence. Therefore, the standard-setting process has to deal with conflicting requirements.
- 3) *Variability*: Forest standards have to address the very high degree of variability that exists between forests around the world. Most other standards are equally applicable anywhere. For example, the strength required of a motorcycle helmet to ensure that it protects anyone wearing it is the same anywhere; therefore, a standard for motorcycle helmet safety can be applied directly in any country. Forests, however, vary enormously in their biology, climates, soils and their social and economic context, even within one country. As a result, FCS need to include mechanisms to ensure that the standard used is appropriate to the specific ecological, social and economic conditions where it is applied. For these reasons all forest standards have to be developed using a combination of: (i) best available scientific and technical information and knowledge about forests and how they function and are affected by management; and, (ii) decision- making about how to address any gaps in the information available and how to balance the different demands made on forests.

CHAPTER 7

ENABLING CONDITIONS FOR FOREST CERTIFICATION

The enabling conditions for FC include the policy/legislation and institutional requirements, capacity to promote FC, i.e. human, financial and physical resources, technical capacity and markets, and marketing of certified products and services, all of which are discussed below.

POLICY/LEGISLATION AND INSTITUTIONAL REQUIREMENTS

To promote responsible forest management, through FC as a market tool, involves tackling the prevalent problems forest resources are encountering, such as policy, market and institutional failures, inadequate tenure, rising populations and their demands, fragmentation of the forest estate as well as inappropriate infrastructure, technology and skills (Upton and Bass, 1995). This requires policy decisions to be made at national and international levels.

At the national level, basic policy initiatives are required to make the transition to responsible forest management. They need to tackle the many forest problems that have their roots in perverse or conflicting legislation and regulations, and to establish incentives for different stakeholders. The way in which policy decisions are reached is also important. A strategic, participatory approach to national forest policy, emphasizing continuous improvement over time is required. The transition to sustainability will require several 'turns' of a cycle of goal-setting, planning and capacity-building, field management, monitoring, information assessment and goal-revision.

Upton and Bass (1995) have discussed the various aspects of policy requirements at the national level to ensure responsible forest management under the following major needs:

- » establishing multi-stakeholder involvement in decisions on forests;
- » appropriate policy and legislation;
- » agreeing on, setting up, and managing a Permanent Forest Estate (PFE); the PFE should cover legal classifications of production forest (natural and plantation), protection forest (for biodiversity, cultural and watershed conservation) and mixed land use categories.
- » select policies which are effective incentives for responsible forest management;
- » secure tenure and rights over forest resources;
- » define more appropriate roles for stakeholders, i.e. government, farmers and local communities and private sector;
- » build capacities to meet current and changing forest needs;
- » improve forest information, monitoring, valuation and research;

- » ensure country-level coordination of international forest initiatives; and,
- » improve the financial environment for forest conservation and management.

Upton and Bass (1995) have also reiterated the appropriate international roles as: (i) international support for national processes; (ii) dealing with global issues; and (iii) global agreement on (i) and (ii).

The international support for national processes is meant to ensure:

- » financial assistance for poor countries to cover the incremental costs of improving forest management and long-term investment as well as better coordination amongst countries providing the financial assistance;
- » technical assistance for capacity-strengthening and skills development; sharing information, research and technology;
- » harmonization of data protocols and standards; and,
- » improved trade measures so that reforms in one country are not frustrated by fears of losing market shares to other countries.

Dealing with forest issues with significant global implications are handled in the following ways:

- » setting principles and harmonizing standards for sustainable forestry to support trade in forest products: international efforts are required to produce international standards in order to harmonize trade, but also to achieve consistency with environmental needs;
- » continued debate and dialogue on global forest issues vis-a-vis national and local concerns; and,
- » payments for global services - supporting those activities which generate benefits beyond the borders of individual nations, e.g. management of cross-border protected areas, carbon storage forests, areas of extremely high biodiversity, forests on desert fringes and in regional watersheds.

Global agreements refer, for example, to CITES, Convention on Biodiversity (CBD), Climate Change and Desertification Conventions and the International Tropical Timber Agreement.

In general, many current policies were defined to serve narrow, static and simple ends, and by and large concentrated on government control. Policies for the transition to SFM will, however, be more dynamic and focus on groups other than government, notably the private sector and communities.

The following constitute the major elements of the enabling policy/legislation environments for FC:

- » Mainstreaming FC as a tool for promoting SFM in existing policy and legal frameworks of different African countries, as has been done in Namibian, South African and Ugandan forest policy/legislation.

- » Strengthen capacities and mechanisms for forest law enforcement and governance (FLEG).
- » Revision of forest/environmental policies and laws to provide more support to FC, forest companies and all other stakeholders in FC.
- » Put in place public procurement policies that clearly support/prioritize procurement of certified forest products.
- » Capacity for developing certification standards and procedures.
- » Strengthen the capacity of policy makers through training and sensitization on FC.
- » Strong, committed leadership: sufficient numbers of well-trained, committed supporters of responsible management in government, NGOs, companies and support agencies, or as strong lead organization.

The following constitute the major elements of the enabling institutional arrangements for FC:

- » Establishment of forest certification structures adequately covering Africa, namely regional and sub-regional offices, national offices/representatives/focal points, African- Based (preferably also African-owned) certification bodies, SDGs/NWGs, etc. and build the capacities of existing ones.
- » The groups responsible for promoting certification, such as SDGs/NWGs should be established in African countries with a clear legal status and recognition by the Forest Administration authorities and the different FCSs and with the necessary support to operate effectively and efficiently
- » Supporting African-based interested groups to become CBs for FC.
- » Provide public institutions responsible for forests management with adequate staff empowered with necessary physical and financial resources, and technical capabilities, so that they can shoulder their responsibilities during the process of FC.
- » Institutionalising courses on FC in higher learning institutions at national levels could bridge the knowledge gap in FC.
- » Development and strengthening of public-private-partnerships among various stakeholders, which are instrumental to promote FC.

CAPACITY TO PROMOTE FOREST CERTIFICATION

For FC to bring desired achievements, the necessary capacities of actors at various levels have to be built and appropriate institutional and organizational frameworks should be put in place. Actors include, but are not limited to, policy makers responsible for making decisions in state and private forest management, stakeholder representatives, forest professionals, contractors and other operators, forest owners, auditors, as well as certification and accreditation bodies.

The successful promotion of FC in Africa requires the necessary capacity, which can be generally categorized under human, financial and physical resources, technical capability, enabling policy/legislation environment, appropriate institutional arrangements as well as marketing structures

and information systems for certified forest products/services. Based on studies undertaken in the E/S (Kalonga, 2015), Central (Mbolo, 2015a), Northern (Mbolo, 2015b) and W (Ahimin, 2015) African sub-regions, the needs for capacity building to promote FC in Africa are summarized below.

Human Resources

- » Increase the number of qualified auditors for each country in the FC process.
- » Qualified internal auditors in forest companies for FM and CoC certification processes, i.e. for the preparation of external audits as well as coaching and training staff and overseeing the work regularly.
- » Training stakeholders in technical development of national standards for sustainable forestry, certification management and basics of business (e.g. development of business plan).
- » Raising awareness on advantages and disadvantages of FC, its potential role as a policy instrument for RFM and marketing.
- » Assessment and integration of social needs, including access to resources, workers' needs and rights, and community development.

Financial Resources

- » To have SFM initiatives that employ FC as a tool, there is a need to have financial institutions at national or sub-regional level to support such initiatives to complement efforts of private companies and ENGOs. The Tanzania Forest Fund (TFF) is an example of such financial institutions.
- » Establish well-coordinated funding mechanisms to support stakeholders at all levels in the forest sector in the development and promotion of FC. The good examples of WWF's GFTN and ITTO should be scaled-up and -out or initiatives are required to set-up similar mechanisms to support the volunteer companies to go for FC.
- » Partnerships should be encouraged between the major distributors of certified products and producers to support them financially through better prices or direct subsidies.
- » Efforts of African RECs, e.g. COMIFAC, ECOWAS and SADC to promote SFM and FC should be supported by donor agencies.
- » FSC should establish and fund National Offices in the different sub-regions similar to its efforts in the Global North.

Physical Resources

- » NIs/NWGs/SDGs that would be responsible for the development of FSSs and promotion of FC should be established with national offices adequately staffed, furnished and equipped.
- » Moreover, physical presence of FCSs, demonstrated by the presence of fully staffed, equipped, furnished and operational offices, is needed in Africa to promote FC.

Technical Capacity

- » Developing and implementing a training programme on FC targeting the various stakeholders at all levels, including government employees.
- » Build technical capacity of stakeholders in the areas of:
 - forest certification schemes and their certification systems;
 - techniques of forest management, including development of forest management plans;
 - geographic data and assessment systems, e.g. Geographical Information System and Remote Sensing;
 - traditional knowledge and socio-cultural services associated with forest resources;
 - undertaking studies on the economic potential of forest areas;
 - restoration of forest resources, including reforestation of targeted areas;
 - conflicts management;
 - valorization of forest products, starting with medicinal and aromatic plants;
 - techniques of Reduced Impact Logging;
 - identification of high conservation value in managed forests;
 - establishment and management of forest product traceability system (CoC); and,
 - forest auditing techniques and also marketing and promotion of certified products.
- » Building capacities of producers (farmers, communities, concessionaires and governments), small-and medium-sized enterprises, regulators (public extension systems), assessors/auditors, certification and accreditation bodies, small and large timber companies, wood and NTFP industry, rural/urban (development) banks, etc. to implement RFM and comply with related standards.
 - forest owners, managers and field staff to understand and implement the requirements of RFM, including adequate training and support.
- » Capacity for conducting internal audits and establishing an effective external audit process.
- » Knowledge and skills/techniques necessary to understand the forest resource, including forest dynamics, standing volume, growth and yield, what responsible or sustainable forest management entails,, including management planning, harvesting, silviculture and road building.
- » Provide training on environmental protection, conservation planning and identification, protection and monitoring of endangered species and forests of high conservation value.

Markets, and Marketing Structures and Information Systems

Develop and maintain market structures/information systems that link African forest owners/operators, primary producers and traders to the different actual and potential sub- regional, regional and international markets of certified forest products/services, which recognise, promote and reward RFM.

MARKETING OF CERTIFIED PRODUCTS AND SERVICES

FC has been accepted as a market-based instrument which aims to raise awareness and provide incentives for both producers and consumers towards a more responsible use of forests (Upton and Bass, 1995; Barklund and Teketay, 2004; Nussbaum and Simula, 2005; Nukpezah et al., 2014). Therefore, availability and accessibility of markets to certified forest products and services is extremely important for the success of FC globally and, especially, in Africa (Nukpezah et al., 2014). To make markets for certified forest products and services available for and accessible to both producers, consumers and other relevant stakeholders, it is absolutely necessary not only to develop markets but also put in place associated marketing structures and information systems by those responsible for promoting forest certification. This is because the benefits from market-based instruments, such as FC, are low where people do not demand certified products, where they cannot pay for the certified products or where markets are underdeveloped (Upton and Bass, 1995).

In the following section efforts made by the various FCSs in developing markets and putting in place associated marketing structures and information systems are discussed.

Efforts of FSC in Marketing Certified Forest Products

FSC uses its Business Development Unit to lead its efforts to engage the private sector in its activities at all levels⁴³. FSC works with all existing and potential certificate holders in the forest management-supply chain and retail sectors to build and support the development of markets for FSC-certified products. To achieve this objective, FSC uses different ways, including Trademark Support, Key Account Management, Global Partnership, FSC Market Development and FSC Marketplace Programmes.

Trademark Support Programme

The Trademark Support Programme (TSP) ensures the provision of a guarantee to consumers⁴⁴ through its trademarks. The FSC trademarks, which are presented under 4.1.6.8, provide a guarantee to consumers that the products they buy come from responsible sources, i.e. well-managed forests, controlled sources or recycling. They enable consumers to choose products that support forest conservation, offer social benefits, and enable the market to provide an incentive for better forest management. They are therefore essential to the whole FSC system. For this reason, FSC has a dedicated TSP to provide services for trademark use. It is extremely important to the integrity and credibility of the FSC system that its trademarks are used correctly.

Key Account Management Programme

The Key Account Management Programme (KAMP) is meant for building partnerships and synergies by FSC⁴⁵. The KAMP aims to: (i) maximize the opportunities for the FSC Network to

engage with business partners around the world; (ii) support the strategic development of the supply of FSC certified materials; and, (iii) develop communication channels with key clients to provide them with information about market trends related to FSC certified products.

Through joint activities and campaigns, FSC works to raise the value of its brand and increase demand for certified products. Through working with key accounts, FSC facilitates access to its worldwide network and information about markets for certified products. The KAMP aims to build and maintain strong and productive relationships with key clients that engage with and are committed to FSC. Through collaboration, FSC can share skills and resources, and promote innovative approaches to improving forest management. The key clients of FSC drive the supply and demand for FSC-certified products, and these efforts have led to the phenomenal growth in the area of forest covered by FSC certificates and the number of CoC certificates as well as increased awareness about FSC certification. Through marketing and awareness raising, FSC also aims to mainstream its scheme in key clients' procurement policies. For FSC's key clients, the KAMP is designed to help overcome bottlenecks in supply and demand of FSC products by linking disparate supply chains, and provide an expanded opportunity to exchange information about market needs. By working in partnership with FSC, key clients communicate their commitment to RFM to consumers and other businesses.

Global Partnership Programme

The Global Partnership Programme (GPP) aims to build high profile partnerships that demonstrate outstanding commitment to FSC and its mission 46. It raises awareness of FSC certification and brings attention to the innovative approaches of FSC to environmental, social and economic issues in forest management. The GPP is closely aligned with the Global Strategy objectives of FSC to provide leadership in advancing RFM, ensure equitable access to the benefits of the FSC scheme, develop the market for FSC certified products and strengthen the global network of FSC.

For instance, in 2010 FSC signed its first global partnership agreement with AkzoNobel, a global leader in sustainability and the largest paints and coatings company worldwide. The partnership's main objectives are to highlight the vital significance of forests and to raise awareness of FSC's mission to promote RFM worldwide. AkzoNobel is supporting FSC's outreach efforts by educating customers and helping to drive demand for FSC certified products. This focuses on increasing access to FSC certification for smallholders and community producers of timber and NTFPs, and increasing the benefits of FSC certification for these producers through new marketing initiatives. With AkzoNobel's support, FSC has been able to initiate a number of projects with smallholders and community producers. In 2011, the partnership was launched in the United Kingdom, Netherlands, Germany, Switzerland, Brazil, Denmark and Sweden with a diverse range of activities. FSC has plans to expand the partnership's activities to, among others, Canada, the Czech Republic, Russia and the USA.

Market Development Programme

The Market Development Programme (MDP) works through FSC's Regional Offices and Network Partners to promote the expansion of markets for FSC products in key countries and regions⁴⁷. FSC aims to increase awareness of its scheme in these key markets, working both to stimulate end consumer recognition and demand for FSC products, and promote FSC FM and CoC certification. Building on its market research and understanding of its brand image in key areas, FSC works with the KAMP to develop and run market awareness campaigns and initiatives. The MDP is currently focusing on projects in Japan, the Commonwealth, Russia, and North America.

Marketplace Programme (MP)

Launched as a pilot in 2011 in a number of countries, the FSC Marketplace (accessed @<http://marketplace.fsc.org/>), which is an international online platform to connect buyers and sellers of FSC certified materials and products, is designed to create connections throughout the global supply chain⁴⁸. It provides information on thousands of different FSC certified products and materials, and promotes global opportunity and equality in trade by helping users find FSC certified suppliers and buyers across international borders. It generates business information for the FSC scheme, which was not previously available and improves access to industry-focused products.

Countries with FSC-Certified Forest Products

Products containing the FSC logo (building products, forest products/paper and packaging), indicative of FSC certification, have been found in the different parts of the world (see list in <http://www.ecolabelindex.com/ecolabel/forest-stewardship-council-fsc-chain-of-custody-certification>, accessed on 26-10-2014). FSC has a global presence, with representations in 80 markets. Through an unbroken chain of the FM and the CoC certification, FSC maintains its system credibility. With 44 National partner organisations FSC is working to promote responsible forest management and to bring FSC certified products and materials from forests to stores. The market survey reports of FSC can be accessed from its website⁴⁹. FSC-certified paper (Figure 7) is sold and used all over Africa by Mondi, a company in South Africa. However, very few people know that the paper that they are using is FSC- certified, containing the FSC logo. Other FSC-certified products in Africa include package materials of milk products (Figure 7).

Efforts of PEFC in Marketing Certified Forest Products

Similar to FSC, PEFC maintains comprehensive databases (accessed @<http://www.pefc.org/find-certified/certified-certificates>) to ensure easy access to relevant information on certificate holders, logo and label users, certified products, accredited certification bodies, and PEFC-endorsed national certification schemes⁵⁰. PEFC is also engaged in a range of activities at global, regional and local levels aimed at maintaining and enhancing the market for certified products, from promoting CoC certification to companies to helping to bring NWFPs such as mushrooms to the market place⁵¹.



Figure 7. FSC-certified paper (A) and packaging material for milk products (B) sold in Gaborone, Botswana (photo by Demel Teketay).

Products containing the PEFC logo (building products, buildings, forest products/paper, furniture and packaging), indicative of PEFC certification, have been found in the different parts of the world (see list in <http://www.ecolabelindex.com/ecolabel/programme-for-the-endorsement-of-forest-certification-schemes-pefc>, accessed on 26-10-2014).

CHAPTER 8

FOREST CERTIFICATION IN PRACTICE

PROCESSES INVOLVED IN FOREST CERTIFICATION

Discussions of how FC works in practice can be found in various publications (e.g. Upton & Bass, 1995; Nussbaum & Simula, 2005) and websites (www.ic-fsc.org, <http://www.accreditation-services.com>, www.pefc.org). A summary of how FC works in practice is presented below based on the information obtained from these and other sources. The main steps followed in the actual FC process by the different certification schemes are more or less similar and, in general, involve accreditation, certification and branding/labelling (Figure 8).

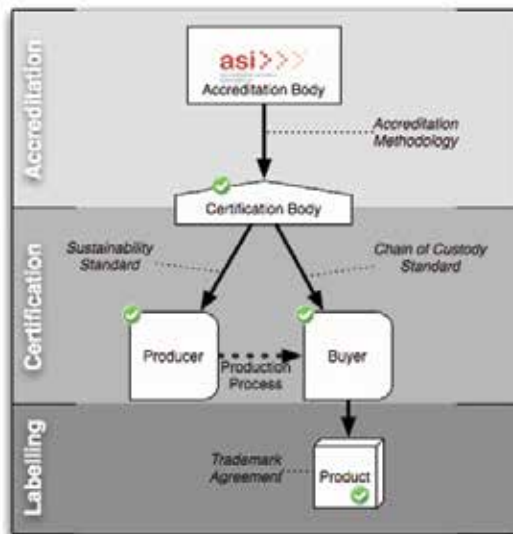


Figure 8. The process of FC involving accreditation, certification and labelling (source: adopted from <http://www.accreditation-services.com/wp-content/uploads/2011/07/accreditation.png>, accessed on 08-12-2014).

The process of accreditation in FC has already been discussed above (see 4.6). The actual steps involved in the process of FC include submission of an application by forest operator/owner to the FCS followed by a scoping visit, document review, field assessment, peer review, certification, labelling and periodic review by the FCS (Table 9).

Table 9. The processes involved in forest certification

Responsibilities of Certification Body	The Forest Certification Scheme	Responsibilities of Forest Operator/Owner
Interview, discussion and presentation, preliminary evaluation of policy and objectives (standards)	Application	Forest operator/owner responsibilities provision of basic information, description of site and operations, completion of interview questionnaire
Lead assessor visits site, final selection of audit team to suit local conditions, audit methodology and plan of work finalized	Scoping Visit	Meetings with senior staff, understanding of certification process, supply of preliminary management documentation, audit logistics
Check adequacy and compliance to standards, identify key priorities, evaluate management systems and assess resource requirements	Document Review (Examination)	Supply of detailed documentation
Verify key indicators and resource adequacy, validate management system, interview external stakeholders	Field Assessment (Examination or Validation)	Supply access to site, documentation and personnel
Technical validation of audit procedures and results	Peer Review (Validation)	
Issue certificate and explain limitations of usage	Certification	Receive certificate and accept conditions of use
Organize and implement chain of custody inspections	Labelling	Undertake not to label without chain of custody inspection
Verify continued compliance and non-abuse of certificate, assess progress towards 'continuous improvement	Periodic Review	Supply access to site, documentation and personnel Source: adopted from Upton and Bass (1995).

Upton and Bass (1995) have provided a summary of what a forest manager should consider and accomplish (self assessment) prior to submitting the application for certification to the FCS in order to determine if the forestry operation in question is ready for certification. Four main steps are considered, i.e.:

- » Step 1. Evaluate needs for FC, which includes: (i) marketplace expectations for environmentally acceptable forestry practices; (ii) expressed requirements of shareholders/customers for demonstration of environmentally acceptable forestry practices; (iii) regulatory requirements for environmentally acceptable forestry practices; and, (iv) assess if benefits outweigh costs?
- » Step 2. Undertake preliminary analyses, including: (i) selection of standards; (ii) interpretation of standards to suit local conditions; and, (iii) baseline assessment to measure current environmental performance of forestry practices in light of standards;
- » Step 3. Establish, implement and evaluate an environmental management system (EMS) to achieve quality forestry, including: (i) adoption of an environmental forest policy and definition of objectives; (ii) development of a management system to meet defined objectives; and, (iii) internal monitoring and evaluation of forestry programme redefinition of objectives and management system as required (feedback); and,
- » Step 4. Invite certification of quality forest practices, including: (i) assessment of documentary procedures; and, (ii) field check of forestry activities. This step is usually coupled with the choice of the most appropriate FCS and one of its accredited certification bodies, usually through floating and processing a bid meant for the purpose.

The last step is instrumental to kick-start the actual process of certification summarized in Table 9.

Submission of Application by the Forest Operator/Owner

After accomplishing the activities described in the four steps above, the forest manager makes a formal application to a CB accredited by the chosen FCS. The application includes a preliminary evaluation, often accompanied by an interview, discussion and presentation of what is involved. The CB requests the forestry operation to submit copies of a forest policy or statement specifying the operation's environmental objectives. The CB will also request preliminary documentation, which demonstrates that the environmental issues in the policy are being addressed. If a management plan has already been prepared a copy of this will also be required by the certification body. This initial review of the operation's environmental and forestry policy allows the CB to evaluate if the company is ready for certification immediately or if further development of management practices is required. Such a process avoids the operation using scarce funds, by going through the certification process prior to being in a position to potentially receive a certificate. If the CB deems the forest management practices of the forest are likely to meet the requirements of the FCS, the certification process is put into motion (Upton and Bass, 1995).

During the application step, the CB formally undertakes to maintain complete confidentiality with regard to the forest and provides formal details of the conditions attached to the FCS (Upton and Bass, 1995). These will, generally, include:

- » scope of the FCS operated by the CB;
- » legal status and organization of the CB;
- » general conditions for obtaining and retaining a certificate, such as the provision of relevant information and acceptance that remedial action may be required between assessment and award of the certificate;
- » requirement to appoint a designated staff member to liaise with the CB;

- » property and validity of the certificate - normally ownership of the certificate is retained by the CB;
- » right of access for surveillance visits by the CB;
- » notifications, such as for reassessment or material changes in the management system of the forest made during the validity period of the certificate;
- » publicity of award of the certificate and marking of products from certified forests;
- » circumstances under which suspension, withdrawal and cancellation of the certificate would occur; and,
- » appeals and complaints procedures.

Scoping Visit or Pre-Assessment

Once an application is accepted, the CB may visit the forest in question. This is undertaken by a lead assessor with the objective of finalizing the assessment methodology, ensuring that the selected team has skills appropriate for the particular site and finalizing the plan of work with field management. Selection of the assessment team must ensure that adequate professional skills are available to address the priority environmental and social effects of the forestry operation. The scoping visit is, often, the first time that the CB comes into contact with the forest, and site management team meets with personnel from the CB. An important part of the scoping visit is detailed meetings with senior field staff to ensure complete understanding of the certification process and that the assessment logistics are feasible in the time and with the resources allocated. During these discussions the lead assessor will conduct a preliminary review of management documentation so as to become familiar with the particular operation 'style' and 'culture' as well as ensure that coverage is adequate. The lead assessor will also gain a brief overview of the organization/company, its departments, structure and geographic distribution of the forest area.

Specifically, a scoping visit would aim to address:

- » an introduction to the CB and presentation of the certification process and context;
- » confirmation of the scope of certification required;
- » explanation of the assessment, including both document review and field assessment, and the need for openness;
- » nomination of, and agreement on, the member of staff from the forest who is to accompany the assessors during their work;
- » explanation that, during the assessment, evaluation is undertaken by taking sample(s) and problems may exist, which are not detected in the initial assessment;
- » confirmation of confidentiality;
- » explanation of major and minor requests for corrective action, and that the raising of these does not necessarily mean a reassessment; and,

- » fixing dates for starting the assessment.

Document Review

The basic requirements of an assessment start by looking at documented management systems. The forest manager supplies all necessary documentation to the CB, which maintains a log of those submitted. The assessment will start only following a successful scoping visit or if discussions with the forest manager indicate that the forest is ready. In particular, the scoping visit report may recommend that identified deficiencies are corrected prior to the assessment. Once notification has been received from the forest owner that all aspects of the scoping visit report have been addressed the assessment can start. Where a scoping visit has taken place, many of the items listed in the previous section would be addressed in an opening meeting with the forest management team. In addition, during the opening meeting, the assessment team would record attendance and arrange a date and venue for a formal closing meeting. Following the opening meeting, a familiarization tour is made of the premises prior to commencement of the formal assessment. In some instances, the forest management team will have supplied copies of key documents to the CB prior to the assessment. This often takes place during the scoping visit. Under such circumstances, valuation of relevant documentation can start prior to the assessment. Such documentation could include final versions of the environmental policy, forest management plan, and/or operating procedures. Where documentation can be provided prior to the assessment, the time allowed for reviewing documents on site can be shorter and is, usually, more productive since the assessor will have had more time to consider the submitted documentation and to consult over particular points before arriving on site.

The list of requested documentation will have been included and agreed to earlier either in the scoping visit report or in written correspondence from the CB. The CB evaluates the documentation submitted for compliance with the certification standards. Key environmental and social effects must have been identified and prioritized, management systems should be clearly described, including objectives and targets, and an assessment made of resource requirements. In particular, the audit team will check that the:

- » environmental policy of the organization/company is adequate;
- » documentation satisfies national regulatory requirements;
- » social elements have been accounted for;
- » forest operation allows for optimum use of extracted forest resources and reduced waste from external resources used;
- » environmental impact of forest operations is correctly addressed; and,
- » forest management systems are robust enough to realize the objectives and targets set by management.

To assist in the work, the assessor will use a document questionnaire provided by the CB. The document questionnaire is signed by the assessor who completes the evaluation and any omissions or non-compliances detected are listed along with any other queries. These are addressed to the forest manager in writing as soon as possible. In exceptional circumstances, the amount of corrective work required may be substantial. The lead assessor may, then, recommend that no

further assessment work is undertaken until the organization/company has taken the necessary corrective action and resubmitted the relevant documentation.

Field Assessment

The second part of the assessment involves an examination of internal and external site indicators and a validation of the documented management system (see Upton and Bass, 1995: pages 94-95, Figure 8.3). Internal site indicators would include ongoing research programmes, permanent sample plots, key conservation sites, etc. External site indicators include interviews with external stakeholders directly affected by the activities of the organization/company. They might also include downstream effects in important water catchment areas. Validation of the management system includes a sample check of described procedures to ensure adequate field implementation. As part of the document review, the assessment team would produce a number of assessment checklists. These are based on the documentation reviewed and not on the certification standards. The objective of the checklists is to permit a logical and structured evaluation of field implementation. The items to be checked should be referenced to the documentation concerned and communicated to the site management team. Each assessment checklist is signed by the assessor who completed it and countersigned by the lead assessor.

Communication of the checklists to the site management team enables an assessment itinerary to be prepared and agreed upon between the assessment team and the organization/company. The checklists tend to place most emphasis on inventory and other resource assessment results, harvesting and road building activities, treatment of watercourses and incorporation of special conservation needs. In all cases, assessors consult personnel working in the organization/company who are responsible for the procedures being evaluated. This is in order to ascertain the level of understanding of the procedures and management plan and, most importantly, the level of adherence to the procedures. Objective facts, including records and site evidence, are examined to substantiate the adequacy of compliance both with the documentation of the organization/company and the certification standards. At any time, the team may consider aborting the assessment due to a high level of non-compliance in evidence. This decision is made by the lead assessor, in consultation with other members of the assessment team, and based on both the degree and amount of non-compliance. Should the organization/company request that the assessment process continue, then, this is acceptable provided that it agrees that the current assessment is technically aborted and that a complete re-assessment would take place at a later date.

At the end of the field assessment, the team meet to determine compliance with the certification standard and to prepare a draft assessment report. The assessment report should demonstrate:

- » that an assessment has been undertaken;
- » the manner in which the assessment process was conducted;
- » the results and conclusions of the assessment process; and,
- » the decision as to whether or not to recommend that award of a certificate be given.

The initial assessment results are presented to, and discussed with, the forest management team prior to the assessment team's departure at a closing meeting. The closing meeting would typically address:

- » presentation of findings and reporting on decisions;
- » explanation of decisions regarding major and minor actions requiring correction;
- » obtaining a signature from an authorized representative of the organization/company to all agreed actions requiring correction;
- » obtaining a signed confirmation from the organization/company that the assessment has taken place;
- » explanation of the peer review process; and,
- » recording any disagreements with findings.

Following the closing meeting, a package of assessment documents is produced for presentation to the organization/company and submitted for peer review. The package of documents would contain the assessment report, requests for corrective action (see details in Upton and Bass, 1995: page 96, Box 8.3), copies of assessment checklists, assessment itinerary, documentation questionnaire, scoping visit report and pertinent correspondence.

Peer Review

The assessment report and associated documentation is sent for peer review by at least three independent specialists. The independent specialists will have been selected for their experience and knowledge of the forest type in question, technical expertise and international standing. The primary function of the peer review process is to attest to the technical credibility of the assessment methodology of a particular certification exercise and examine the conclusions reached by the assessment team. The peer review process is, therefore, critical in adding a second tier of professional expertise to the assessment prior to the decision being taken as to whether a certificate can or cannot be awarded. The role of the peer review is to ensure that the assessment report has the necessary content to act as the foundation for the award of a certificate and confirm that the assessment team has:

- » carried out an objective and professional assessment;
- » investigated all relevant data sources and avenues of enquiry;
- » arrived at an appropriate conclusion based on the evidence presented to it; and,
- » prepared a concise and quality report that will stand up to public scrutiny.

The peer review process underwrites the quality of the assessor's work and assists in providing the assessment decision with the support that will give the certificate international credibility. Individuals to be included as peer reviewers should be approved by the governing board of the CB. In order to maintain quality and consistency of the peer review process, the certification body should define and document a set of procedures that cover the peer review scope.

Certification

Following approval of the assessment recommendations by the peer review process, the organization/company may be awarded a certificate. This is accompanied by responsibility for its maintenance, and it requires a commitment to continual improvement of environmental and

social performance, and an undertaking to fulfil any requirements for immediate corrective action which have been recommended. The certificate remains the property of the CB and should not be copied or reproduced in any manner without prior approval of the CB. Any modification to the forest management practices or forest area of the local farm management unit (LFMU) should be reported to the CB that will determine whether or not the notified changes require additional assessment. Failure to notify the CB can result in suspension of the certificate.

The organization/company has the right to publish that the forest in question has been certified and apply the certificate mark to stationery and promotional material. In so doing the organization/company should ensure that no confusion arises between certified and non-certified forest areas. The organization/company should not make any claim that could mislead purchasers to believe that a product derives from a certified forest when it does not. The CB can suspend the certificate for a limited period where corrective action requests have not been signed off in the time agreed or where incorrect or misleading references have been made in respect of the certificate. At the same time, the CB should indicate the conditions under which the certificate can be reinstated. If these conditions are not fulfilled, the certificate should be withdrawn. At all times the organization/company has the right of appeal. Notification of the intention of such an appeal should be made in writing to the CB, usually, within a specified time limit of notice of certificate withdrawal. Appeals are judged by a sub-committee of the governing board comprised of at least three non-executive members. The CB is required to submit evidence to support its decision. The decision of the sub-committee should be final and binding on both the organization/company and the CB.

Labelling or Branding

Where the forest manager and/or buyers of wood from the certified forest wish to identify the wood coming from a certified source, it is necessary to apply for CoC inspections. As with certification of the forest area, it is important to differentiate between a CoC system, which is installed by the various parties in the chain, and CoC assessment which relates to the activities of the CB in order to provide a verification of product origin (see details in Upton and Bass, 1995: pages 100, Figure 8.4 and page 101, Box 8.4). To varying degrees, CoC requires that products are identified and segregated, and accompanied by a system of records, which can be easily interpreted. The CoC must be able to provide physical evidence that the certified product originates from a particular source, requiring a secure data capture and communications system, which runs in parallel with and links to the physical evidence. To some extent, there is a trade-off between the need to identify and segregate certified products. An efficient and easily recognizable identification and recording system may reduce the need for segregation. In all cases, the application of CoC systems should use techniques and technology which are appropriate to the product. For example, the transport and manufacture of high-value wood products from large logs can justify a sophisticated product identification and recording system related to individual pieces. In contrast, composite wood products using low-quality material, often in particle form, will require a system whose emphasis is on product segregation and batch identification.

CoC is a critical element of any FCS since it provides the link between buyers and sellers from the forest to the point of final sale. It is important, for credibility to be maintained, that the CoC remains intact throughout, particularly at stages where responsibility for the goods changes. Essentially, CoC is a stock control exercise, which requires the goods to be secure and requires transparency for ease of inspection. The chain itself will consist of a number of links, the number depending on the range of sources, complexity of the manufacturing process and type of market into which the product is sold (see example in Upton and Bass, 1995: page 102, Box 8.5).

Each organization in the chain should establish and maintain procedures appropriate to its scale for identifying individual products or batches from particular sources. Each identification of products should be unique and recorded. Through the identification and associated records, it should be possible to trace the product to its immediate source, original shipment and/or batch and certified source of origin. It should also be possible to complete an input/output audit at each organization in the chain. The quantity of certified material bought by the organization should approximate to the amount sold after allowing for processing losses. Usually an appropriate conversion factor and acceptable tolerance limit are agreed upon between the organization in the chain and the CB. Where appropriate, each organization in the chain should allocate a new identification at the time of receipt of goods. Where a batch production process is used, it may be more appropriate to allocate a new identification at the end of the production run and to the packed bundle. Under such circumstances, it should be possible to trace the product to a particular production run and, hence, through the associated documentation to the various raw materials used in the process.

Certified products should ideally be stored separately from non-certified products. Documented procedures appropriate to the scale of the organization should exist to ensure that a non-certified product is prevented from inadvertently entering the production process. Good records are a key element for successful CoC assessment. All records must be legible and easily identifiable to the product involved. Each organization in the chain should aim to maintain purchase, stock, production and sales records (Upton and Bass, 1995).

Publicity material used, and claims made by the organization concerning the source of origin of the product sold, would also be verified as part of the assessment. Initial meetings between the organization/company in the chain and the CB would agree upon acceptable procedures for product identification, segregation and record keeping. The cost of the assessments can be reduced if the organization/company implements a structured programme of its own for internal audits of the agreed system. Such audits should be planned in advance and documented. They should also aim to verify that the activities carried out within the organization/company comply with the planned and documented arrangements described and measure the effectiveness of them to meet the declared objectives. In complex situations, a programme of internal audits would be essential.

Periodic Review or Surveillance

The extent of periodic review required is determined by the assessment report and, particularly, the number and degree of corrective action requests. The assessment report will set out the initial timetable of surveillance visits required as well as the particular aspects of the activities of the organization/company that require attention. The assessor who is to undertake the surveillance visit would obtain the previous surveillance report (or the assessment report if it is the first surveillance visit), details of corrective action requests and any complaints or appeals, which have gone on file since the last surveillance visit. The assessor should contact the client in order to arrange for a date. A six-monthly frequency of visits should generally be maintained by the CB with visits permitted to take place two months either side of the nominal date. A surveillance visit should:

- » cover at least 20% of the management system of the organization/company and, in particular, should address any changes, which have been made since the previous visit; the assessor should also try to cover areas of the management system, which were not addressed in previous visits;
- » verify that all observations made during the original assessment have been acted upon;

- » verify that all due minor corrective action requests have been dealt with;
- » audit the procedures of the organization/company for internal monitoring;
- » aim to consult personnel of the organization/company responsible for the procedures being assessed;
- » validate the effectiveness with which the management system assessed is being implemented;
- » examine promotional materials to check that there is no misrepresentation of the certificate; and,
- » raise non-compliances in the form of corrective action requests where appropriate.

On completion of the surveillance visit, a report should be produced, which is signed by the assessor and a representative from the organization/company. Surveillance visits may also include CoC inspections and/or checks to determine whether required changes to the CoC system have been made.

Modular Approach

The modular approach, also known as step-wise or phased approach, has emerged in FC to assist those forest owners/managers and concessionaires, which have difficulties of achieving full certification in one go owing to barriers related to capacity, governance and regulatory problems. A modular approach to certification can help overcome these problems by dividing full compliance with the FC standards into a series of phases through utilizing the limited resources available for one or two tasks at a time, instead of trying to begin all of the necessary activities at once. Some CBs, e.g. SmartWood that implements “SmartStep”, a Rainforest Alliance SmartWood Programme (Rainforest Alliance, 2007), have started providing the modular approaches to their clients.

As stated above, complying with the full set of P & C of FSC requires a high level of performance from Forest Management Organizations. Many forest managers, especially smallholders and those in tropical countries, perceive FSC certification as prohibitive and inaccessible unless intermediate benefits are available along the path to certification that justify their efforts and investments⁵². As a response, FSC approved a Policy on Modular Approaches to FC (FSC-POL-10-003) in 2005 and initiated a Modular Approach Programme (MAP) (FSC, 2005b, 2013). This policy set up minimum criteria for credible stepwise schemes. The policy also stated FSC’s own interest in exploring stepwise schemes and collaborating with entities operating credible stepwise schemes.

FSC’s MAP is an emerging initiative aimed at providing a structured path to achieve FSC certification by verifying defined steps, starting from the legal right to harvest to full FSC certification. MAP provides a lower entry level to the FSC system and allows for a more pro- poor approach to certification⁵³. It is also FSC’s response to new demands for legal verification, but in a framework that incentivizes FMOs to keep improving their practices and not just strive for the minimum. MAP creates an effective compliance link between each step so that each incremental improvement increases both the ability to achieve the next step as well as the overall ability to meet the full standard. Finally, MAP is designed with a claims system that allows limited market benefits at the intermediate steps.

FSC has drafted MAP standards (forest management, chain-of-custody and accreditation requirements), planned the integration of smallholder support services, and developed an M&E system. In addition, FSC has carried out field-tests and consultations throughout 2013 as part of a 'controlled' launch. Through MAP, full FSC certification is accomplished in three time-bound and independently verified steps, starting with legality verification, then, Controlled Wood certification, and ending with full FSC certification within a five-year period.

There are 5 main elements in the FSC MAP: (i) *application* - a template submitted to an FSC CB, including a self-assessment of conformance with the basic requirements for participating in MAP; (ii) *baseline assessment* - like a pre-assessment, this is organized and agreed to by the Organization and performed by an accredited CB; (iii) *action plan* - developed by the Organization in response to the baseline assessment results, submitted to the CB for verification; the action plan details what the MAP participant will do to get FSC- certified, and forms the basis for measuring progress in annual audits; (iv) *formal participation* in MAP, including annual audits from the CB and public reporting; and, (v) *three time-bound steps* (Legal, Controlled Wood, Full FSC), to be met within a five-year period.

Group Certification

While individual certification works well for most medium- and large-sized enterprises, it can be a major challenge for small enterprises, whether these are small forest owners or small- scale producers of wood products. They do not have the economies of scale that their larger competitors have. Therefore, the cost and complexity of understanding and implementing the standard and engaging a CB can be a major barrier to FC (Nassbaum and Simula, 2005).

As a result, most certification schemes provide a mechanism that allows certification through a group scheme. A group scheme is managed by a group manager who is responsible for ensuring that all the group members, whether they are forest owners or small-scale producers, understand and implement the requirements of the standard. The group manager, then, engages the certification body and manages the certification process on behalf of the members.

Small enterprises get two major advantages in seeking certification through some form of group scheme. Firstly, the group manager takes on the challenge of understanding and interpreting the requirements of the standard and can help group members to understand and implement them in practice. Secondly, by undergoing the certification assessment as a group, economies of scale are regained so that the cost per small enterprise is significantly reduced. Therefore, any small- or medium-sized enterprise wishing to become certified should consider the advantages of obtaining certification through a group scheme.

Small or Low-Intensity Managed Forest (SLIMF) Certification

FSC defines a small producer in terms of the area of their forests or the volume of timber they harvest each year. A small or low-intensity managed forest (SLIMF)⁵⁴, can qualify for streamlined auditing procedures that reduce the cost of the audit by, for example, reducing the sampling in the audit. The procedures also allow for desk-based audits in years where a small producer has not harvested. FSC has eligibility guidelines for SLIMFs that certification bodies use to determine if a forest is eligible or not. To achieve certification under streamlined procedures for SLIMFs, a forest management unit has to be either 'small' or 'low intensity' according to the definitions of FSC (FSC, 2005c, 2009).

In general, a forest management unit is classified as small in area when it is less than 100 ha. However, National Offices can apply to increase this maximum to 1000 ha. In all countries, forest management units may be classified as low intensity when they comply with at least one of the following two criteria: (i) the harvesting rate is less than 20% of the mean annual growth in timber (Mean Annual Increment or MAI), and the annual harvest is not more than 5000 m³; and, (ii) the forest is managed exclusively for NTFPs (FSC, 2005c, 2009).

Forest Certification for Ecosystem Services

Through financial support from the Global Environment Facility (USD 2.8 million), international partners⁵⁵ are collaborating on a project (2011-2015), Forest Certification for Ecosystem Services (ForCES)⁵⁶, aimed at researching, analyzing, and field testing innovative ways how to evaluate and reward the provision of critical ecosystem services, such as biodiversity conservation, watershed protection and carbon storage and sequestration.

Pilot tests are carried out at ten forest sites (in Chile, Nepal, Indonesia and Vietnam⁵⁷) under different socio-political and environmental conditions. This project will contribute to the overall goal that forest biodiversity is conserved through a process where voluntary FSC certification incorporates expanded and enhanced global and national forest management standards, which are applied to emerging markets for biodiversity conservation and other ecosystems services. This goal will be targeted throughout the Project Objective: *“To pilot test expanded and enhanced global and national environmental standards applied to emerging markets for biodiversity conservation and eco-system services as an initial step for upgrading of successful models of FSC certification”*. This will be achieved through establishing FSC certification as a market tool for a wide range of Ecosystem Services, e.g. carbon sequestration, water supply, high conservation value forests, etc., which are currently not adequately covered for sustainable forest management. Moreover, the pilot testing in the four characteristically different countries will demonstrate the applicability of the FSC system in practice and will enable both national and international compliance indicators to be developed. The project also has a component to ensure community ownership of information through the establishment of community monitoring systems.

The following results are envisaged from the project: (i) the development of scientifically tested and auditable ecological services indicators for assessing compliance with certification criteria; (ii) the certification for ecosystem services of at least one pilot site in each country, with a further six forest management units certified or nearing certification; (iii) the verification of viable FSC business models for marketing ecosystem services through certification; (iv) community ownership information sharing systems developed; (v) concrete private sector interest demonstrating readiness to pay for ecosystem services certification; and, (vi) FSC and technical agency personnel (e.g. certification bodies and development agencies) trained to deliver on ecosystem services certification.

In addition, newly developed impact indicators are used to demonstrate positive outcomes and the achievement of social and environmental objectives. By the end of 2015, FSC will have in place an enhanced global system for forest managers, which targets key ecosystem services with present or future market potential and FSC will have successfully certified demonstration sites for ecosystem services.

Nussbaum and Simula (2005) summarized the areas of potential synergies between certification of forest management and carbon sequestration as follows:

- » whether common methodologies, definitions and concepts can be developed;

- » the building of capacity, which is required for both instruments;
- » whether forest management certification and other management tools can contribute towards the preparation of accurate inventories through providing data relating to land- use changes and changes in the growing stock;
- » whether forest management certification, if further developed, may verify the implementation of measures or the lack of measures, both positive and negative, that affect sinks;
- » whether auditing procedures could be complementary for forest management and sinks
- » certification, even if both instruments require separate protocols and accreditation;
- » whether general procedures of existing accreditation bodies (e.g. ISO 9000 and ISO 14000) could also be applicable - just as for forest management procedures - for sinks validation, verification and certification systems, after having been augmented to specifically deal with sinks projects;
- » how group certification may reduce barriers (such as costs) for individual (small) forest owners, to implement forest management certification schemes and facilitate the implementation of (bundled) sinks activities; and,
- » whether, and to what extent, any sinks credit return may provide additional financial support to the private sector for also implementing forest management certification schemes (e.g. cap management), or, the reverse, where forest management certification may give added value and marketing advantages to carbon sequestration.

Tracing Claims of Certified Forest Products

For some forest managers, the aim of certification is to allow them to make immediate claims about the quality of their forest management. This is particularly important where the demand for certification comes from investors, governments, shareholders or local communities. However, the biggest driver behind FC remains the market demand for products that come from well-managed forests. It is, therefore, necessary to have a mechanism which links products to the forest where the original tree (or NTFP) was grown. This is known as product tracing, supply-chain management or, most commonly, chain of custody (Nussbaum and Simula, 2014).

Making claims about products made with raw material from certified forests is more complex. Manufacturing processes in the forest products sector are often very complicated. Once a log leaves the forest it may go through a range of manufacturing processes before it becomes a final product. The wood may be cut, peeled, chipped or broken down into fibre, divided into separate loads, will probably change ownership more than once, and will generally be processed and reprocessed. At any one of these stages, there is the risk that it could be mixed with material from uncertified forests.

The raw material may be sourced from a number of suppliers, each of whom has, in turn, sourced from several suppliers, and so on. In practice, many processors have material that originated in tens or even hundreds of sources. However, if a credible product claim is to be made, it is necessary to have sufficient control over the entire production chain to be able to make clear and accurate claims about the source of the material in the final product. This requires some form of product tracing or *chain of custody*. A chain of custody is a *verifiable system of traceability*

for certified timber or other material at each stage through which it passes from the forest to the final product. Each time ownership of the material changes or processing is undertaken, another link is added to the chain. It is important to demonstrate at each stage that the material being transported, processed or sold is certified, and that it has not been mixed with or ‘contaminated’ by material from other sources. This is meant to provide clear separation or demarcation of certified and uncertified forest products, at all stages, including forest sites, processing, shipping, manufacturing, and wholesale and distribution stages (FSC, 1994a and b; Nussbaum and Simula, 2014).

Status of Forest Certification Globally

Key Findings, relevant to FC, were reported under Chapter 4, which focuses on “*Policy measures to enhance forest-related benefits*” in the recently released report on “*State of the World’s Forests*” (FAO, 2014). These are presented below.

- » All countries that have revised their national forest programmes (NFPs) or forest policies since 2007 have included SFM as a policy goal.
 - SFM as a concept and term has become popular in national forest policies and, in particular, country reports.
 - Countries use a broad conception of SFM as outlined in the Forest Instrument, which emphasizes a balanced approach to economic, social and environmental benefits and recognizes the multiple roles of forests for different stakeholders.
 - Countries continue to amend their forest policies and legal frameworks, putting SFM at the centre.
 - Since 2007, at least 37 countries (10 African) have passed and promoted new policies promoting SFM and aiming at socioeconomic development.
 - In addition, at least six countries (one African) have reported having further elaborated criteria and indicators as a way of operationalizing SFM, supporting policy development, monitoring and reporting.
- » Countries have developed numerous policies and measures to promote SFM since 2007, many of which have the potential to enhance socio-economic benefits.
 - There is a trend towards incorporating SFM as a broad national goal, increasing stakeholder participation, and greater openness to voluntary and market-based approaches.
 - However, there is a need to strengthen implementation capacities, so that the potential to enhance socio-economic benefits is realized.

The key findings directly related to FC included: (i) voluntary certification is now well established as a widely applied private instrument that complements public forest policy instruments; (ii) governments in developed countries are continuing to strengthen public procurement schemes and green building programmes, thus, reinforcing demand-side incentives for products from sustainable sources; and, (iii) verification of the legality of timber harvested is slowly expanding, enhancing the role of the private sector in strengthening sustainable forest management (FAO, 2014).

FC and promotion programmes were mentioned in over two-thirds of recently revised NFPs and three-quarters of country reports, and as of 2013, public forests are certified in 61 countries.

- » FC is the most widely known voluntary instrument in the forest sector, with the proportion of global roundwood supply from certified forests estimated at 28.3%, i.e. 501 million m³ (UNECE/FAO, 2013; FAO, 2014).
- » National governments are often involved at various stages in the development and management of voluntary FCSs.
- » National standards for FC have been elaborated for FSC in 39 countries worldwide, and 32 national standards have been endorsed by the PEFC.
- » While there is no formal obligation by the FSC or PEFC to involve national government representatives in standard elaboration bodies, standards are required to meet national legislation, and in practice these bodies take into account relevant national public policies.
- » In some countries, such as China and Indonesia, certification is part of state forest policy.
- » Governments can help promote certification as a voluntary instrument to encourage SFM.
 - For example, Nicaragua's national forest policy promotes certification for SFM purposes.
 - Canadian provincial governments provide funding to help companies attain CoC certification.
 - Honduras's National Forest Policy includes a sub-programme for Economic Development in Forestry, which aims to promote certification processes.
 - In Peru, WWF coordinates FC development and the government promotes it as a tool for SFM.
- » Where certification is already developed, it is often used as an "off the shelf" SFM policy for state-owned forests and protected areas.
 - For example, the majority of Guatemala's FSC-certified area is in the Maya Biosphere Reserve.
 - Lithuania reports progress in SFM in FSC-certified state forests.
 - As of 2013, there are 61 countries that have public forests certified by the FSC and around 30 countries with public forests certified by PEFC, mostly in Europe and North America.
- » Some 20 countries, mainly developed market economies, continue to promote and strengthen green procurement and green building certification systems, including criteria that promote wood from sustainable sources.
 - Governments in developed countries have promoted green procurement policies as a way of increasing demand for legal and sustainable timber and timber products.

- By end-2010, a total of 14 countries worldwide had operational public sector procurement policies at the central government level for wood and wood-based products (Austria, Belgium, Denmark, Finland, France, Germany, Japan, Mexico, Netherlands, New Zealand, Norway, Switzerland, United Kingdom) (EU Standing Forestry Committee, 2010).
 - Countries where respective policies or laws exist by 2013 include Australia, China, India, Italy, Republic of Korea and Slovenia.
 - Similarly, voluntary green building programmes, codes and standards promote legally and sustainably harvested wood products.
 - For instance, the US NGO-led International Green Construction Code was finalized in March 2012 and has now been adopted in whole or in part by ten states in that country.
 - The voluntary Leadership in Energy and Environmental Design (LEED) Green Building Certification Programme is widely recognized in the USA, as is the Building Research Establishment Environmental Assessment Method (BREEAM), which has country-specific schemes in seven European countries (Austria, Germany, Netherlands, Norway, Spain, Sweden, United Kingdom).
- » Voluntary instruments other than FC were explicitly dealt with in only 4 of the 22 NFPs or forest policies issued since 2007, and by only 35% of country reports, while systems for verifying and certifying the legality of timber traded are increasingly being implemented in importing and exporting countries.
- The main instruments for verifying legality are the EU's FLEGT Action Plan, USA's 2008 Amendments to the Lacey Act, and Australia's 2012 Illegal Logging Prohibition Act, which also outlaws the importation of illegal logged timber from abroad, with effect from November 2014.
 - As part of the EU's FLEGT Action Plan, legality verification is supported through Voluntary Partnership Agreement (VPA) processes in countries that wish to export to the EU.
 - By 2013, six countries were at the stage of implementing a VPA (Cameroon, Central African Republic, Ghana, Indonesia, Liberia, Republic of the Congo), while nine were negotiating a VPA, and several others preparing for or consulting on it.
 - The EU Timber Regulation (EUTR) "due diligence" requirement, which came into effect in March 2013, prohibits the placing on the EU market of wood or wood products that are derived from wood harvested in contravention of the applicable legislation in the country of origin.
 - Anyone placing wood on the market for the first time must exercise due diligence to minimize the risk of introducing illegal wood.
 - Most EU Member States have by now nominated a competent authority responsible for implementing the EUTR.
 - EUTR compliance is recognized for wood that carries a FLEGT licence – or a CITES permit.
 - By 2015 no single FLEGT licence had been issued.

- Exporting countries have begun incorporating legality assurance system elements such as tracking and verification in their NFPs or policies, including Canada, Côte d'Ivoire, Guyana, Honduras, Montenegro, New Zealand, Suriname and Uganda.
- Countries that are improving their organizational frameworks and information systems to track legally harvested timber through value-added chains and improve market transparency include Brazil, Ghana, Indonesia and Liberia.
- In August 2012, Australia and New Zealand signed an Arrangement on Combating Illegal Logging and Promoting SFM, promoting, amongst other things, systems for verifying the legality of timber and wood products in Australia, New Zealand and the wider Asia-Pacific region.

Voluntary instruments, such as FC, are increasingly accepted as useful tools to support and complement government policies towards SFM. They also help strengthen the role of the private sector as an accountable partner. However, many policy challenges remain, including the high cost of certification for small-scale producers, addressing the lack of domestic demand for products that are costlier than products from exploitation, using the purchasing power of governments on markets, and fighting deforestation and illegal logging (FAO, 2014).

CHAPTER 9

CONTRIBUTIONS OF FOREST CERTIFICATION

Several authors have discussed the actual and potential contribution of FC (e.g. Upton and Bass, 1995; NAFA, 1996; Vogt et al., 2000; Ozinga, 2001, 2004; Bass et al., 2001; FERN, 2001, 2004; Cashore, 2002; Collier et al., 2002; Cashore et al., 2003, 2004; Markopoulos, 2003; Meidinger et al., 2003; Pearce et al., 2003; Rametsteiner and Simula, 2003; Tollefson, 2003; Thornber, 2003; Eba'a Atyi, 2004; Ham, 2004; Ros-Tonen, 2004; Smith, 2004; World Bank, 2004; Hirschberger, 2005; Nussbaum and Simula, 2005; Spilsbury, 2005; Cashore et al., 2006a and b; Yadav et al., 2007; ITTO, 2008; Karmann and Smith, 2009; Peña-Claros et al., 2009a & b; Teitelbaum, 2009; van Kuijk et al., 2009; ETRN, 2010; Peña-Claros and Bongers, 2010; Marx and Cuypers, 2010; Sheil et al., 2010; Tikina et al., 2010; Kaechele et al., 2011; Newsom and Hughell, 2011; UNESCO, 2011; van Hensbergen et al., 2011; Muthoo, 2012; Rae and Godden, 2012; FSC Sweden, 2013; Dillon, 2013; Cerutti et al., 2014; Karmann, 2014; Nukpezah et al., 2014; Lewis and Davis, 2015; van Kreveland and Roerhorst, undated; websites^{58,59}). The information obtained from the various sources can be generally categorized as economic, social, environmental and cross-cutting.

Economic Contributions

Certification is an economic market-based instrument, which aims to raise awareness and provide incentives for both producers and consumers towards a more responsible use of forests. The potential economic contribution of FC can be summarized as follows:

- » provided greater access to premium timber markets (where they exist);
- » strong willingness amongst consumers to pay the extra costs associated with FC, usually taking the form of higher prices, which may be achieved where additional environmental aspects are recognized as enhancing product quality;
- » medium-term gains in efficiency and productivity;
- » protection of market share and increased marketing opportunities through product differentiation; reduction of environmental risk, resulting in better access to financial markets for loans, rights issues, insurance, etc.;
- » better stock control;
- » improved image in 'green' conscious markets and with employees;
- » better commercial advantage of timber companies over competitors, e.g. preferential access to new customers or increased market share or better prices through direct sales or niche marketing;
- » improved business profile in markets where 'green' is associated with the 'attitude' of the producer more than the content of the product, leading to benefits in terms of improved commercial performance;

- » reduction of the number of intermediaries and, thereby, increased proportion of the final sale price awarded to the forest owner by improving the efficiency and transparency of the supply chain;
- » improved product supply prospects associated with FC can be of particular benefit to smaller forestry operations, in terms of providing direct market access and in obtaining better prices for wood products;
- » improved management control/system, including internal mechanisms of planning, monitoring, evaluation and reporting, associated with FC in terms of transparent and efficiently functioning systems, a prerequisite for FC to be cost-effective;
- » good systems associated with FC also provide accurate and timely information, which assists management in making better decisions and improving control over what is happening in the forest;
- » price premiums and market access, the main economic benefits of FC;
- » higher recovery of national revenues where forest revenues are being avoided;
- » promoting multiple benefits, e.g. NTFPs, which are sources of livelihoods and culture of local people;
- » assist forest managers in raising funds and obtaining access to cheaper finance by reducing environmental risk associated with investments in forestry;
- » improved image of the forest management enterprise locally and in associated markets;
- » significant economic improvements in Germany, Latvia, Russia, Sweden and the United Kingdom, e.g.: (i) in locations where there is a conflict between deer numbers and forest management objectives, certification has led managers to develop game management strategies to minimize economic damage; (ii) improvement in management planning (maps and management plans), and specifically the preparation of management objectives, long term forest plans and long-term sustainable harvest planning; (iii) consultation with neighboring forests managers on harvesting has improved local planning and coordination; (iv) formal monitoring of objectives has been implemented, allowing feedback mechanisms; (v) improved marketing of forest products and income by matching production better to market requirements; (vi) improved ability to prevent illegal logging; and, (vii) recreational benefits of forests have been improved through the conservation of sites of historical and cultural significance, complemented by better and safer public access.

Environmental Contributions

The potential environmental contributions of FC can be summarized as follows:

- » provision of a mechanism for companies to reduce environmental risk and negative commercial effects that high environmental risk increasingly involves, i.e.:
 - failure to reduce this environmental risk is likely to result in increased cost, affecting the commercial returns of those companies identified as having both direct and indirect impacts on forests;

- increased cost and reduced commercial return are likely to be the result of several factors, including poor environmental image, difficulty in maintaining market share and securing new markets, low staff morale, increased staff turnover and loss of good staff to competitors and increased insurance and financing costs.
- » great potential to promote payments for ecosystem/environmental services
- » validate forest management practices;
- » assure shareholders that land is being managed sustainably;
- » environmental conservation;
- » maintenance and enhancement of biodiversity;
- » influencing the health and viability of World Heritage Sites neighboring certified forests;
- » contribution to the delineation and assessment, conservation, maintenance and enhancement of High Conservation Value Forests (HCVFs)⁶⁰; improve the HCVFs;
- » protect rare, threatened or endangered species and/or their habitats through developing wildlife corridors that can aid their movement;
- » minimizing the movement of invasive species;
- » prevent or contain forest fires through the acquisition of firefighting equipment and training of staff in its use;
- » use of reduced-impact logging; and,
- » significant ecological improvements in Germany, Latvia, Russia, Sweden and the United Kingdom, e.g. (i) consistent implementation of Environmental Impact Assessments; (ii) identification, mapping and management/protection of long term retentions, natural reserves, key habitats and biotopes; (iii) increase in deadwood level favoring species diversity through natural regeneration, care and thinnings; and, (iv) restoring of threatened forest types, such as deciduous and wet forests.

Social Contributions

The potential social contributions of FC can be summarized as follows:

- » better working and living conditions for workers and their families;
- » more inclusive and better governed institutions for negotiations between local populations and logging companies;
- » helps leverage financial resources for local communities by timber companies through the creation of mechanisms for providing financial or in-kind support to local communities for various purposes, including consultation, capacity-building and economic development;
- » better managed and more effective benefit-sharing mechanisms;

- » leads to formal agreements between forest companies and local communities, leading to verification that their interests and concerns are incorporated into the management plan of the certified forests;
- » helps strengthen consultation processes, which is important both at the political level, where communities wish to directly influence the nature and scope of resource management on their traditional territories, and the operational level, where communities wish to have their resource needs respected and protected;
- » helps raise awareness of issues of local communities within forest companies;
- » innovative ways of dealing with problems related to infringement of customary uses;
- » raising the awareness and morale of company employees;
- » increased stakeholder involvement in SFM and FC;
- » promotion of new institutional roles, i.e. orderly mechanisms for other groups, and governments, to play their legitimate roles, with the incentive to play these roles to a high standard and cost-effectively;
- » addressing the public's environmental and social concerns in forest management;
- » balancing the objectives of forest owners, other stakeholders and society;
- » empowering the poor and less favoured;
- » poverty alleviation;
- » community participation;
- » improved health and safety, rights and living conditions of employees (and their families);
- » assisted in the protection of sites of special cultural, ecological, economic or religious significance to local communities;
- » helped structure internal policies of forest companies in the area of relations with local communities through better identification of the roles and responsibilities of their employees with regards to local communities, formalize certain relationships with local communities and strengthen their policies related to local communities.
- » increased control over forest management and involvement in decision making;
- » greater protection of NTFPs;
- » potential for economic benefit and capacity building for local communities;
- » improved relationship of local communities with the forest industry;
- » acts to reduce social conflict in and around certified forests;

- » helps in securing land tenure and usufruct rights (in certified community forests);
- » has given a greater voice to indigenous groups who have been historically left out of the forest debate;
- » creating space for broad participation and continuous adaptation in forest management/conservation efforts;
- » brought together industry, the environment community and local community in an unprecedented way;
- » companies, communities and forest landowners have reinvented their businesses, enhanced their products and established new partnerships;
- » significant social improvements in Germany, Latvia, Russia, Sweden and the United Kingdom, e.g. (i) improvement across all six countries in the implementation of health and safety legislation, including the provision of better equipment and training, use of safety procedures and reliance on properly qualified forest workers; (ii) public safety has also improved through the implementation of risk assessments and better signage of work zones; (iii) improved the social conditions for forest workers, e.g. favoring employment of local people; (iv) formal job training has increased, leading to better compliance with social/legal requirements; (v) avoided evasion of social contributions and employment rights; and, (vi) rural development has been strengthened through the involvement, and participation of neighbors, local stakeholders and communities in forest planning improved the social conditions;
- » for forest workers through the implementation of health and safety legislation and favoring employment of local people;
- » more equitable sharing of benefits; and,
- » contribution to sustainable poverty alleviation.

Cross-Cutting

The potential contributions of FC, which are cross-cutting the economic, social and environmental benefits, can be summarized as follows:

- » help promote SFM more generally through dialogue between the private sector, government bodies, NGOs and civil society;
- » create a climate of change for policy and legislative reform;
- » incentive to harmonize forest management standards between countries and to improve coordination of decision-making by defining a focus for SFM;
- » enhancing capacity for RFM;
- » enhanced effectiveness and efficiency of forest managers;
- » contribution to policy reform since adequate policy and legislation need to be in place to assist certification;

- » development of new skills and capacities since SFM requires new skills for stakeholders in almost all forests and new capacities for organizations involved in forestry;
- » contribution to foresters' professional development;
- » educate and raise the awareness of consumers and the public;
- » improve the company's governmental and political influence;
- » increase the company's credibility with environmental groups;
- » gaps identified during FC may lead to more appropriate forest research and allocation of research resources;
- » enhancing better public reporting as a result of the provision of independent statements on forest condition and status: the principle of third party verification;
- » challenging existing institutional structures and assisting in their development so as to better meet today's needs by including all stakeholders and providing independent assessments of forestry activities in forests; and,
- » enhancing better international coordination required to address many forest problems as well as for forest monitoring, international accountability and harmonized standards for SFM if and when certification gains international recognition.

CHAPTER 10

STATUS OF FOREST CERTIFICATION IN AFRICA

Africa is characterised by extremely diverse ecological conditions, ranging from humid forests to deserts and from mountain temperate forests to coastal mangrove swamps. Superimposed on this ecological diversity are varying degrees of human interaction, which are shaped by political and institutional arrangements, economic conditions, social and cultural settings. These mixes of factors result in a dynamic landscape mosaic (FAO, 2003, 2014; Barklund and Teketay, 2004; Njuki et al., 2004; Kowero et al., 2009). Africa also harbours the second largest bloc of rainforest after Amazonia. It represents more than 15% (180 million ha) of tropical forests. Over 90% of the 1.2 billion people living in extreme poverty depend on forests for some part of their livelihoods⁶¹. The forest resources are also a major contributor to national income of most countries in the continent, notably countries in the Congo Basin.

African forests have fulfilled and continue to fulfil critical economic, environmental, social and cultural functions (Barklund and Teketay, 2004; Njuki et al., 2004; Kowero et al., 2009; FAO, 2014). As the continent undergoes rapid political, economic and social transitions, changes that could gain momentum during the coming decades, the society-forest relationships will be redefined, altering the relative importance of the different forest functions. Currently, forests and forestry in Africa confront a number of problems, including a rapid decline in the forest cover, forest degradation, loss of biodiversity and a variety of unsustainable use that cast uncertainty on the future flow of goods and services. Hence, stakeholders at various levels are confronted with questions relating to the current and future state of forest resources and their ability to contribute to sustainable development.

Various mechanisms have been proposed and tried over the years for promoting SFM around the globe. Of these, FC has been considered as a potential tool for enhancing responsible forest management (Barklund and Teketay, 2004). Efforts to promote FC have been underway for quite some time now, and the past and ongoing FC activities by different FCSs and other organizations are presented below.

PAST AND ONGOING EFFORTS ON FOREST CERTIFICATION

Certification Schemes Engaged in Forest Certification

Two different groups have emerged over the years, which are promoting and implementing forest certification in Africa. The first group promote FM, CoC and controlled wood (CW) certification, e.g. FSC and PEFC. In FSC, ASI is responsible for checking certification body compliance with FSC's rules and procedures through a combination of field and office audits. In the case of PEFC, CBs are accredited by Comité Français d'Accréditation (COFRAC) or any other accreditation body member of European Accreditation (EA) or International Accreditation Forum (IAF) according to a specific programme, which defines the requirements that CBs have to respect concerning PEFC forest management certification, based on the ISO 17021 norm.

The following CBs have been engaged in FC in Africa: (i) Bureau Veritas (BV) (both FSC- and PEFC-accredited); (ii) Scientific Certification Systems (SCS) - doing business as SCS Global Services (both FSC- and PEFC-accredited); (iii) Smartwood (Rainforest Alliance) (FSC-accredited); (iv) Société Générale de Surveillance (SGS) (both FSC- and PEFC-accredited); (v) Quality Assurance Training (QAT) (PEFC-accredited); (vi) Woodmark Soil Association (WSA) (both FSC- and PEFC-certified) (Kalonga, 2015; Mbolo, 2015a and b; Ahimin, 2015).

The second group promoted verification of legality of timber/wood, wood products, some of which in addition to FM, CoC and CW certification, e.g. Origine et Légalité des Bois (Origin and Legality of Timber) (OLB) developed by BV, Timber Legality and Traceability Verification (TLTV) by SGS France, Verification of Legal Origin (VLO) and Verification of Legal Compliance (VLC) developed by SmartWood, the Rainforest Alliance's certification programme for forestry, and the European Union's Forest Law Enforcement Governance and Trade (EU-FLEGT) Action Plan.

Forest Stewardship Council (FSC)

FSC is one of the major organizations which pioneered FC in Africa through promoting certification of various forest types in different African countries; recruiting and endorsing FSC National Contact Persons to spearhead the process of development of standards and FC in their respective countries; establishing an African Regional Office (FSC Africa); and building the capacities of countries and stakeholders for responsible forest management.

Cognizant of the objective realities regarding SFM and certification on the ground and after careful examination of the findings and recommendations from the study it commissioned (Eba'a Atyi, 2003), FSC decided to increase its presence in Africa by appointing the first Regional Director, responsible for coordination of the project and overall FSC activities, at

the end of 2003. This was followed by the establishment of its first African Regional Office, FSC Africa, in Ghana (August 2004 - June 2009) and implementing a project entitled "*Capacity Building for Sustainable Forest Management and Forest Certification in Africa*" (Boetekees, 2002) through funding from Denmark, Netherlands and Novib (OXFAM- Netherlands) (Barklund and Teketay, 2004). The successful implementation of responsible forest management and FC entails putting the necessary capacity, i.e. skilled and competent personnel, physical and financial resources, appropriate institutional arrangements as well as a conducive policy and legislation environment, in place.

The development objective of the project implemented by FSC Africa was to secure that Africa's forests are well-managed and that the timber from them has a good access to markets in the North. It was aimed at improving forest management in a selected few countries in particular and Africa in general by creating and enabling the environment for forest certification and, thus, improving access to markets in the North without destruction of the forests and the livelihoods of communities in the region. The immediate objectives of the project were to: (i) propagate and communicate the features of responsible forest management in the African Region and the programme of FSC to encourage responsible forest management; (ii) set up participatory, multi-stakeholder working groups aimed at developing forest management standards; (iii) support the implementation of FC based on FSC-endorsed national standards for forest management developed by open, balanced, participatory and representative national working groups in the selected countries; and, (iv) improve natural resource management capacity of local communities and forest managers through training and capacity building (Boetekees, 2002; Barklund and Teketay, 2004).

The following were the major achievements of FSC Africa between 2004-2009 (Teketay, 2004-2008).

- » The first FSC Africa Regional Director was appointed and a legally incorporated FSC Africa Regional Office (FSC-ARO) was established in Ghana with a Social Officer (based in Yaoundé to cater for the Congo Basin), a bilingual (English and French) Administrative and Finance Officer, a bilingual Secretary, two security officers and fully- furnished office.
- » A study aimed at identifying all relevant stakeholders in the selected countries was carried out and reports were produced.
- » Several stakeholders' and training workshops were organized on FC in Cameroon, Côte d'Ivoire, Gabon, Ghana, Kenya, Liberia, Morocco, Republic of Congo and Zambia.
- » Communication and information tools to promote good forest management were developed.
- » The following documents were translated into French and distributed to stakeholders in Francophone Africa: (i) FSC Principles and Criteria and 18 approved FSC standards; (ii) FSC Statutes; (iii) FSC Bylaws; (iv) National Initiatives Manual (78 pages); (v) FSC Social Strategy; (vi) 10 FSC Fact Sheets; (vii) a brochure prepared for the 10th Anniversary of FSC, which provides the achievements made in the first decade of FSC's existence and operations; (viii) All entries of the FSC Website; (ix) Presentations of Different FSC Units: Policy and Standards Unit (PSU), Accreditation Business Unit (ABU)/ Accreditation Services International (ASI), Marketing and Communication Unit (MCU) and FSC Africa; and, (x) Other Documents: Generic Small Forest Standard for Africa (FSC-DIS-01-012), Draft Common Consultation Policy Document and Market Survey Questionnaire by FSC.
- » The FSC National Initiative Manual translated into French was reviewed by a French- speaking consultant because of its importance as a core document of FSC;
- » 16 FSC National Contact Persons (NCPs) were identified in Burkina Faso, Cameroon, Côte d'Ivoire, Democratic Republic of Congo (DRC), Ethiopia, Gabon, Ghana, Kenya, Morocco, Mozambique, Republic of Congo (ROC), Senegal, South Africa, Tanzania, Uganda and Zambia, and their applications were processed and endorsed by FSC.
- » FSC National Offices were modestly furnished and equipment established in Cameroon, Gabon, Ghana and ROC.
- » FSC NCPs and a few members were sponsored by FSC-ARO to participate in the 10th Anniversary of FSC and General Assemblies of FSC.
- » National Working Groups (NWGs) were established in Cameroon, Côte d'Ivoire, Gabon, Ghana, Kenya, Morocco, ROC, South Africa, Tanzania and Zambia to develop national standards and promote FSC FC.
- » National forest stewardship standards were developed by NWGs in Cameroon, Côte d'Ivoire, Gabon, Ghana, Kenya, Morocco, Mozambique, ROC, South Africa, Tanzania and Zambia and field-tested by NWGs in Cameroon, Ghana, Morocco and Mozambique.
- » The NWG in Ghana and the forest stewardship standard it developed were endorsed by FSC.

- » A Sub-Regional Working Group (SRWG) for the Congo Basin, composed of representatives from Cameroon, Central African Republic, Democratic Republic of Congo, Gabon, Republic of Congo, and other relevant stakeholders established to develop sub-regional forest stewardship standards and promote FC established.
- » Draft forest stewardship standards for the Congo Basin developed by comissioning an expert, discussed and approved by the SRWG, which was approved by FSC as FSC- STD-CB-01-2012-EN Congo Basin Regional Plantations and Natural EN: approved in April 2012.
- » Wide national, regional and international stakeholder consultations were carried out on FC in Africa.
- » Studies reported were produced on *“Forest Resources, rural communities and prospects of sustainable forest management and certification”* in Cameroon, Gabon, Ghana and Republic of Congo.
- » Many presentations were made during national, regional and international workshops/ meetings in different African countries and elsewhere on status of FC and the FSC FCS in Africa.
- » A report entitled *“Forest certification: a potential tool to promote sustainable forest management in Africa”* (Barklund and Teketay, 2004) was prepared for the project *“Lessons Learnt on Sustainable Forest Management in Africa”*, jointly implemented by KSLA, AFORNET/ AAS and FAO.
- » FSC-ARO participated and contributed actively as a member of the *“Regional Expert Group Meeting (REGM) on developing an African Eco-labelling Scheme”* and led the Group Discussion on forest certification. A presentation on *“The Role of FSC in Promoting Responsible Forestry”* was made to the REGM and an excerpt of the presentation has been included in the brochure entitled *“Ecolabelling as a Potential Marketing Tool for African Products: An Overview of Opportunities and Challenges”*.
- » FSC-ARO participated in a GEF-supported project entitled *“improved certification schemes for sustainable tropical forest management”*, which involved Cameroon, Brazil and Mexico. The aim of this project was to develop tools and incentives to help small forest managers, communities and NTFP collectors in the tropics to identify and protect biodiversity in the forests they manage through certification, while continuing to meet their own management objectives.
- » FSC-ARO in partnership with GIZ/GTZ implemented a Public and Private Sectors Partnership Project in Cameroon (PPP-Cameroon) on *“Adaptation of Certification Approaches to Council Forests and Other Small and Medium-Sized Forest Units from Permanent Estates and Improving Their Access to International Market”*. The project was instrumental for the development of the Community SLIMF standard in Cameroon (FSC-STD-CAM-01-2010), which was approved by FSC in December 2010.
- » FSC-ARO and Svensk SkogsCertifiering AB (SSC-Forestry) undertook a joint mission to four Francophone countries - Benin, Burkina Faso, Senegal and Togo - with the main objectives of (i) finding out about the present status of forest resources and policies in the countries; (ii) meeting with different group of stakeholders in those countries and discuss how to promote RFM and FC, of especially NTFPs; (iii) explore the opinions, expectations and strategies of

different pre-selected organizations on RFM and FC, especially on the Training Programme being offered by SSC-Forestry and FSC; and, (iv) selecting training themes and next candidates for the SSC-Forestry Training Programme with the pre-selected organizations.

- » FSC-ARO organized the first ever training and meeting of FSC National Initiatives (NIs) in Africa.
- » Website for FSC Africa was designed and uploaded on to FSC website.
- » FSC-ARO participated in two sub-regional workshops, one in Addis Ababa (Ethiopia) and another one in Douala (Cameroon) on *“Lessons and the Way Forward with Sustainable Forest Management in Eastern Africa”* organized by Sustainable Management of Forests in Africa Project (Number II) in partnership with AFORNET and KSLA . A presentation on “Forest certification and FSC/FSC Africa” was made. The objectives of this workshop were to: (i) discuss the major findings from the project “Lessons learnt on sustainable forest management in Africa”; (ii) identify key issues from the lessons; and, (iii) concept notes and initiate the development of project proposals for five key issues. The workshop was instrumental in brainstorming the establishment of the **African Forest Forum (AFF)**.
- » FSC National Initiatives (now renamed National Offices) in Africa increased from four in 2004 (FSC, 2004) to 16 in 2009.
- » Number of FSC members in Africa increased from three in 2004 to 130 in 2008.
- » FSC-certified forests increased from about 1.9 million ha in six countries in 2004 (FSC, 2004) to about 5 million ha in eight countries in 2008-2010 (Blaser et al., 2011).

Unfortunately, with the termination of the project funding, the FSC-ARO had to be closed down at the end of June 2009, which also happened to coincide with the global economic crisis. This has led to the subsequent closure of the national offices established with support from the project and, also, the discontinuation of the activities initiated in the different countries.

In August 2010, the second Regional Director was appointed and FSC-ARO was re-opened in Cameroon (Hakizumwami, 2011). The major achievements 2010-2012 included:

- » awareness created for key actors, including decision makers to create conditions for government support to the promotion of responsible forestry;
- » capacity buildt for key actors (auditors, logging companies staff, public administration staff, local NGOs, individual experts, etc.);
- » market links created between producers and buyers (countries and individual companies) for FSC certified timber;
- » promotion of transparency and communication in FC;
- » frameworks of consultation and dialogue on credible FC established;
- » FSC regional forest stewardship standard developed and endorsed by FSC; SLIMF standard developed and endorsed for Cameroon; and,

- » timber legality verification standards promoted.

The second FSC Africa Regional Director left FSC and, hence, FSC-ARO had to be closed once again in 2012. However, in 2013, FSC-ARO was re-opened again with the appointment of the third FSC Africa Regional Director, this time in Johannesburg, South Africa, and two Sub-Regional Coordination Offices for the Congo Basin and East Africa based in Brazzaville, Republic of Congo, and Nairobi, Kenya, respectively. Following the second re-opening of FSC-ARO, the following activities have been carried out:

- » FSC East Africa Roundtable Meeting was held in Tanzania in November 2014 for three days in which 26 participants were involved with a field trip led by Kilombero Valley Teak Company (KVTC). Participants included FSC Policy Director, Regional Director Africa and East Africa sub regional coordinator, FSC members, SDG members, existing and prospective Certificate holders and the African representative from the FSC Permanent Indigenous People Committee (PIPC)⁶².
 - Updates were provided by FSC to stakeholders on progress since the 2013 roundtable held in Uganda, sharing of reflections from the FSC GA held in Spain, IGI's and the FoRCES project.
 - Standard Development Group (SDG) representatives from Uganda and Tanzania provided an update on progress and the plans for 2015.
 - The event closed off with the participants having an opportunity to identify and prioritize focus areas for 2015.
- » FSC Congo Basin Office provided assistance to the Gabon Government to plan a two- day National Workshop. All the Gabonese timber sector attended the presentations made by FSC National Standards Manager, and FSC Congo Basin Coordinator.
 - Different systems of forest management certification schemes were presented, and the Action Plan to promote forest certification in Gabon was initiated.
 - FSC Congo Basin Office will support this initiative, and work closely with the Gabonese Ministry in Charge of Forests to ensure a credible and efficient implementation of this Action Plan.
- » Four national meetings have been held in the Congo Basin, moderated and organized by FSC Congo Basin Office with the financial support of Regional Programme for Central Africa of World Wildlife Fund (WWF-CARPO). Stakeholders from Cameroon, Congo-Brazzaville, Democratic Republic of Congo and Gabon are now engaged in the development of National Standards in compliance with version 5 of our Principles and Criteria, and the final version to come of the IGIs.
- » The largest contiguous forest concession in the tropics is now FSC-certified. Industrie Forestière d'Ouessou (IFO), which operates as a subsidiary of the hardwood company Danzer in the Republic of Congo, received the FM and CoC certificates at the end of 2014, following a successful independent evaluation. The IFO concession covers 1.16 million ha. This brings the total FSC certified area to 1.7 million ha in the Republic of Congo and to 4.8 million ha in the entire Congo Basin.

- » A Policy and Standards Officer - Congo Basin, has been appointed for the Congo Basin as of January 2015. The Policy and Standards Officer is responsible for securing the quality of the development and revision of National Forest Stewardship Standards and Controlled Wood National Risk Assessments in the Congo Basin.

Programme for the Endorsement of Certification Schemes (PEFC)

As stated earlier, PEFC supported the establishment of and endorsed PAFC Gabon, and PAFC Cameroon is in the process to be endorsed by PEFC. However, there is no forest, product or service certified by PAFC Gabon or PAFC Cameroon as yet.

Other FCS Verifying Legality of Timber and Timber Products

As stated under 4.2.6, different FCSs are engaged in verifying the legality of timber and timber products originating in central and western Africa sub-regions. These FCSs are presented briefly below (see details in Mbolo, 2015a and b, and Ahimin, 2015).

The EU developed its **Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan** in 2003, which provides a number of measures to exclude illegal timber from markets, improve the supply of legal timber and increase the demand for wood products from legal sources. The two main elements of this action plan are the *EU Timber Regulation (EUTR)* and *Voluntary Partnership Agreements (VPAs)* between wood producing countries and the EU.

- » Cameroon started the negotiation of the VPA with the EU in 2003, and it was signed and ratified in 2010 and 2011, respectively. Cameroon is developing the systems needed to control, verify and license legal timber.
- » CAR signed the VPA with the EU, and is developing the systems needed to control, verify and license legal timber. It will use these systems for timber and timber products exported not only to the EU, but also to other destinations worldwide.
- » DRC, Gabon and Côte d'Ivoire are negotiating VPAs with the EU.
- » ROC has ratified a VPA with the EU, and is developing the systems needed to control, verify and license legal timber. It will use these systems to cover timber and timber products exported not only to the EU, but also to other destinations worldwide. The systems will also apply to timber and timber products sold within the country.
- » Ghana (2008) and Liberia (2011) signed and ratified VPAs and are developing the systems needed to control, verify and license legal timber.

Bureau Veritas has developed the OLB system, an international system based on a complete and strict legality requirement for traceability adapted to forest enterprises and simple and effective wood tracking (CoC), to heed client requests for an official and third-party certification on the legality of their timber. This is an exclusive service of certification by Bureau Veritas. OLB is based on a certificate for operators/forest managers and a certificate of CoC for industrialists and traders. Certificate of lawfulness of the wood is based on respect of the certification standard by forest companies. The certificate presents the provisions to meet compliance with laws regarding the management and exploitation of wood, employment and security of persons, and respect for the environment. It also widely addresses the issues of traceability of the wood in the company until the sale or primary processing. The certification of companies processing and trading wood is based on the respect of the CoC standard. The certificate presents the provisions to meet the right

to use the OLB mark on products of companies.

Bureau Veritas has certified a total area of 628,212 ha of natural forests in two companies in Côte d'Ivoire through its OLB system.

SGS's Timber-Traceability-and-Legality Verification System (TTLV) has been developed to improve traceability and forest management by using technology to trace the movement of timber and monitor financial flow. It has transformed transparency in the forest sector. Ensuring efficient control on timber movements guarantees the legality of exported or locally distributed timber, and enhanced traceability ensures that the supply chain data is 100% accurate from the forest to the point of export. By using technology to enhance forest management, one will be able to trace, track and certify timber as it grows. The significant presence of SGS in the global forest sector gives it insight into how regular auditing, continuous monitoring and independent verification of a company's wood production can enhance supply chains and sustainability. SGS solutions offer long-term improvement in the management and verification of forest information and contribute to better governance in the forest sector.

Rainforest Alliance (RA) SmartWood has developed standards and procedures for independent third-party verification that wood has been harvested and/or traded legally. RA's legality verification standards verify the legality of the wood at the forest level and ensure the traceability of legal timber at all points in the supply chain (CoC). RA offers forest product companies voluntary independent third-party verification of legal status for the sources of raw material used in their products. It originally developed its legality verification programme as a progressive, two-tiered system in which companies began with Verification of Legal Origin (VLO) and moved to Verification of Legal Compliance (VLC).

VLO verifies that timber comes from a source that the harvester has a documented legal right to harvest, pursuant to the laws and regulations of the government of the jurisdiction. Suppliers of VLO timber must follow and maintain documented CoC systems. VLC ensures that administrative requirements of permitting, planning, taxes or fees, and harvesting, as well as a broad range of applicable and relevant laws and regulations related to forestry, have been met. The difference between "legal origin" and "legal compliance" is an important one. Legal origin verification signifies that a company has met the administrative requirements of permitting, planning, taxes or fees, and harvesting in defined areas only. Legal compliance encompasses a broad range of laws on environmental protection, wildlife, water and soil conservation, harvesting codes and practices, worker health and safety, and fairness to communities.

Past and Ongoing Support Provided to Forest Certification in Africa

The various past and ongoing support provided to FC could be categorized under capacity building/training, standard development and funding (also see details in Mbololo, 2015a and b; Ahimin, 2015; Kalonga, 2015).

Through Capacity Building/Training

The FSC African Regional and Sub-Regional Offices project on "Capacity building for SFM and FC in Africa" focusing mainly on four countries - Cameroon, Gabon, Ghana and Republic of Congo - with financial support from DANIDA, DGIS and Novib (OXFAM Netherlands) has been already described under 6.1.1.1 (Teketay, 2004-2008). Moreover, FSC International Center is currently managing the FSC Smallholder Fund to support smallholder forest owners to certify their forests. A pilot project is being supported in Uganda through this fund.

In the context of implementing the “Plan Stratégique Gabon Emergent (PSGE)”, which has “to sustainably manage the Gabonese forest and position the Gabon as a leader of tropical certified wood” as one of its major objectives, Gabon organized meetings in November 2014 with technical and financial support from FSC. During these meetings, FSC has put a set of communication documents in French, English and Mandarin at the disposal of the participants, and presentations were made, particularly on the opportunities for FSC certification for small and medium-sized enterprises. At the end of the workshop, a Plan of Action for the promotion of forest certification in Gabon has been drafted. It will be finalized during the first quarter of 2015 (FSC-Congo Basin, 2015; Mbolo, 2015a).

Svensk SkogsCertifiering AB (SSC-Forestry) 63 has organized an international training programme for forest certification financed by the Swedish International Development Agency (Sida) since 1996. More than 600 certification specialists from more than 60 countries, including several African countries (about 100 from countries in the West Africa Sub-Region), have been trained by SSC-Forestry (van Hensbergen et al., 2011). FSC-ARO joined to present on FSC certification and FSC Africa’s engagement during some of these training sessions.

Over the last 10 years, **AB Training/Centre for the Modernisation of Operations (CMO)** has been involved in training over 500 FSC auditors in various ways, i.e. training of new and refresher training of FSC FM and CoC auditors as well as training in auditing techniques based on ISO STD 19011. Of these, about 75 were from Africa. In addition, over 50 courses were presented for industry and forestry students during this period, training over 1700 foresters/forestry students in the process. The training has taken place in Ghana, Liberia, Mozambique, South Africa, Tanzania, Uganda and Zimbabwe (Michal Brink, personal communication).

Bureau Veritas is implementing a training course paid for by the trainees on forest auditing each year since 2010. So far, it has trained more than 30 forest auditors in the Central Africa Sub-Region (CASR).

Smartwood (Rainforest Alliance) has performed a free programme of training for FSC auditors in the CASR since 2006. It has organized four training sessions, i.e. two in Cameroon in 2006 and 2012, one in the ROC in 2013 and one in Gabon in 2014. With an average of 15 trainees per training session, this programme has trained more than 60 and 40 FSC auditors in the Central and Western Africa Sub-Regions, respectively.

The initiative “**Centre d’Excellence Sociale (CES)**” of the NGO “The Forest Trust” (TFT), launched in 2008 for the benefit of the countries in the CASR, provides vocational training for young African graduates on the social aspects of SFM. With the educational institution based in Cameroon, the CES aims to promote excellence and improve the understanding and linkages between forestry companies and indigenous communities living in the forests of the Congo Basin, encouraging dialogue and sustainable forestry management practices. The CES offers a unique one-year programme taught in the classroom and during practical field-based training covering a broad range of social, ethnographic and forestry management topics, including participative mapping techniques, which aim to incorporate the views and rights of indigenous people living in and around forest concessions. This will not only allow indigenous communities to have a voice in the use of local resources but also will assist forest companies to work towards attaining FSC certification. With an average of 10 students per year, CES, which is an ongoing programme based in Yaoundé, Cameroon, has trained more than 40 young graduates from Central Africa.

Building and Wood Workers’ International (BWI), an international trade union engaged in the building and wood sectors, organized an international workshop entitled “*Building and*

Strengthening Capacity and Role of Trade Unions in Forest Certification Process” in Nairobi, Kenya, in 2007 (Teketay, 2008). The objectives of the workshop were to: (i) identify opportunities and challenges facing Trade Unions as social partners in FC process and how best Trade Unions’ can be involved in the process/initiative; (ii) share experiences and lessons learnt on various certification initiatives/processes so as to better the role of Trade Unions in advocating for social and labor issues in FC process; (iii) identify strategies on mechanisms for Trade Unions participation and how to engage and negotiate with other social players to ensure decent work in forestry; and, (iv) propose the way forward and action plan for Trade Union participation in FC process in Africa.

The deliberations focused on opportunities and challenges for FC, experiences from various countries and engaging social partners. At the end of the workshop, an Action Plan for the period 2007-2009 was proposed. From the closing remarks, it was evident that the forestry and wood unions in Africa need to proactively participate in the process of FC. They need to join already existing forest certification councils, committees, working groups and partner in the process with other stakeholders and actors. Their continued absence implies that workers issues will be shelved off from discussions involving the social strategy in SFM. The meeting identified the need to implement the proposed Action Plan and work towards realizing the proposed activities. An initial outcome was that the BWI representative in Kenya joined the national standard working group for that country.

In August 2010, BWI organized the Africa and Middle East Regional Strategic Planning Seminar on the theme: *“Building global solidarity for a sustainable future in construction, wood and forestry sectors”* in Tunisia. The global objective of this seminar was to formulate the BWI Regional Action Plan for the new congress period 2010-2013 based on the Global Strategy and on the specific challenges facing building and forestry workers. A presentation on *“Prospects of forest certification in strengthening Decent Work Agenda in the Congo Basin and Improving Institutional Participation in Sustainable Forest Management”* was made. At the end of the seminar the following were achieved: (i) BWI affiliates in the Africa and Middle East Region acquired common understanding of the current context influencing trade union work at the global, regional and national levels; (ii) best practices and concrete strategies were highlighted to guide BWI affiliate actions in the Region; (iii) sub-regional targets and results that contributed to the BWI Strategic Plan were generated; and, (iv) the Regional Action Plan for the congress period was developed and adapted.

The BWI organized the same training in DRC in 2008, in Cameroun in 2010 and in Gabon in 2011. Participants were mainly trade union members in the forestry sector. The main objectives of the trainings were to create awareness among forest and industry workers on FC issues and their involvement to support FC activities in the companies which employ their members.

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and International Agricultural Centre convened two regional workshops with the aim of establishing a regional network on FC. Unfortunately, the regional initiative did not progress beyond these workshops (Owino, 2003; Kalonga, 2015).

FC is included within the Convergence Plan of ***Commission des Forêts d’Afrique Centrale (COMIFAC)*** (COMIFAC, 2005). For this purpose, many programmes and projects related to FC are implemented, i.e.: (i) reflexion meeting on FC in the CASR in Douala, Cameroon (February 2009) with the financial support of BMZ, Spanish Cooperation, EU, USAID and WWF; (ii) the ongoing programme on “Promotion of certified forest exploitation” financed by the German Bank, KfW, since 2010; (iii) the ongoing programme on “Partnership for the promotion of responsible forestry in the CASR” financed by the Congo Basin Forests Partnership (CBFP); (iv) COMIFAC working-

group on forest governance established since 2013; and, (v) FAO analysis on the prospects for certification of NWFPs in the member countries of COMIFAC, with the technical support of the project GCP/RAF/398/GER, in 2006.

FSC and GIZ supported a Public-Private-Project (PPP), which has been implemented on Besso Council Forests managed in a partnership between Industrie et Production du Bois (INPROBOIS) and Société de Développement des Forêts (SODEFOR) in Côte d'Ivoire during 2007-2009. The main objective of this project was to assist Council Forests (CF) in managing the forest sustainably and apply for FSC certification. One of the key results of this project was that all the participants involved in the project recognized that it was urgent to go for FSC certification while many prerequisites were not fulfilled by the company. Finally, based on the experience acquired in implementing this Project, INPROBOIS had decided to go step-by-step and started with the OLB certification and is working toward FSC certification. A subsequent GIZ PPP project with the aim to strengthen FSC representation in the Congo Basin as well as other regions of the Global South was initiated in 2008 and promoted the first ever FSC regional standard (mentioned previously). It also financed various workshops in the region.

Through a partnership between **HCEFLCD, the Social Development Agency, WWF, UNDP and the USA Peace Corps**, the pilot project "Gestion Intégrée des Forêts du Moyen Atlas (GIFMA)" for the integrated management of forests of the Middle Atlas was initiated in Morocco through PPPs following an innovative approach based on the continuity, good governance, monitoring of procedures and certification in the management of forest areas. Launched in March 2008 by the HCEFLCD, the GIFMA project, with a budget of 3.11 million dollars (23.5 Moroccan Dirham), was implemented in Morocco. The rural municipalities of

Skoura (province of Boulemane) and Tanourdi (province of Khénifra) were selected as pilot municipalities for the establishment and validation of models of management provided by the project. A strategy of reproduction and adaptation of these models was, later advocated in other rural municipalities in the project area, over an area of more than 1 million ha, partly covering the regions of Fes-Boulmane, Meknès-Tafilalet and Taza-Al-Hoceima-Taounate.

Spreading over a period of five years, the GIFMA project aimed at the implementation of integrated management of forest ecosystems of the Middle Atlas to restore their ecological functions and contribute to sustainable socio-economic development of rural populations. The project ensured the development of participative management models, multi-functional and self-financing of forests by organizing the population into groups, and putting in place mechanisms for management of forest areas that promote the participation of local actors, the preservation of the integrity and biodiversity of the forest ecosystem, improve the silvo- pastoral productivity and erosion control. This project might contribute to the capacity building of local populations of forest areas and all the actors and stakeholders, including through the organization of training sessions for the benefit of associations, municipalities, fisheries, forest services and institutional partners, in order to assimilate, develop, reproduce and adapt these models in corridors and most vulnerable watersheds.

The **Group Chèque Déjeuner France** is a cooperative that integrates the PEFC certification to its approach of social responsibility of the company. It commits itself to the respect of the sustainable management of forests and extends in Europe and Northern Africa Sub-Region (NASR). Since 1964, the Group bases its originality on its cooperative structure and defends a model of corporate social responsibility (CSR), with the effectiveness of organizations and better living of individuals in the centre of its concerns. The Group defends and embodies proximity values, integrity, openness and efficiency. Now present in 13 European countries, including France, NASR and Turkey, it made

its international growth a major focus of its development strategy. Through the PEFC certification, the Group registered its activity in compliance with the sustainable management of forests and strengthens its CSR policy. The Group required supplies of PEFC paper from the titles printer, the National Printing House, which has itself imposed to its provider, to set up the PEFC CoC.

Through Forest Stewardship Standard Development

In parallel with the development of *African Timber Organization (ATO) PCIs, the International Tropical Timber Organization (ITTO)*, which was the first organization to propose a set of criteria and indicators for the management of tropical forests in 1992, has revised and updated this set on the basis of the experience gained in the field, and published a new set of criteria and indicators in 1998. For member countries of ATO and ITTO, the two sets of PCIs were put in coherence and validated in Yaoundé (Cameroon) in May 2003, in a text entitled “Principles, criteria and indicators of the ATO/ITTO for the

sustainable management of African natural tropical forests” (ATO/ITTO, 2003; Mbolo, 2015a). Projects were also implemented by ATO and ITTO to develop PCIs for promoting SFM in Africa, leading to the PAFC Gabon and Cameroon FCSs (see under 4.2.4).

ATO, ITTO and CIFOR: Following the Rio Summit in 1992, the ATO, which has fourteen Member countries - Cameroon, Côte d’Ivoire, Ghana, Togo, Liberia, Nigeria, CAR, DRC, Equatorial Guinea, Gabon and ROC - in cooperation with the Centre for International Forestry Research (CIFOR) developed two sets of Principles, Criteria and Indicators (PCIs) during 1995 - 2001 for the sustainable management of natural forests in Africa to be used at national and FMU levels. Field tests of these PCIs were conducted between 1995 and 1998 in Cameroon (1996), Gabon and Côte d’Ivoire (1996), and the CAR (1998). At the end of these tests, the ATO PCIs were developed consistent with the FSC Principles and Criteria and were validated in December 2000 in Libreville (Gabon).

Supported by **FSC, GTZ and UNDP**, the FSC National Initiative in Cameroon has implemented a Public-Private-Project (PPP) on Council Forests during 2007-2009. The main objective of this project was to bring Council Forests and small Forest Management Units owners to manage their forests sustainably or to certify them by FSC. One of the key results of this project was the description of the Chain of Traceability of products coming from Council Forests. A related UNEP/GEF financed project in 2008 aimed at evaluating communities’ own appreciation in Cameroon, Mexico and Brazil, of high conservation values. An outcome was the SLIMFs Standard for Cameroon, approved in 2010. This project also laid the groundwork for the subsequent FSC eco-system services project.

The **European Commission (EC)** facilitates the national effort of harmonization and political recognition of the standards of private certification schemes consistent with the requirements of the VPA/FLEGT in ROC to ensure the legality of its timber in the international market, with the technical support from the European Forest Facility (EFI). Also, with the technical support of EFI, EC facilitates the national effort of harmonization and political recognition of the standards of private certification schemes consistent with the requirements of the VPA/FLEGT in Ghana to ensure the legality of timber on the international market. Côte d’Ivoire had made the decision to engage in the VPA negotiation in September 2013. The discussion between the two parties has started, and they have planned to sign the VPA in late 2016 or early 2017.

In November and December 2014, the **FSC Sub-Regional Office in the Congo Basin** organized a series of national workshops in Cameroon, Gabon, DRC and ROC aiming at informing stakeholders on the FSC national standard development process with financial support from WWF-CARPO. In each of the above countries, an Advisory Forum and a National Working Group for the development of standards will be put in place (Mbolo, 2015a; FSC-Congo Basin, 2015).

The ATO/ITTO joint project PD 124/01 Rev.2 (M) “Promotion of sustainable management of African forests” was funded and started in 2003. This project, which is still being implemented, had supported 7 countries (Benin, Côte d’Ivoire, Ghana, Liberia, Mali, Nigeria and Togo) in the WASR and 5 CASR countries to set up at the country level a National Working Group and develop national standards for SFM both for natural forests and forest plantations.

Through Funding

The **World Wide Fund for Nature’s (WWF)** sub-regional programme offices have been supporting FC through funding and various other ways as summarized below:

- » WWF - Central Africa Forest and Trade Network (WWF-CAFTN) is implementing a programme to promote FSC in the CASR through the following activities: (i) providing financial and technical support to logging companies to process and achieve FSC certification; (ii) organizing a high level seminar on Responsible Trade of Forest Products between Spain and Countries in CASR (February 2006); (iii) organizing a guidance and information visit of the Delegation of Gabon in Northern Europe, on certification, labelling of timber and the needs of consumers, industries and European Governments (May 2006); (iv) organizing a business seminar for the promotion of responsible markets for tropical timber between the Spain and the countries of the CASR in Brazzaville (October 2007); and, (v) providing support for the assessment of the social impact of the FSC certification system in the CASR, with the technical support of CIFOR (June 2014).
- » WWF - Eastern Africa Regional Programme Office (WWF-EARPO): (i) provided funding for FC awareness to stakeholders and standard development process; (ii) supported a programme on FC in Kenya in 2005, which involved wood carving co-operative societies in the use of alternative ‘good woods’ grown in farm woodlots to relieve pressure on natural forests, which was also supported by the Man and Plants Programme of UNESCO; (iii) supported FC initiatives in Madagascar in 2000 - unfortunately, the initiative did not deliver positive outcome because few stakeholders were involved in the process, and also the private sector did not participate; (iv) through WWF-Tanzania Country Office (TCO), has taken over the FC initiative at the national level in 2006 and is supporting/facilitating the ongoing FC process in Tanzania, i.e the participation of potential stakeholders with the SDG and the IGLs and standard harmonisation processes; and, (v) through WWF-Uganda Country Office (UCO) is providing support for the SDG to participate in the IGLs and standard development processes through carrying out stakeholders’ consultations.
- » WWF - Mediterranean Programme (WWF-MedPO): facilitated the pilot initiative for the development of FSC certification in the countries of Northern Africa Sub-Region (NASR) as follows: (i) opened the debate on issues related to the management of forests and FC in these countries, through pre-assessments of forest management and the organization of workshops to communicate on the interest for the certification of cork oak forests, Argan tree and Thuya (Araar) wood in collaboration with Woodmark Soil Association (WSA) and with support from forestry institutions in Morocco and Tunisia; (ii) promoted FSC certification in Morocco to better protect biodiversity, improve the social conditions of local communities and promote

access to markets of forest products, such as cork and argan oil since 2003; (iii) promoted several projects on FC (since 2003) in collaboration with the Spanish NGO, Institut de Promotion et d'Appui au Développement (IPADE), the Moroccan chapter of the European Dialysis and Transplant Association (EDTA) and the Haut Commissariat aux Eaux et Forêts et à la Lutte contre la Désertification (HCEFLCD), including: (a) the certification project of state forests that chose Kourt Malha (province of Chefchaouen) and Ain Tamaloukt (province of Agadir) forests as pilot sites for the importance of their NWFPs, namely cork and argan oil, and since they have a management plan; and, (b) FSC pre-assessment of two forests in 2010.

- » WWF - Western Africa Regional Programme (WWF-WARPO): (i) implemented a programme to promote FSC in the Western Africa Sub-Region (WASR) through its Global Forest and Trade Network; and, (ii) conducted the following activities: (a) providing financial and technical support to logging companies to process and achieve FSC certification; (b) organizing a high level seminar on Responsible Trade of Forest Products between European countries and, mainly, Ghana and Côte d'Ivoire; and, (c) organized business a seminar for the promotion of responsible markets for tropical timber between Spain and the countries in WASR.

In 2010, **FSC Denmark** supported and facilitated the FC initiative that was started in 2006 with support from private forest companies. During this process, a Civil Society Organisation (CSO), known as AGREF, was legally instituted in 2010 as a responsible organisation for the FC process in the country. FSC Denmark did not continue with facilitation beyond 2010, resulting in slowing down of the process. However, FSC Denmark is at the moment in discussion with FSC Africa Regional Office to revive the process.

As stated above, the **COMIFAC** Convergence Plan is the institutional planning of all activities to be carried out in the Congo Basin Ecosystem. FC has been taken into consideration in this planning giving the green light to actors to implement the process. Thus, in October 2014, COMIFAC has approved the FSC-IC financing demand to support the consolidation of FSC's strategy for the Congo Basin. This institutional and financial support will enable the Sub-Regional Coordination of FSC to lead a number of actions, including the continuation of the development of new FSC national standards in four countries, viz. Cameroon, Gabon, DRC and ROC.

As stated earlier, **Support for Ecocertification of Forest Concessions in Central Africa (ECOFORAF)** has provided funding for PEFC International for its support to the revision of the Gabonese national forest certification system. ECOFORAF is an initiative funded by the French Fund for the Global Environment (FFEM) aimed at encouraging and enhancing SFM in Central Africa and extending forest certification, especially in the Congo Basin region.

The **German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)** has been providing funding for a project aimed at developing and implementing the AEM, focusing on eco-labelling of four priority sectors, namely agriculture, fisheries, forestry and tourism (see details under 4.2.3).

Official Representation of Forest Certification Schemes in Africa

FSC used different nomenclature for its representatives in the different countries around the world, i.e. FSC regional offices, NCPs or national initiatives, and NWGs in the past. FSC had NCPs in Burkina Faso, Cameroon, Côte d'Ivoire, DRC, ROC, Ethiopia, Gabon, Ghana, Kenya, Morocco, Mozambique, Senegal, South Africa, Tanzania, Uganda and Zambia.

Since 2013, FSC has been re-structured into FSC International Center, FSC regional and sub-regional offices, national offices, national representatives and national focal points. Accordingly, there is an African regional office located in Johannesburg, South Africa, two sub-regional offices located in the Brazzaville, Congo Basin, and Nairobi, Kenya, one national representative based in Brazzaville, ROC, and one national focal point based in Kampala, Uganda⁶⁵. Unfortunately, all other NCPs have been disbanded.

PAFC Gabon and Cameroon have been established as Pan-African Forest Certification Association of Gabon and Cameroonian Association of the Pan-African Forestry Certification in Libreville, Gabon, and Yaounde, Cameroon, respectively.

The day-to-day activities of the African Ecolabelling Mechanism is being implemented by a Secretariat hosted in the HQ of the African Standardization Organization in Nairobi, Kenya.

Availability, Focus and Scope of Endorsed Standards

The FSC P & C for Forest Stewardship provide an internationally recognized standard for RFM. However, any international standard for forest management needs to be adapted at a regional or national level in order to reflect the diverse legal, social and geographical conditions of forests in different parts of the world. The FSC P & C, therefore, require the addition of indicators that are adapted to regional or national conditions in order to be implemented at the FMU. The FSC P & C with a set of such indicators approved by the FSC Policy and Standards Committee (PSC) constitute an FSC Forest Stewardship Standard (FSS).

The following national forest stewardship standards⁶⁶ have been developed in Africa and endorsed by FSC:

- » Cameroon (FSC-STD-CAM-01-2012: Natural and Plantations)⁶⁷ - follows the requirements of FSC-STD-60-002 "Structure and content of forest stewardship standards" to improve consistency and transparency in certification decisions between different CBs in the Congo Basin region and thereby to enhance the credibility of the FSC certification scheme in the region as a whole.
- » Cameroon (FSC-STD-CAM-01-2010, SLIMF) - covered by diverse vegetation types and ecosystems, including forests, savannas and steppes, distributed throughout the country from north to south. It has a forest cover of 17.5 million ha. More than 100 community forests exist in the country with a total area of c. 500,000 ha.
- » CAR (FSC-STD-CAR-01-2012, Natural and Plantation) ⁶⁸ - follows the requirements of FSC-STD-60-002 "Structure and content of forest stewardship standards" to improve consistency and transparency in certification decisions between different CBs in the Congo Basin region and thereby to enhance the credibility of the FSC certification scheme in the region as a whole.
- » DRC (FSC-STD-DRC-01-2012: Natural and Plantations)⁶⁹ - applicable to all forest operations seeking FSC certification within the Congo Basin. The standard applies to the management of natural forests and plantations, managed by large enterprises for timber production. Specific indicators for each of the above forest types will be adapted at national level. The standard also takes into account small and low intensity managed operation (Community forests, NTFP management) in the Congo Basin region. These shall meet the international definition of SLIMF in order to qualify to use these indicators.

- » Gabon (FSC-STD-GAB-01-2012: Natural and Plantations) - applicable to all forest operations seeking FSC certification within the Congo Basin. The standard applies to the management of natural forests and plantations, managed by large enterprises for timber production. Specific indicators for each of the forest types will be adapted at national level. The standard also takes into account small and low intensity managed operation
- » ROC (FSC-STD-RoC-01-2012: Natural and Plantations) - sets out the required elements against which FSC accredited CBs shall evaluate FM practices within ROC.
- » Ghana (FSC-STD-GHA-01-2012, Natural and Plantations) - follows the requirements of FSC-STD-20-002 Structure and content of forest stewardship standards (November 2004) to improve consistency and transparency in certification decisions between different certification bodies in Ghana and in different parts of the world, and thereby to enhance the credibility of the FSC certification scheme as a whole.

One of the major achievements of FSC in Africa is the ***very first regional forest stewardship standard in the history of FSC*** (FSC-STD-CB-01-2012, Sub-Regional Standard), approved in 2012 for countries in the Congo Basin: Cameroon, CAR, DRC, ROC, Equatorial Guinea, Gabon.

The AEM has also developed an African (regional/continental) FSS (ARS AES 3-2014 Forestry - Sustainability and Eco-Labeling – Requirements), which has been approved by the AEM Board.

PAFC Gabon has also developed a national PEFC-endorsed standard for FM and CoC certification while PAFC Cameroon is in the process of developing its FC standard.

TTLV of SGS, OLB of Bureau Veritas and VLC of Smartwood international standards are used for the verification of legality and traceability.

Availability of Enabling Policy/Legislation Environments for Forest Certification

As described under 4.11 above, many countries in Africa have mentioned sustainable development and SFM in their constitutions without making any specific reference to FC while others, e.g. Namibia, South Africa, and Uganda have made reference to FC as a tool to promote SFM in their policies, strategies, programmes, etc.

Institutional Arrangements for Forest Certification

Apart from the official representation indicated under 6.1.3, above there are no institutional arrangements put in place to cater specifically for FC by the different countries in Africa.

Availability of Appropriate Capacities for Forest Certification

The major bottleneck in the promotion of FC is either the complete lack of or inadequate capacity for FC, suggesting the need for developing appropriate demand-driven programmes of capacity building for FC in Africa. Although specific capacities required to promote FC effectively and efficiently are either absent or inadequate, encouraging initiatives are emerging in the different sub-regions of Africa, e.g. (see details in Kalonga, 2015; Mbololo, 2015a and b; Ahimin, 2015):

- » the forest resource base, including the second largest block of rainforest globally, the Congo Basin forest - considered by some as the lung of Africa - represents a huge capacity to promote SFM and FC in Africa;
- » though not adequate, as yet, the presence and operation of FSC Africa Regional and Sub-Regional Offices, in Johannesburg and Brazzaville, respectively, FSC National Representative and Focal Point in ROC and Uganda, National Offices of PAFC Gabon and Cameroon as well as several National Working Groups affiliated to FSC, PEFC, ATO/ITTO in the different Africa countries are emerging capacities, which are and will be very instrumental to accelerate the process of FC and, thereby, SFM in the continent;
- » although the exact number is not well known, there are a number of experts trained in FC, including for auditing/assessment of forest resources for certification, in several countries in Africa;
- » though still very few, the national and sub-regional forest stewardship standards (see details under 6.1.4) , which have been developed in a few countries in Africa and endorsed both by FSC, PEFC and AEM form capacities that could be scaled-up and out to promote credible FC and SFM in Africa;
- » certified forests and products from Africa (see details under 6.1.12 and 6.1.13) provide concrete evidences that FC and SFM can be realities and accomplished successfully in Africa; they can be considered as capacities, which can result in strength and confidence to all stakeholders striving to move FC and SFM forward;
- » the increasing political will of governments in CASR, which own all the forests, for FC as well as the efforts being made by ATO and ITTO, COMIFAC and bilateral cooperations, the Conference of the Ecosystems of the Dense Humid Forests of Central Africa (CEFDHAC) and the Programme Sectoriel Forêts Environnement (PSFE) specific to Cameroon to promote and support SFM and FC;
- » the Réseau des Institutions de Formation Forestière et Environnementale d'Afrique Centrale (RIFFEAC), made up of all institutions providing training in forestry and environmental issues, is a good example to cultivate the human resources required to
- » promote SFM and FC in CASR; RIFFEAC is a group of twenty-one training institutions in CASR, which aims at developing the skills and the necessary structures for the joint and sustainable management of environmental and forest resources;
- » the Professional Masters Programme on Forest Certification and Auditing developed by the Department of Plant Biology, Faculty of Science, the University of Yaounde I in Cameroon since 2005 has been instrumental in producing professionals to promote FC;
- » though few, a number of short-term training programmes have been implemented to increase the number of qualified professionals in FC, including FM auditors, e.g. training programmes implemented by SSC - Forestry, Smartwood Rainforest Alliance, Bureau Veritas and Centre d'Excellence Sociale (CES) (see details under 6.1.2);
- » increasing development of policy tools and institutional frameworks for promoting SFM in NASR;

- » establishment of a NWG in Morocco affiliated to FSC in 2008 after a large public consultation and a final election of its members; although it has not been endorsed by FSC, its members have received training on FC by the first FSC African Regional Office and could be used as experts to spread the process in the NASR;
- » availability of legal civil society organisations, such as Associação pela Gestão Responsável das Florestas em Moçambique (AGREF) in Mozambique and the Tanzania Association for Forest Management and Products (TAFMP); and,
- » expansion of existing markets and the creation of many new European markets for North African forest products, including markets for bottle stoppers and building materials made up of cork, according to the growing demand from industrialized countries; this has resulted in attracting investment partners and financing of forest projects by potential donors. The flow of forests products from NASR to these markets requires international recognition of responsible forest management, therefore, FC.

Processes of Development of Forest Certification Standards

The processes of development of FC standards in African countries follow the internationally accepted processes as described under 4.3.2.

Need for Adapting Forest Certification Standards to Conditions in Africa

The international standards developed by the international FCSs are difficult to apply directly to promote FC in Africa since they are generic. Therefore, there is a need to adapt/align them to the specific environmental and social realities in Africa. For instance, the indicators developed by the FCSs may not be relevant or applicable in the Africa countries. The indicators and their means of verification required to implement the standards on the ground may be very specific to each country requiring their development specifically for the countries. Accordingly, the Forest Stewardship Standards being used in countries with FSC- endorsed standards, i.e Cameroon, CAR, DRC, Gabon, Ghana and ROC as well as PEFC- endorsed standard in Gabon (see under 6.1.4) have been developed through the use of international standards adapted to the objective realities of the countries and with multi- stakeholder participation and the use of country-specific indicators and means of verification (Teketay, 2008).

Engagement of Stakeholders and Government in Forest Certification

Stakeholder engagement is crucial to the success of any FCS. It is only through participation of all interested parties that a system can ensure that: (i) all information and knowledge are applied; (ii) experiences and best practices are integrated; and, (iii) stakeholder expectations are met⁷⁴.

In Ghana, as part of the development of the FSC national standard by the NWG, the government has taken a very active part. The private sector and NGOs have not been left out. Traditional chiefs played a leading role in view of their impact on land tenure and property of the country. A particular opening was made for women to boost their participation in the process (Teketay, 2007; Ahimin, 2015). In Côte d'Ivoire, where the process of developing the national FSC standard was initiated without coming to an end, the involvement of various stakeholders, including the government, was significant. For the development of standards, both for the FSC and ITTO, the governments and other stakeholders have taken a very active part through the NWGs as multi-stakeholder groups in which all stakeholders were engaged (Ahimin, 2015).

In eastern and southern Africa sub-regions, governments have been and continue to be involved in the FC process, including the development of standards informally through instituting policy and legal frameworks, which create enabling environment for FC adoption. Moreover, as stated above, Namibia, South Africa, and Uganda have formally recognised FC as a tool for SFM in their legal frameworks. Stakeholders' identification and analysis process has been in place in Kenya, Mozambique, South Africa, Tanzania and Uganda. The engagement process has brought together interested and affected parties from respective governments, private sectors, civil society and community-based organisations into the development of standards and certification. Collectively, they nominated people to participate on their behalf in the FC standards development process (Kalonga, 2015).

In terms of the development of ATO/ITTO standards, the process begins with the creation or activation of the NWG in the country through a strong awareness creation, a mapping of stakeholders involved in forest management. A stakeholder workshop is organized to inform the different actors of the initiation of the process. From this moment, the parties choose their representatives to serve in the NWG. Once the NWG is in place, it starts the process of developing such standards (Ahimin, 2015).

Types of Forests Certified and/or Undergoing Certification

So far, forests in Africa have been certified with FM certificates only through the FSC FCS. The types of certified forests in Africa include natural as well as semi-natural and plantation forests, exotic hard and soft-wood plantations, and miombo woodlands/forests (community natural forests) (FSC, 2014d; Kalonga, 2015).

Ongoing forest certification processes include (see details in Kalonga, 2015; Mbolo, 2015a):

- » 1,000 ha plantations of Pinus and Eucalyptus, owned by Wild Living Resources Conservancy (WLR), is undergoing SLIMF and group certification processes to produce certified charcoal in Malindi/Kilifi coastal area of Kenya; it underwent the main audit by WSA, FSC-accredited CB, in May 2014.;
- » some plantations, owned by Lurio Green Resources and covering a total of c. 8,000 ha, are undergoing the process of certification in Nampula province of Mozambique; an assessment was carried out by SGS, a FSC-accredited CB, in 2014;
- » several operations are undergoing the process of certification in Tanzania: (i) New Forests Company (Tanzania) Ltd., got its 2,631 ha forests pre-assessment by SGS in July 2014, and the main assessment/certification audit was planned for December 2014; (ii) Mpingo Development Initiative has planned to certify 7,600 ha more community natural forests in Kilwa, Rufiji, Tunduru and Liwale districts; (iii) community forests of about 100,000 ha are expected to be certified in Tunduru before 2017, while some initial preparations are ongoing to certify about 78,000 ha of forests in Liwale;
- » in Uganda, three private owners of small natural forests on Lake Victoria Islands in Kalangala District have been identified to pilot FSC MAP with financial support from the FSC International Smallholder Fund; the National Forestry Authority of Uganda is also in the process of certifying Kalinzu Central Forest Reserve, one of its tropical forests;

- » one forest society in Cameroon (Société Forestière et Industrielle de la Doumé = SFID Djoum) and one in Gabon (Société des Bois de Lastourville = SBL) are the process of obtaining the VLC certificate.

Areas of Forests Certified and Numbers of FM and CoC Certificates Issued

As of September 2015, the total area of forests certified by FSC in Africa is just over 7.4 million ha in 10 countries (12.5% of all countries with FSC-certified forests worldwide, but only about 4% of the total area – 184 million ha - of FSC-certified forests, and about 2.8% of the total area of PEFC-certified forests worldwide (268 million ha) (FSC, 2015; Tables 2 and 10; PEFC, 2015). The areas of certified forests (with FM certification) in Africa represent only about 1.6% when compared with the total areas of forests certified worldwide by both FSC and PEFC (452 million ha), the two FCSs that have their footprints in Africa. ROC (33%), Gabon (27.8%), South Africa (19.6%) and Cameroon (12.7%) have the four largest areas of FSC-certified forests (in descending order of areas of forest) while Ghana (0.01%) has the lowest area of FSC-certified forests in Africa (Table 10). South Africa has the highest (20 = 41.6%) while Ghana has the lowest (one = 2%) numbers of FSC FM certificates in Africa.

Table 10. FSC-certified forest areas* and numbers of forest management (FM) certificates in Africa.

Country	Area Certified (ha)		Number of FM Certificates	
	Total	Proportion (%)	Total	Proportion (%)
Cameroon	940,945	12.7	4	8.3
Gabon	2,062,494	27.8	3	6.3
Ghana	3,367	0.1	1	2.0
Mozambique	59,905	0.8	3	6.3
Namibia	137,514	1.9	4	8.3
Republic of Congo	2,443,186	33.0	3	6.3
South Africa	1,452,527	19.6	20	41.6
Swaziland	124,794	1.7	4	8.3
Tanzania	142,731	1.9	3	6.3
Uganda	38,974	0.5	3	6.3
Total	7,406,437	100.0	48	100.0

The total numbers of FM and CoC certificates issued in Africa by FSC are 48 (3.5% of total) in 10 countries (12.5% of all countries with FSC FM certificates worldwide) (Tables 2 and 10) and 168 (0.6% of total) in 12 countries (10.6% of all countries with FSC CoC certificates worldwide) (Tables 2 and 11), respectively. South Africa (104 = 61.9%), Egypt (16 = 9.5%), Cameroon (12 = 7.1%) and Gabon (11 = 6.5%) have the four highest numbers of CoC (in descending order of numbers of CoC certificates) while Mozambique, Seychelles and Tanzania (each with one = 0.6%) have the lowest numbers of CoC certificates (Table 11).

All of FM and CoC certificates in Africa have been issued by FSC (FSC, 2015) except five PEFC CoC certificate issued in Egypt (two), Morocco (one), South Africa (one) and Tunisia (one) (PEFC,

2015).

Table 11. FSC chain of custody (CoC) certificates in Africa.

Country	Number of CoC Certificates	Proportion (%)
Cameroon	12	7.1
Egypt	16	9.5
Gabon	11	6.5
Ghana	7	4.2
Morocco	5	3.0
Mozambique	1	0.6
Namibia	3	1.8
Republic of Congo	2	1.2
Seychelles	1	0.6
South Africa	104	61.9
Tanzania	1	0.6
Tunisia	5	3.0
Total	168	100.0

The only FSC-certified operations in WASR are those in Ghana, a teak plantation covering 3,367 ha. In addition, Bureau Veritas has certified a total area of 628,212 ha of natural forests through its OLB system (Ahimin, 2015). The legality of a total of 2,115,231 ha of forests have been verified through the OLB system in Cameroon so far. In Gabon, 832,305 ha have been verified through the same system up to 2013. As no certificate was renewed, the tendency of the OLB certification in Gabon has been rather downwards. This indicates

demotivation or lack of interest from economic operators. Similarly, in CAR, one company had a total of 195,500 ha certified through the OLB system in 2006. However, this certificate has not been renewed (Mbolo, 2015a).

In 2010, SODEFOR, a logging company in DRC, was certified through the VLC by the Smartwood Rainforest Alliance programme. The certificate was withdrawn a few months later due to a complaint by Greenpeace. In 2013, the VLC certificate was issued to six forest companies in Cameroon covering a total area of 685,351 ha (Mbolo, 2015a). One 20,270 ha Eucalyptus plantation was FSC-certified with FM certificate in 2008 in Morocco, a certificate that was not renewed. Since then, no more forest area has been certified by FSC or PEFC in NASR (Mbolo, 2015b).

Further details of areas of forests certified as well as numbers of FM and CoC certificates issued in the different sub-regions of Africa can be found elsewhere (Kalonga, 2015; Mbolo, 2015a and b; Ahimin, 2015).

Types of Certified Forest Products

The types of certified forest products in Africa include logs, lumber, plywood and carpets, wood and paper products, household toilet and towel paper, tissue paper and cosmetic wipes, kitchen accessories like cutting boards, furniture for children's rooms, bedrooms or living rooms, outdoor

garden furniture, wood for construction and gardens, many tools with a fist or a wooden handle, bags for markets commissions, grilling accessories, like pliers- grill or charcoal, etc. (Kalonga, 2015; Mbolo, 2015a and b).

Positive and negative lessons learnt

Positive lessons learnt from the FC processes in Africa include (see details in Barklund and Teketay, 2004; Kalonga, 2015; Mbolo, 2015a and b; Ahimin, 2015):

- » availability of considerable areas of forest resources, especially in the Congo Basin, that help to justify efforts towards FC;
- » the need for inclusion and active participation of African governments in FC since they are owners and regulators of activities related to forest resources;
- » the increasing trend of political will in several countries in Africa to promote SFM and FC;
- » FC is being used by governments in Africa, e.g. the Cameroonian Government, as a communication tool to demonstrate progress towards sustainable management of their forest heritage;
- » government institutions are becoming increasingly open to the involvement of the civil society in forest management and monitoring;
- » the positive contribution of the COMIFAC to FC and SFM in CASR;
- » a number of National Working Groups for SFM and FC have been established in some countries and are being initiated in other countries;
- » capital investment by private companies for SFM is increasing, and there is increasing interest by a number of major logging companies towards FC;
- » donor agencies interested in the forestry sector are considering FC as a positive tool for the promotion of SFM;
- » increased awareness in the domestic markets, mainly in South Africa, for forest products originating from well-managed forests;
- » foresters starting to see FC as a useful management tool that can guide them in their day-to-day operations, i.e. FC provides foresters with a way of measuring performance of their own activities, the reward being a certificate to prove that they are maintaining sustainable levels of forest management;
- » certification has brought awareness of social issues related to forestry, i.e. better communication mechanisms exist between foresters, their rural neighbours, and employees;
- » ensuring equitable sharing of economic and social benefits of well managed forests throughout the forest products value chain, e.g. material benefits for workers such as good working condition, employment of local workers with higher wages, health insurance and improved training of workers; and at community level, benefits included community-based projects, like infrastructure development, including rural roads construction, schools, health centres and water supply in the sub-regions;

- » enhanced greater international market security and higher prices for forest products to forest owners, managers and timber dealers as a market incentive (e.g. price premium) and driver of certification;
- » markets that provide reliable income to forest owners/managers and local suppliers, in addition to providing opportunities for expansion;
- » the developing process of PCIs at national level requires the participation of all stakeholders and the establishment of standard development groups, which has promoted dialogue between stakeholders; especially between the private sector, government and civil society;
- » the items discussed during the development of standards have led to the awareness of policy makers for the need to revise laws and regulations to better adapt to SFM;
- » in some countries, audits carried out in the process of FC have allowed private companies to improve their organization and their practices in the field;
- » the training given during the development process of standards and FC has strengthened the capacity of governmental departments, civil society and private operators;
- » training programmes targeting forestry professionals and stakeholders have been revised in some countries to better fit the realities of SFM or FC;
- » regulatory and institutional reforms have been undertaken in some jurisdictions to better supervise and assist the private sector;
- » the involvement of other economic sectors (agriculture, mining, infrastructure, etc.) during the process of developing standards of SFM or FC in Côte d'Ivoire has led to the awareness of the stakeholders for the development of standards for sustainable agriculture; and,
- » in Mali, actors in the mining sector have become aware of the damage caused to the environment by mining and are committed to change or modify practices to contribute to the rehabilitation of damaged sites; this commitment was made during the awareness workshop on SFM in the country.

Negative lessons learnt include:

- » the proportion of certified forests remains small in Africa (see 6.1.12) despite encouraging initiatives in several countries to promote FC, including the various training programmes on FC;
- » high transaction costs, especially for smallholder forest enterprises; hence, FC could prove to be difficult for micro-timber growers who cannot afford the costs associated with certification compliance;
- » scarcity or absence of premium prices for certified products;
- » difficulty for small scale operations to be certified due to the intensive levels of administration and management required from mostly illiterate forest managers;

- » some FC criteria are above the national standards for forest management, contributing towards resistance of forest managers to certify their operation;
- » certified forest products not required by most African domestic and some international markets;
- » the declining interest of forest companies in FC, e.g. in Gabon, due to the availability of international markets, especially in Asia, that do not require certified forest products, even leading to the failure of timber companies to renew their certificates;
- » no guarantee that certification will bring increased cost-effectiveness;
- » weak forestry institutions in the region, especially for implementing forest regulation and enforcing forest laws;
- » inadequate capacity of stakeholders in FC at various levels, including local civil society organisations, rural communities and local NGOs;
- » political instability, e.g. DRC, Liberia, Côte d'Ivoire and CAR;
- » illegal logging compromising the possibilities of promotion of FC and SFM;
- » perception of FC as being a process aimed, ultimately, at boycotting African timber products in international markets and coming under the domination of NGOs;
- » inadequate basic information about forest resources and forestry in Africa;
- » very few recognised African-based certification bodies, increasing the cost of FC; poor roads and other infrastructure in Africa making FC costly to set up and maintain; fairly corrupt environment, both public and private, undermining the possibilities to fight illegal forestry and encourage FC and SFM;
- » most training activities on the FC are more theoretical than practical;
- » the lack of national capacity for conducting audits leading to the use of external expertise, which increases the cost of FC;
- » reforms at the international level have led to the removal of FSC national initiatives since 2011; no national organization, can represent FSC; this has led to lack of motivation of FSC members in countries, which had contact persons of FSC in the past;
- » FSC members do not receive the benefits of their membership rights, such as benefiting from training, getting support from FSC for national level activities or attending some international meetings or workshops in relation to FC; this may discourage the FSC members from their active participation in the promotion of FC; and,

despite the various efforts being made by different countries and stakeholders to promote FC and SFM, deforestation still continues unabated.

Gaps, Challenges and/or Constraints

The gaps, challenges and/or constraints in the promotion of FC in Africa include (see also Kalonga, 2015; Mbolo, 2015a and b; Ahimin, 2015):

- » inadequate capacity for FC at various levels;
- » availability of only a few FC standards;
- » lack of African-based accreditation bodies to accredit CBs for FC;
- » lack of African CBs/inadequate number of locally-based accredited CBs;
- » inadequate number of forest auditors;
- » inadequate public education and awareness on FC, and its benefits remain a big challenge in Africa;
- » inadequate and unethical implementation of policy and legal framework for SFM (inadequate political will, corruption and tax evasion);
- » local markets do not make a difference between a certified and non-certified product;
- » creating and sustaining markets for certified forest products in local/national, sub-regional and international markets;
- » high initial certification costs, particularly for smallholders and inadequate awareness of and preference on certified forest products among consumer groups;
- » local and sub-regional markets and some international markets, which do not have preferential consideration for certified forest products;
- » continuation of deforestation and forest degradation unabated;
- » illegal logging in most of the forest areas in Africa;
- » corruption in the forest sector;
- » political instability, leading to insecurity that hamper the promotion of SFM and FC;
- » institutional weakness to implement policies and enforce laws, including lack of equipment and motivation of civil servants;
- » low level of information available to stakeholders in laws and regulations governing SFM in general and FC in particular;
- » inadequate capacity of stakeholders, e.g. civil society organisations, rural communities and local NGOs to monitor SFM translated by very few local or regional forest auditors;
- » perception of some stakeholders that FC is aimed to boycott African timber in international markets and under the domination of activist environmental NGOs;

- » heavy burden that forest operators, at least in the Congo Basin, are confronted with the need to process for more than one certificate, e.g. FM/CoC, OLB, TTLV, VLC and VLO, operated by CBs; the multiplication of all these FCSs has led to a war of marks and a need for clarification to consumers;
- » lack of adequate statistical data on African forest resources and the associated wood economy;
- » low level of domestic wood processing;
- » extractive character of the African forest sector with a small proportion of income reinvested in productive activities, such as processing;
- » weakness of the EUTR reflected in illegally sourced wood still being imported into Europe despite the entry into force of the EUTR in the importing countries;
- » lack of field testing of some of the FC standards being used in the Congo Basin;
- » competition between leading exporters, especially in markets of special products, e.g. Cameroon and Gabon directly competing on the same market of special plywood intended for European countries;
- » absence of certification of NTFPs;
- » rule of governments in the management of forest lands and access to forest concessions limits the evolution of the concept of FC;
- » negative publicity towards FC and FCSs since FC was seen as pressure from countries of the North, a kind of ecological interference by the northern countries on forests in the countries of the South; and,
- » difficulties to implement social requirements related to the SFM and FC.

PERCEPTIONS OF STAKEHOLDERS AND GOVERNMENTS

Different stakeholders/governments in the various sub-regions of Africa have different perceptions on FC as described below.

Eastern and Southern Africa Sub-Region

Stakeholders and governments in the eastern and southern Africa sub-regions are involved and/or plan to implement SFM practices to: (i) manage their forests sustainably and, hence, contribute to improvement of their forests' economic return and livelihoods of communities; (ii) market forest products to increase sales and prices of these products; (iii) promote good governance, which aims at stopping corruption and enhancing public awareness about the need for SFM; (iv) promote self-esteem, on the part of those contributing to forest conservation efforts and promoting corporate social responsibility; and, (v) provide access to green loans and financial mechanisms, linking into international networks with institutions like the World Bank to give increased chances of attracting operational funds for SFM, which employs FC as a management tool (Kalonga, 2015).

These responses indicated that there is a positive perception towards FC in the sub-regions, and that FC provides various advantages that may attract more participation of stakeholders/governments in the sub-regions. Despite the fact that FC gives assurance that forest management activities are environmentally appropriate, socially beneficial and economically viable, stakeholders, however, did not appreciate the voluntary regulatory role FC has in contributing to responsible management of forest resources.

Central and Western Africa Sub-Regions

The perceptions of stakeholders, including governments, on FC in the central and western Africa sub-regions are discussed below (Mbolo, 2015a; Ahimin, 2015).

Governments

In the 1990s, FC was driven by environmental NGOs (e.g. WWF, Greenpeace, Friends of the Earth and Fern) that were promoting the boycott of tropical timber in general and African timber in particular in the international markets. This was perceived by governments in central and western Africa as a process aimed, ultimately, at boycotting African timber in international markets and to be under the domination of those activist environmental NGOs. After the Brazzaville conference in 2005, FC was perceived as a tool to: (i) enhance SFM obliging forest companies to respect laws and regulations in force, giving advantage to the governments in the monitoring of this aspect of SFM; (ii) communicate worldwide efforts made by governments towards sustainable forestry and conservation of biodiversity; and, (iii) I timber in international markets.

Currently, the governments of Cameroon and ROC are implementing the accreditation of private FC schemes to enable forest enterprises access the EU market by respecting the EUTR. However, some governments are still complaining that FC is too much driven by European and International NGOs while others do not have any interest.

Forest Companies

At the beginning, like governments, forest companies perceived FC as a means used to boycott tropical and African timber in international markets. However, some have now realised that FC enables them to keep their customers, access new market niches or credits, and communicate their progress towards sustainable/responsible forestry. But most companies still find costs exorbitant, especially the implementation of social issues, e.g. construction of roads, schools, hospitals and support to local communities. All of them also find FSC standard and certification procedures too complex and, hence, difficult to implement.

Forest Workers and Trade Unions

Initially, FC was perceived by forest workers and Trade Unions as more work to enable the forest companies to sell their products to make more profits without sharing the benefits with workers. Currently, they consider FC, mainly FSC certification as “a saviour”, i.e. a tool that enhances the wellbeing of the forest worker, a process that obliges the forest companies to respect the labour code and apply the conventions of the ILO to the forest sector.

Civil Society

For the civil society, FC is the only efficient tool that will ensure sustainable management of tropical forests in general and African forests in particular. Their reasons of supporting and

promoting FC are many, e.g.: (i) reducing illegal logging; (ii) reducing corruption in the forest sector; (iii) enabling the effective participation of local communities and indigenous people in forest management; (iv) enabling the sharing of benefits from SFM; (v) enabling the respect of laws and regulations in force by forest companies; and, (vi) introduction of transparency in the forest sector. Nevertheless, the civil societies feel that FC is being undermined by CBs biased towards increasing their profits rather than enhancing credible assessment of SFM/RFM.

Certification Bodies

For the CBs, FC is a tool that will enhance the responsible management of tropical forests in general and African forests in particular. Nevertheless, they reported that the standards of FSC and PEFC are too complex and become more and more complex every day. The standards comprise too many concepts that lead to increased costs of FC in their implementation.

Northern Africa Sub-Region

In NASR stakeholders believe that FC is a tool useful for the improvement of forest planning and management, providing a transparent and credible dialogue between all interested parties in the public and private sectors, both nationally and locally. In this sub-region, mainly in Morocco, the contributions and commitment of various stakeholders, including Governments, in developing FC and standards are identified in terms of:

- » initiation of multi-actor partnerships for reflection and development of participative management, multi-functional and self-financing models for the forests of the Middle Atlas, focusing on continuity, good governance, and monitoring of certification approaches in the management of forest areas;
- » facilitation and funding from international organizations for the development of pilot FSC certification initiatives in the countries of NASR;
- » consultation and participation of local stakeholders and partners in the development and revision process of national standards, affiliated to FSC, in Morocco [mapping of stakeholders, development of national standards, establishment of FC structure (NWG) and governance mechanisms and field testing of standards];
- » technical support to the NWG in the national standards development process;
- » political support of the Government in the process of initiation, development and evaluation of the national standard;
- » technical support of national, sub-regional and international expertise for the development of the national standards;
- » scientific research to determine potential social and environmental impacts of FSC certification; and,
- » communication and information on the FC process.

MARKETS FOR CERTIFIED FOREST PRODUCTS AND SERVICES

Apart from the web-based marketing information provided by FSC (see under 4.8.1) and PEFC (see under 4.8.2), there are no adequate African marketing structures/information systems for certified forest products/services originating from all the sub-regions in Africa that can inform producers and consumer groups of the economic, environmental and social benefits of FC. In international markets where certified forest products are more accepted, there are still limited marketing information systems linking the forest owners/operators and primary producers and the traders in these markets (Kalonga et al., 2014; Kalonga, 2015). Despite several calls for separate production and trade data on certified products, consistent information on the markets for certified products is still inadequately available worldwide (see Purbawiyatna and Simula, 2008), particularly in Africa.

There are potential prospects in local/national, sub-regional, regional and international markets. Stakeholders are willing to buy timber from certified forests. Despite the fact that some big companies, government ministries, departments or agencies indicated that they were willing to buy their timber from certified forests, more awareness-raising about certified forest products is still needed. In addition, some stakeholders in the construction and furniture industry indicated that it is difficult to state the extent to which they would procure timber from certified forests, and that their decisions would depend on the market dynamics. This means that there is a training need to forest products consumer groups on the value of certified forest products so that they influence the market accordingly by changing their preferences (Kalonga, 2015).

COST OF FOREST CERTIFICATION

Certification provides a mechanism for reliable, independent verification that a particular standard has been met. However, it also costs both time and money. Certification in the forest can be a long and expensive business. It is therefore important for forest managers to be sure that it is the right decision before starting. The benefits do not come free since implementing the standard and undergoing certification add costs. In addition, some of the requirements of the standard can lead to foregone benefits for forest owners. To what extent potential benefits can be achieved in practice and how costs can be minimized will vary from one local situation to another depending upon how certification is promoted and implemented. It is important to carefully consider where expected benefits will exceed costs as these are the situations in which certification is most likely to be appropriate (Upton and Bass, 1995; Nussbaum and Simula, 2005).

Costs of certification can be divided into direct and indirect costs. The main direct costs are the costs of forest management certification and CoC certification (Upton and Bass, 1995; Nussbaum and Simula, 2005). These costs are often relatively higher for tropical forests than temperate forests, partly because many certifiers are located in temperate countries and partly because tropical forests are complex, both ecologically and socially. Costs are also relatively higher for small organizations than for large ones. Indirect costs are those related to compliance with the standard, which involves upgrading forest management and/or the wood processing systems in order to meet the requirements of the certification standard. Such efforts can be relatively minimal in cases where forest management was already good enough before certification, which is the case in many temperate situations. In contrast, the indirect costs of FC become very high if the company does not practice good forest stewardship, as is the case in many forest concessions in tropical countries.

The costs of CoC certification depend upon the management system of the enterprise, particularly control measures and records. Many timber processing companies produce both certified and non-certified products, which implies additional costs related to the separation of the two types of raw materials and products. Some internationally operating companies are certified under two international systems (e.g. FSC or PEFC), which also has an impact upon the costs. However, the cost of CoC certification is generally only a fraction of the cost of forest management certification.

In general, certification costs tend to be much greater for primary producers than for processors, while the benefits of certification, which relate primarily to market access, tend to be reaped by actors further down the supply chain. Therefore, at present, the main financial winners from FC appear to be processors and retailers rather than forest owners or managers. This may be one of the barriers preventing a more rapid and extensive uptake of certification and suggests that, in the absence of other incentives for forest managers, lack of direct financial benefits may continue to act as a disincentive.

Implementation of group certification, FSC's SLIMF standard and modular approach is a means to reduce the cost of certification, especially useful for small operations.

The costs of FC are the main financial difficulties of FC in general. The high costs associated with FC in general and FSC certification in particular are due to many factors, including difficulties to implement social requirements related to SFM, lack of African CBs and FC auditors, poor infrastructure, complexity of FC standards and the behaviour of CBs. More attention needs to be paid to the last point. The multiplication of FCSs multiplies audits to the same companies, increasing the costs of FC. Small forest management units (community forests, for instance) generating little income and low levels of harvests, thus, see their capacity and ability to fulfill the requirements for the FC procedures and process drastically reduced. The case of the FSC scheme is typical with several concepts, and complex standards and procedures, e.g. Intact Forest Landscapes, Free, Prior, and Informed Consent (FPIC) and HCVF, among others (Mbolo, 2015a and b, Ahimin, 2015).

SWOT ANALYSES OF PAST AND ONGOING EFFORTS ON FOREST CERTIFICATION

The strengths, weaknesses, opportunities and threats of past and ongoing efforts in FC are described below (Barklund and Teketay, 2004; Kalonga, 2015; Mbolo, 2015a and b; Ahimin, 2015).

Strengths

- » FC is an internationally recognised, independently verified procedure for ensuring that forests are sustainably managed without compromising forest ecosystem services, social issues are adequately considered and benefits are equitably shared.
- » Substantial forest areas and resources for certification, including the second largest contiguous block of tropical rainforest in the world, on which many people depend for their livelihoods.
- » Presence of policy and legal frameworks that support FC.
- » Availability of international markets, especially European markets, and increasing demand for certified African forest products.
- » Availability of price premiums for some certified forest products.

- » Increased revenue to governments as more taxes are paid (i.e. no bribes and tax evasion) due to good forest governance as a result of FC.
- » The main global FCSs, e.g. FSC and PEFC, and other private FCSs are taking root.
- » Though few still, the existence of a young generation of trainees in forest management and certification.
- » More enterprises are applying for FSC certification. Open and transparent process in FC
- » Balanced participation of actors in the FC processes.
- » Consensus decision-making by all relevant stakeholders.
- » Processes of FC recognized as credible since they are also supported by large international NGOs.
- » Image enhancement for certified enterprises.
- » Large and wellspread forest plantations in some countries.
- » Existence of real awareness and well-trained staff in the forestry sector in some countries.
- » The active participation of the governments in the promotion of FC, e.g. Morocco.

Weaknesses

- » FC initiatives are not sustainable due to inadequate appropriate capacity for FC (human, physical and financial resources).
- » Absence of locally-based accreditation and certification bodies
- » FC has inadequate capacity on how to audit and certify ecosystem services (e.g. carbon, biodiversity, water catchment, etc.).
- » Lack of National/Sub-Regional FC Standards.
- » No Market and Market Information Systems in place for certified forest products.
- » Inadequate and unethical implementation of policy and legal Frameworks (FLEG).
- » High expectation for unrealistic high price premiums.
- » FC initiatives for smallholder private and community forests are dependent on donor funding.
- » With no government involvement allowed by the FSC statutes, there is inadequate government participation in FC. In turn, this causes limited FC of public forests, restricting impact of FC since in many countries forests are owned and/or managed by governments and/or agencies of governments.

- » While individual certification works well for most medium- and large-sized enterprises, it can be a major challenge for small enterprises, whether these are small forest owners or small-scale producers of wood products since they do not have the economies of scale that their larger competitors have.
- » Certified forest products from Africa represent a very small proportion of certified forest products in global markets.
- » Demotivation of forest operators due to the complexity of FC's standards and procedures.
- » Processes of FC are voluntary and market-oriented with no legal requirements.
- » Lack of awareness on FC in some countries.
- » Restructuring of FSC that led to the abolishment of FSC national initiatives and disbanding the established FSC affiliated NWGs.
- » Ignorance of consumers on certified forest products in the markets. Certification of NTFPs is either lacking or not adequate.

Opportunities

- » There are some initiatives for FC such as the presence of SDGs in some countries for development of agreed standards for credible public assurance for SFM.
- » Donor agencies interested in the forestry sector see FC as a positive tool for the promotion of SFM.
- » Increasing interest by a number of private forest companies towards FC for SFM.
- » Presence of FSC regional and sub-regional offices as well as national representatives and focal points.
- » Political will to promote FC, e.g. Uganda.
- » Increased awareness in the domestic markets, mainly in Uganda, for forest products originating from well-managed forests.
- » FC opens up for international markets.
- » FSC Policy and Standard Unit provides support to SDGs.
- » Availability of untapped local, sub-regional, regional and international markets for certified forest products from Africa.
- » Increasing awareness in the domestic markets, mainly in South Africa, for green products.
- » National ATO/ITTO standards/PCIs and audit manual for SFM of African natural and plantation forests strengthen forest policies and legislation in ATO/ITTO member countries and form a good basis to help companies make decision on FC.

- » Better organization of certified companies in the forest and in the factories leading to lower production costs – increased effectiveness and efficiency.
- » Recognition of certified forest products from Africa in European markets through due diligence.
- » Signature of VPA by some countries with the EU, creating favorable conditions for forest certification.
- » Strengthening or revision of forest laws in the direction of better forest management.
- » Possibility of certification of ecosystem services increasing returns from certified forests.

Threats

- » Limited funds for FC initiatives.
- » Inadequate local, sub-regional, regional and international markets for certified forest products.
- » No reliable/guaranteed price premiums.
- » High costs of certification.
- » Increased costs of FM and production.
- » Markets of certified forest products strongly dependent on international markets.
- » Inadequate capacity of governments, civil society organisations and local ENGOs to monitor SFM.
- » International markets that do not require certified forest products.
- » Expectations of a price premium for certified forest products not realized, except for a few niche products and markets. In the absence of a price premium, certification is considered not only as a barrier to markets wishing to source certified products but also demotivates forest managers to certify their forests.
- » Cost of forest certification, especially for smallholder private owners and communities.
- » FC processes perceived as coming from outside of Africa.
- » Existence of a large market and alternatives for non-certified products.
- » VPA signed or under negotiation with the EU leading to a decline in interest for private certification.
- » Certification Bodies exclusively from outside Africa.
- » Bad campaigns on the credibility of certificates.
- » Financial crisis on the international timber market.

- » Reduction in the timber market from natural forests and strong increasing of plantation timber market.
- » Domestic markets of wood (not demanding certification) increasingly growing.
- » Risk of bad publicity for companies in case of withdrawal of the certificate despite the huge resources involved for certification.
- » Recurring droughts, which amplify the phenomenon of desertification of woodlands in NASR.
- » Imbalance and competition among the different uses of forest resources associated with the overlap of rights and titles on the forest resources in NASR.

COUNTRIES THAT NEED SUPPORT IN STANDARD DEVELOPMENT

Studies carried out in the different sub-regions of Africa indicate that there are initiatives of FC and/or FSS development in different countries, i.e. in Cameroon, CAR, Gabon, DRC and ROC in CASR (Mbolo, 2015a), in Kenya, Madagascar, Mozambique, Tanzania and Uganda in EASR, in Namibia, South Africa, Swaziland, Zambia and Zimbabwe in SASR (Kalonga, 2015), in Egypt, Morocco and Tunisia in NASR (Mbolo, 2015b), and in Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo in WASR (Ahimin, 2015).

As discussed under 4.3 above, the processes involved in the development of FSSs are very complex and require appropriate technical skills as well as long periods for completion. As a result, the decision to develop national FSSs should be taken by stakeholders in the African countries. In other words, the development of national FSSs should be demand-driven. Hence, interested parties, including AFF, and development partners that are willing to support the development and implementation of national FSSs should approach and work with national stakeholders and in close collaboration with national, regional and international FCSs, namely FSC, PEFC, AEM, PAFC Gabon and Cameroon as well as those that are engaged in the verification of legality of timber, e.g. Bureau Veritas, SGS, SmartWood and EU.

CHAPTER 11

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Forest and woodland resources and trees outside forests play critical roles in providing goods and services necessary for the well-being of both humans and animals. For instance, they serve as sources of food, beverages, animal feed, timber/wood used for various purposes, fuelwood, charcoal, medicine, honey, spices, gums and resins, other non-timber forest/woodland products, tourism, etc. They have also cultural and spiritual values as well as being environmentally important. They play significant roles in carbon sequestration (adaptation and mitigation of climate change), soil and water conservation, watershed protection, nutrient recycling, nitrogen fixation, amenity and recreation, creation of amenable microclimate, gene conservation, and as habitat and breeding ground for wild animals.

Despite the critical importance of forest resources, which has been re-affirmed empirically by FAO (FAO, 2014), and the agreed international plan to implement the four global objectives on forests, the global rate of deforestation is still alarmingly high in many parts of the world, and the Millennium Development Goals (MDG) indicator on forests has not been achieved. Over the last several decades, forest resources have been faced with different problems, which prevented them to realize their potential contribution to economic and social development as well as environmental conservation. The most significant include reduction of forest area and quality, the environmental degradation of forest areas, the loss of biodiversity, the loss of cultural assets and knowledge, the loss of livelihoods of forest-dependent people and climate change.

Similar to other parts of the world, various factors have affected the forest sector in Africa (Njuki et al., 2004; Kowero et al., 2009). These range from demographic factors to institutional, climatic, societal and political factors. Because of the complexity of these factors, leading to economic, political and social problems, it has been difficult to achieve SFM in Africa. This is due to many factors: e.g. poverty, leading to high dependence of local communities on forests for livelihoods and basic goods and services, such as wood fuel, fodder, NWFPs and as potential expansion land for agriculture; illegal logging; exploitation of forests usually by large foreign companies holding concessions; lack of funds and technical know-how to implement sustainable forest projects by African governments; as well as destruction of forests to pave the way for commercial agriculture, irrigation projects and infrastructure development.

As the problems of deforestation and forest degradation continued unabated, public concern for the environment in general and forest and woodland resources in particular has grown remarkably during the last few decades, both in developed and developing countries. As a result, environmental issues are beginning to take more center stage in global economic and trade policies. The emergence of forest certification, a process that attempts to provide an indicator of how well a product is environmentally appropriate, socially beneficial and economically viable, is a contemporary example of a market-driven mechanism, giving consumers the opportunity to use their purchasing power to promote environmentally friendly and socially beneficial products.

These forest problems triggered global concern, especially over the last two decades, since, as pressures increased on remaining forest areas, conflicts emerged between stakeholders, i.e. those who live in forests, forest industries, governments and the public at large who depend in different ways on the environmental, social and economic benefits provided by forests. Over the years, two main policy approaches have been adopted, i.e. top-down and bottom-up, to manage forest resources. However, the failure of both these approaches has led to the emergence of the third approach, the FC. This new approach introduces policy changes through commercial rather than central or local power and uses market acceptance rather than regulatory compliance as an enforcement mechanism. FC is the process of inspecting particular forests or woodlands to see if they are being managed according to an agreed set of standards. It involves assessing the quality of forest management in relation to a set of predetermined principles, criteria as well as indicators and their means of verification. FC also gives consumers a credible guarantee that the product comes from forests which are managed in environmentally responsible, socially beneficial and economically viable ways.

Concerned about the accelerating deforestation, environmental degradation and social exclusion, a group of timber users, traders and representatives of environmental and human rights organizations met in California in 1990. This diverse group highlighted the need for a system that could credibly identify well-managed forests as the sources of responsibly produced wood products. The concept of FSC and the name were coined at this meeting. Therefore FC started with the establishment of FSC in 1993 with a definitive set of Principles and Criteria as well as the Statutes agreed and approved by the Founding Members in 1994.

Following the establishment of FSC, PEFC and several other international, regional and national FCSs emerged. Of all FCSs that have evolved over time, FSC and PEFC are the only international FCSs that have made their footprints in Africa. AEM is being developed as a regional FCS while PAFC Gabon and Cameroon are being developed as national FCS. Four types of certificates have been introduced by the FCSs, namely FM, CoC and CW, and certificates verifying legality of timber are also being issued in Africa.

FC is carried out by CBs, and the actual steps involved in the process of FC include submission of an application by forest operator/owner to the FCS followed by scoping visit, document review, field assessment, peer review, certification, labelling and periodic review by the FCS. As of 2014, FSC and PEFC have certified 183 and 263 million ha of forests globally, respectively. Of these, the total area of forests certified by FSC in Africa is c. 5.7 million ha in just 10 countries. Of these, Gabon, South Africa and Cameroon have the three largest areas of FSC-certified forests (in descending order of areas of forest) while Ghana has the lowest. South Africa has the highest while Ghana and ROC have the lowest numbers of FSC FM certificates in Africa.

The total numbers of FM and CoC certificates issued in Africa by FSC are 48 in 10 countries and 168 in 12 countries, respectively. South Africa, Cameroon and Egypt have the three highest numbers of CoC (in descending order of numbers) while Mozambique, ROC, Seychelles and Tanzania have the lowest numbers. Almost all CoC certificates in Africa have been issued by FSC while only one PEFC CoC certificate has been issued in one country, Morocco. So far, only FSC has issued FM, CoC and CW certificates in Africa (except the one CoC certificate issued in Morocco by PEFC). A total of 3.6 million ha and close to 700 000 ha of natural forests have been certified in Africa through the OLB and VLC legal verification systems, respectively.

Different organizations have provided/are providing support to FC in Africa, which could be categorized under: (i) capacity building/training - FSC African Regional and Sub-Regional Offices, and International Center, Svensk SkogsCertifiering AB (SSC-Forestry), AB Training/Centre

for the Modernisation of Operations, Bureau Veritas, Smartwood (Rainforest Alliance), Centre d'Excellence Sociale, Building and Wood Workers' International, the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), Commission des Forêts d'Afrique Centrale, FSC, HCEFLCD, Social Development Agency, World Wide Fund for Nature (WWF), United Nations Development Programme (UNDP) and the US Peace Corps as well as Group Chèque Déjeuner France; (ii) FSS development - African Timber Organization (ATO) and International Tropical Timber Organization (ITTO), and Center for International Forestry Research (CIFOR), FSC, GIZ and UNDP, European Commission (EC), FSC Sub-Regional Office in the Congo Basin ; and, (iii) funding - WWF, FSC Denmark, COMIFAC and FSC, Support for Ecocertification of Forest Concessions in Central Africa (ECOFORAF) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) of Germany.

Despite the encouraging efforts made to promote and implement FC by various organizations in Africa, the areas of forests certified (with FM certification) represent only about 4% of the total area of FSC-certified forests worldwide and about 1.3% when compared with the total areas of forests certified globally by both FSC and PEFC. The total numbers of FM and CoC certificates issued in Africa by FSC are 3.5% and 0.6% of the total, respectively. Thus, FC has a long way to go if Africa in general and the stakeholders engaged along the value chain in the forest sector in particular are going to benefit from the successful promotion and implementation of RFM/SFM. This requires exploiting the strengths and opportunities as well as addressing the weaknesses, threats, gaps and challenges/constraints identified through putting in place the necessary capacity, which can be generally categorized under human, financial and physical resources, technical capability, an enabling policy/legislation environment, appropriate institutional arrangements as well as marketing structures and information systems for certified forest products/services.

RECOMMENDATIONS

Based on recommendations from the studies carried out in the four sub-regions (Kalonga, 2015; Mbolo, 2015a and b; Ahimin, 2015) and the study on the whole region (presented in this report), the following recommendations are proposed for the effective and efficient promotion of FC by countries and relevant stakeholders in Africa:

- » stronger commitment from governments on effective law enforcement to control illegal forest resources use through: (i) strengthening close collaboration among stakeholders for FLEG; (ii) enhancing individual and institutional capacities of officers responsible for forest resources; (iii) reviewing and instituting legal reforms that recognise the role of FC in enhancing FLEG effectiveness; and, (iv) using CBOs, CSOs and environmental NGOs to lobby government policy and decision-makers to support FC initiatives;
- » lobby to influence the policy and legal framework of countries to accommodate certified forest products in the public procurement procedures;
- » awareness-raising campaigns to all potential stakeholders and key players to increase acceptance of FC among stakeholders; SDGs could take a lead, supported by other interested and affected parties;
- » build capacities of different stakeholders involved in FC, and develop and undertake training programmes on FC in Africa;
- » introduce FC in the training curricula of education institutions, particularly higher learning institutions, i.e. universities and technical training institutions;

- » enhance the capacity and technology of forest owners/operators, smallholders, private and community forests required to implement SFM and FC;
- » empower ministries in charge of forests with optimal technical staff, financial support and equipment in the field so that they can sustainably control and survey the natural resources inside forests effectively and efficiently towards FC adoption and promotion;
- » investigate reasons for the fluctuation of certified areas and the associated numbers of FM and CoC certificates in Africa, e.g. in South Africa and the Congo Basin, and identify strategies to maintain the same over longer periods of time;
- » put in place marketing structures/systems for certified products and organize various campaigns to promote certified products in local, sub-regional and regional markets;
- » create awareness among private business companies to develop local and regional markets for certified product;
- » introduction and implementation of funding facilities for small and medium enterprises to enable smallholders to have access to finance and improve their forest operations through FC towards meeting SFM practices;
- » revive previous encouraging efforts of the FSC NIs and members in countries of Africa interested in FC, and support initiatives to expand PAFC in order to promote FC widely and sustainably;
- » integrate governments in any action promoting FC and get them involved at the beginning of the action;
- » advocate for the alleviation of procedures enabling the access of forest and forest resources to local communities and layers of society most vulnerable to tackle the issue of illegal logging;
- » advocate for better remunerations and incentives for civil servants to strengthen forestry institutions and reduce corruption in the forest sector;
- » reinforce capacities of national NGOs to better monitor implementation of SFM;
- » pursue sensitization and communication of the specific benefits that each stakeholder gains from FC in order to tackle the issue related to low communication and disinformation on FC;
- » promote the development of local or regional accredited certification bodies and forest auditors;
- » support the ongoing training programmes of forest managers and auditors implemented by members of RIFFEAC and others institutions;
- » support the development of adapted and realistic national standards reflecting national contexts;
- » support field testing of national FM certification standards in order to adapt them to socio-economic conditions and policies in force;

- » advocate and support the development of standards for the certification of NTFPs and environmental/ ecosystem services;
- » support government programmes on development of permanent structures that collect, analyze and disseminate statistics on the forest sector;
- » support government programmes improving domestic processing of wood;
- » advocate incentives for logging companies that are engaged in domestic processing of wood, e.g. reduction/exemption from tax associated with the export of processed wood;
- » promote and facilitate the adoption of FLEGT in Africa;
- » advocate for the effective application of the EUTR in countries importing wood and wood products;
- » sensitize EU markets and customers to require only certified wood and wood products;
- » conduct research on how to systematically add “premium” to certified products that will encourage forest companies to apply for FC;
- » reinforce capacities of Trade Unions to be better sensitized and accompany forest workers in companies that are processing FC;
- » conduct studies on the environmental impacts of forest operations;
- » build the capacity of forest managers to develop and implement training plans for forest workers;
- » advocate for the application of laws and regulations related to the health and safety of workers, sub-contractors and foresters in the sector;
- » conduct studies to identify and analyze species (flora and fauna), which are endemic, rare, threatened or in danger of extinction to promote their control and protection;
- » conduct studies to assess impacts of forest operations on erosion and watercourses and propose measures to control them;
- » undertake studies that can help in the definition of High Conservation Value Forest (HCVF) at national levels;
- » conduct studies on the social impact of forest operations; initiate and establish a network of FC in Africa; implement an aggressive market education programme targeting consumer groups, decision makers in government institutions and departments as well as private institutions and companies that use timber;
- » link certified forest owners with the international agencies who are interested in the ‘green growth and economy’ and community-based forest management (CBFM) initiatives for the conservation of natural forests; and,
- » undertake continuous cost and benefit analyses on FC in Africa.

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REFERENCES

ATO/ITTO, 2003. ATO/ITTO Principles, Criteria and Indicators for the Sustainable Management of African Natural Tropical Forests. ATO/ITTO. Libreville, Gabon, and Yokohama, Japan.

Barklund, Å. and Teketay, D., 2004. Forest certification: a potential tool to promote sustainable forest management in Africa. Report prepared for the project “Lessons Learnt on Sustainable Forest Management in Africa”. Royal Swedish Academy of Agriculture and Forestry (KSLA), African Forest Research Network (AFORNET) at the African Academy of Science and FAO (see: www.ksla.se/sv/retrieve_file.asp?n=752).

Bass, S., Thornber, K., Markopoulos, M., Roberts, S. and Grieg-Gran, M., 2001. Certification’s Impacts on Forests, Stakeholders and Supply Chains. IIED. London, UK.

Blaser, J., Sarre, A., Poore, D. and Johnson, S. 2011. Status of Tropical Forest Management 2011. ITTO Technical Series No 38. ITTO. Yokohama, Japan.

Boetekees, G., 2002. Capacity Building for Sustainable Forest Management and Forest Certification, Project Proposal. FSC International Center. Bonn, Germany.

Cashore, B., 2002. Legitimacy and the privatization of environmental governance: how non- state market-driven (NSMD) governance systems gain rule-making authority. *International Journal of Policy, Administration and Institutions* 15: 503–529.

Cashore, B., Auld, G. and Newsom, D., 2003. Forest certification (eco-labeling) programs and their policymaking authority: explaining divergence among North American and European case studies. *Forest Policy and Economics* 5: 225–247.

Cashore, B., Auld, B. and Newsom, D., 2004. *Governing Through Markets: Forest Certification and the Emergence of Non-State Authority*. Yale University Press, USA..

Cashore, B., Fred, F., Meidinger, E. and Newsom, D. (eds.), 2006a. *Confronting Sustainability: Forest Certification in Developing and Transitioning Countries*. Yale Publishing Services Center. USA.

Cashore, B., Gale, F., Meidinger, E. and Newsom, D., 2006b. Forest Certification in Developing and Transitioning Countries – Part of Sustainable Future? *Environment* 48: 1- 25.

Cerutti P.O, Lescuyer G, Tsanga R, Kassa S.N, Mapangou P.R, Mendoula, E.E, Missamba- Lola, A.P, Nasi R, Ekebil P.P.T and Yembe R.Y., 2014. Social impacts of the Forest

Stewardship Council certification: An assessment in the Congo Basin. Occasional Paper 103. CIFOR. Bogor, Indonesia.

Chan, F. 2011. The Role of Certification Body in the Product Certification Process (available at http://www.google.co.bw/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0CDAQFjAD&url=http%3A%2F%2Fwww.hkctc.gov.hk%2Fen%2Fdoc%2FRole_of_Certification_Body_in_Product_Certification_Process.pdf&ei=X0hHVc2dD435aL2hgaAH&usq=AfQjCNEdtg_RdaM9EeyAi-qEDi0sWbWA&sig2=THLEowGiOWtTzyHPHaruQ&bvm=bv.92291466,d.d24, accessed on 08-12-2014).

Chidumayo, E., Okali, D., Kowero, G. and Larwanou, M. (eds.), 2011. Climate Change and African Forest and Wildlife Resources. African Forest Forum. Nairobi, Kenya.

Collier, R., Parfitt, B. and Woollard, D. 2002. A Voice on the Land: An Indigenous Peoples' Guide to Forest Certification in Canada (<http://www.ecotrust.ca/certification/an-indigenous-peoplesguide-forest-certification-canada>, accessed on 29-03-2015).

COMIFAC, 2005. Plan de convergence pour la conservation et la gestion durable des écosystèmes forestiers d'Afrique centrale. COMIFAC. Yaounde, Cameroon.

Dillon, D., 2013. Responsibly managing European boreal forests: the benefit for birds and society. Birdlife Europe. Brussels Belgium.

Eba'a Atyi, R.E., 2003. Preparatory Study for the Launching of a Regional Office in Africa. FSC International Center. Bonn, Germany.

Eba'a Atyi, R.E., 2004. Forest Certification in Gabon. Paper presented at the Symposium on Forest Certification in Developing and Transitioning Societies: Social, Economic, and Ecological Effects. Yale School of Forestry and Environmental Studies. New Haven, Connecticut, USA.

ETFRN (European Tropical Forest Research Network), 2010. Biodiversity Conservation in Certified Forests. Tropenbos International. Wageningen, the Netherlands.

EU Standing Forestry Committee, 2010. Public Procurement of Wood and Wood-Based Products. Final Report to the Standing Forestry Committee by the Ad Hoc Working Group IV on Public Procurement of Wood and Woodbased Products 2010 (available at http://ec.europa.eu/agriculture/fore/publi/wg4-112010_en.pdf, accessed on 08-10-2014).

FERN, 2001. Behind the Logo: An environmental and social assessment of forest certification schemes. FERN. Moreton-in-Marsh, Gloucestershire, UK.

FERN, 2004. Footprint in the Forest: Current Practice and Future Challenges in Forest Certification. FERN. Moreton-in-Marsh, Gloucestershire, UK.

FAO, 2003. Forest Outlook Studies for Africa. FAO. Rome, Italy.

FAO, 2014. State of the World's Forests. FAO. Rome, Italy.

FSC, 1994a. FSC Principles and Criteria for Forest Stewardship. FSC. Oaxaca, Mexico.

FSC, 1994b. FSC Statutes. FSC. Oaxaca, Mexico.

FSC, 1998. FSC National Initiative Manual. FSC. Oaxaca, Mexico.

FSC, 2004. Ten Years of FSC (1993-2003): Looking to the Future. FSC. Bonn, Germany.

FSC, 2005a. FSC Accreditation Process for Applicant Certification Bodies (ABU-GUI-10-111). FSC. Bonn, Germany.

FSC, 2005b. FSC Policy – Modular Approach to Forest Certification (FSC-POL-10-003, 2005 EN). FSC. Bonn, Germany.

FSC, 2005c. SLIMF Eligibility Criteria (FSS-STD-01-003, Version 1-0 EN). FSC. Bonn, Germany.

FSC, 2009. Guidance on the interpretation of FSC principles and criteria to take account of small scale and low intensity (FSC-GUI-60-001 V1-0 EN). FSC. Bonn, Germany.

FSC, 2012. FSC Principles and Criteria for Forest Stewardship (FSC-STD-01-001 V5-0 EN). FSC. Bonn, Germany.

FSC, 2013. FSC Modular Approach Programme (MAP). FSC. Bonn, Germany.

FSC, 2014a. FSC Principles and Criteria for Forest Stewardship (FSC-STD-01-001 V5-1 EN). FSC. Bonn, Germany.

FSC, 2014b. The Forest Stewardship Council at 20 Years. FSC. Bonn, Germany.

FSC, 2014c. FSC Market Info Pack: An Overview of Recent Trends and Current Status of Forest Stewardship Council. FSC. Bonn, Germany.

FSC, 2014d. Global FSC Certificates: Types and Distribution. FSC. Bonn, Germany. FSC, 2015. FSC Facts & Figures. FSC. Bonn, Germany.

FSC Sweden, 2013. The Contribution of FSC Certification to Biodiversity in Swedish Forests. Report 2. FSC Sweden. Stockholm.

Hakizumwami, E., 2011. Progress of FSC certification in the Congo Basin. International Seminar on Forest Certification, Madrid.

Ham, C., 2004. Forest Certification in South Africa. Paper presented at the Symposium on Forest Certification in Developing and Transitioning Societies: Social, Economic, and Ecological Effects. Yale School of Forestry and Environmental Studies. New Haven, Connecticut, USA.

Hirschberger, P., 2005. The Effects of FSC-certification in Estonia, Germany, Latvia, Russia, Sweden and the United Kingdom: An analysis of Corrective Action Requests (Summary report). WWF European Forest Programme. WWF, Switzerland (<http://assets.panda.org/downloads/fscsummaryanalysisallcountries.pdf>, accessed on 29- 03-2015).

IPCC, 2007. Climate Change 2007: Synthesis Report. IPCC 4th Assessment Report. Geneva, Switzerland.

ISEAL, 2004. Code of Good Practice for Setting Social and Environmental Standards. ISEAL. Bonn, Germany.

ITTO, 2008. Developing Forest Certification: Towards Increasing the Comparability and Acceptance of Forest Certification Systems. ITTO. Yokohama, Japan.

Janisch, C., 2007. Background to Assessment and Survey of Existing Initiatives in Ecolabelling in the Africa Region. UNEP. Nairobi, Kenya.

Kaechele, K., May, P., Primmer, E. and Ludwig, G., 2011. Effectiveness of forest certification and its role in a conservation policy mix. Forest Certification: a Voluntary Instrument for Environmental Governance Special Session on 'Instrument Mixes for Biodiversity Policies'. ESEE 2011. Istanbul, Turkey.

Kalunga, S., 2015. Forest Certification in Eastern and Southern Africa. African Forest Forum. Nairobi, Kenya.

Kalunga, S.K., Kulindwa, K.A. and Mshale, B.I., 2014. Equity in Distribution of Proceeds from Forest Products from Certified Community-Based Forest Management in Kilwa District, Tanzania. Small-scale Forestry, doi 10.1007/s11842-014-9274-6: 1-17.

Karmann, M., 2014. FSC Monitoring and Evaluation Report: Context, Figures, Effects and Impacts. Public Report 2013 (revised version March 2014). FSC. Bonn, Germany.

Karmann, M. and Smith, A. (eds.), 2009. FSC reflected in scientific and professional literature: Literature study on the outcomes and impacts of FSC certification. FSC. Bonn, Germany.

Kowero, G., Njuki, J. and Nair, C.T.S., 2009. Some Drivers of Change in Forest Conditions in Africa. Discovery and Innovation (SFM Special Edition No. 1) 21: 4-11.

Lewis, R.A. and Davis, S.R., 2015. Forest certification, institutional capacity, and learning: An analysis of the impacts of the Malaysian Timber Certification Scheme. Forest Policy and Economics 52: 18–26.

Markopoulos, M., 2003. The Role of Certification in Community-Based Forest Enterprise. In: Meidinger, E. Elliott, E. and Oesten, G. (eds.), Social and Political Dimensions of Forest Certification. Verlag Remagen-Oberwinter, Germany. pp. 105-131.

Marx, A. and Cuypers, D., 2010. Forest certification as a global environmental governance tool: What is the macro-effectiveness of the Forest Stewardship Council? Regulation & Governance 4: 408-434.

Mbolo, M., 2015a. Forest Certification in Central Africa. African Forest Forum. Nairobi, Kenya.

Mbolo, M., 2015b. Forest Certification in Northern Africa. African Forest Forum. Nairobi, Kenya.

Meidinger, E. Elliott, E. and Oesten, G. (eds.), 2002. Social and Political Dimensions of Forest Certification. Verlag Remagen-Oberwinter, Germany.

Meidinger, E., Elliot, C. and Oesten, G., 2002. The fundamentals of forest certification. In Meidinger, E., Elliot C. and Oesten G. (eds.): Social and Political Dimensions of Forest Certification. Verlag Remagen-Oberwinter, Germany.

Molnar, A., 2003. Forest certification and communities: looking forward to the next decade. Forest Trends. Washington D.C., USA.

Molnar, A., 2004. Forest certification and communities. International Forestry Review 6: 173–180.

Muthoo, M.K., 2012. Forest Certification and Green Economy. *Unyasilva* 239: 17-23. Naka, K., Hammet A.L., and Stuart W.B., 2000. Forest Certification: Stakeholders, Constraints and Effects. *Local Environment* 5(4): 475–481.

NAFA (National Aboriginal Forestry Association), 1996. Assessment of the need for Aboriginal compliance with sustainable forest management and forest product certification systems. Golden Lake, Ontario, Canada (<http://www.nafaforestry.org/cert/>, accessed on 29-03-2015).

Newsom, D. and Hughell, D., 2011. The Contribution of Rainforest Alliance/FSC Certification to the Conservation of World Heritage Sites. *World Heritage Papers* 30: 46-53.

Njuki, J., Kowero, G. and Nair, C.T.S., 2004. What Shapes Forestry in Africa? A report prepared for the project “Lessons Learnt on Sustainable Forest Management in Africa”. AFORNET. Nairobi, Kenya.

Nukpezah, D., Alemagi, D., Duguma, L., Minang, P., Mbosso, C. and Tchoundjeu, Z., 2014. An Examination of Forest Certification Status among Logging Companies in Cameroon. *International Scholarly Research Notices* Volume 2014, Article ID 323014, 8 pages (<http://dx.doi.org/10.1155/2014/323014>).

Nussbaum, R. and Simula, M., 2005. *The Forest Certification Handbook* (Second Edition). Earthscan. London, UK.

Olivier, A., 2015. Forest Certification in Western Africa. African Forest Forum. Nairobi, Kenya.

Owino, F., 2003. Some Opportunities and Bottlenecks for Forest Certification in Eastern Africa. XII World Forestry Congress, 2003. Quebec City, Canada.

Ozinga, S., 2001. Behind the Logo: An Environmental and Social Assessment of Forest Certification Schemes. FERN. Brussels, Belgium (<http://www.fern.org/node/532>, accessed on 29-03-2015).

Ozinga, S., 2004. Footprints in the Forest: Current Practice and Future Challenges in Forest Certification. FERN. Brussels, Belgium (<http://www.fern.org/pubs/reports/footprints.pdf>, accessed on 29-03-2015).

PEFC, 2011. PEFC Annual Review 2011 - Moving Beyond Timber: A Review of PEFC Activities. PEFC. Geneva, Switzerland.

PEFC, 2014a. Conformity Assessment PAFC Gabonese Forest Certification Scheme. PEFC. Geneva, Switzerland.

PEFC, 2015. PEFC Global Statistics: SFM & CoC Certification. PEFC. Geneva, Switzerland. Pearce, D.W., Putz, F.E. and Vanclay, J.K., 2003. Sustainable forestry in the tropics: panacea or folly? *Forest Ecology and Management* 172: 229–247.

Peña-Claros, M., Blommerde, S. and Bongers, F., 2009a. Forest Management Certification in the Tropics: Evaluation of Its Ecological, Economic and Social Impacts. Wageningen University, The Netherlands.

Peña-Claros, M., Blommerde, S. and Bongers, F. 2009b., Assessing the progress made: an evaluation of forest management certification in the tropics. *Tropical Resource Management Papers* 95. Wageningen University, The Netherlands.

Peña-Claros, M and Bongers, F., 2010. An indirect way to evaluate the impact of certification. *ETFRN News* 51: 131-136.

Perera, P. and Vlosky, R.P., 2006. A History of Forest Certification. Louisiana Forest Products Development Center Working Paper No. 71. Louisiana State University, Baton Rouge, USA.

Purbawiyatna, A. and Simula, M., 2008. Developing forest certification: towards increasing the comparability and acceptance of forest certification systems worldwide. *ITTO Technical Series* No. 29: 1-128. ITTO. Yokohama, Japan.

Rae, J. and Godden, L., 2012. From Forest Certification to REDD+. *ETFRN News* 53: 194- 202.

Rainforest Alliance, 2007. SmartStep - A Stepwise Approach toward FSC Forest Management Certification, Program Description. Rainforest Alliance. New York, USA.

Rametsteiner, E. and Simula, M., 2003. Forest certification - an instrument to promote sustainable forest management? *Journal of Environmental Management* 67: 87-98.

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

Sheil, D., Putz, F.E. and Zagt, R.J. (eds.), 2010. Biodiversity conservation in certified forests. Tropenbos International. Wageningen, The Netherland.

Spilsbury, M.J., 2005. The sustainability of forest management: assessing the impact of CIFOR criteria and indicators research. *Impact Assessment Papers* No. 4. CIFOR. Bogor, Indonesia.

Smith, P., 2004. Inclusion before streamlining: the status of data collection on Aboriginal issues for sustainable forest management in Canada. In: Innes, J.L., Hickey, G.M. and Wilson, B. (eds.): *International Perspectives on Streamlining Local-Level Information for Sustainable Forest Management*. Canadian Forest Service Pacific Forestry Centre. Victoria, British Columbia, Canada, pp. 94–104.

Teitelbaum, S., 2009. Impacts of FSC Certification in the Canadian Boreal Forest: Exploring Partnerships between Forest Companies and Aboriginal Peoples. Rainforest Alliance. New York, USA.

Teketay, D., 2004. Capacity Building for Sustainable Forest Management and Certification in Africa: Narrative Report (01 January – 31 December 2003). FSC African Regional Office. Kumasi, Ghana.

Teketay, D., 2004-2005. Causes and consequences of dryland forest degradation in Sub- Saharan Africa. *Walia* 24: 3-20.

Teketay, D., 2005. Capacity Building for Sustainable Forest Management and Certification in Africa: Narrative Report (01 January – 31 December 2004). FSC African Regional Office. Kumasi, Ghana.

Teketay, D., 2006. Capacity Building for Sustainable Forest Management and Certification in Africa: Narrative Report (01 January – 31 December 2005). FSC African Regional Office. Kumasi, Ghana.

Teketay, D., 2007. Capacity Building for Sustainable Forest Management and Certification in Africa: Integrated Narrative and Financial Report (01 January – 31 December 2006). FSC African Regional Office. Accra, Ghana.

Teketay, D., 2008. Capacity Building for Sustainable Forest Management and Certification in Africa: Integrated Narrative and Financial Report (01 January – 31 December 2007). FSC African Regional Office. Accra, Ghana.

Teketay, D., 2012a. The African Ecolabelling Mechanism (AEM) and its Eco Mark Africa (EMA): Current Status. Presentation at the “ECOWAS Workshop on Ecolabelling”, 24 May 2012, Mensvic Grand Hotel, Accra, Ghana.

Teketay, D., 2012b. African Eco-Labeling Mechanism: Options to Promote Sustainable Consumption and Conservation. Keynote presentation during the “Think Tank Event on Eco-labelling of African Fisheries: Policy Dialogue on Eco-Labeling of African Fisheries”, 20-21 Nov. 2012, Windsor Hotel, Nairobi, Kenya.

TEREA, 2008. Gabonese Forest Certification Scheme. Gabonese Association of the Pan African Forest Certification System PAFC, Gabon, Libreville.

Thornber, K., 2002. Certification: A Discussion of Equity Issues. In: Meidinger, E. Elliott, E. and Oesten, G. (eds.): Social and Political Dimensions of Forest Certification. Verlag Remagen-Oberwinter, pp. 63-82.

Tikina, A.V., Innes, J.L., Troster, R.L. and Larson, B.C., 2010. Aboriginal peoples and forest certification: a review of the Canadian situation. *Ecology and Society* 15: 33.

Tollefson, C., 2003. Indigenous rights and forest certification in British Columbia. In: Kirton, J. and MacLaren, V. (eds.): Hard Choices, Soft Law: Voluntary Standards in Global Trade,

Environment and Social Governance. Ashgate Press, Aldershot, New Mexico USA, pp. 93-118.

UNECE/FAO, 2013. Forest Products Annual Market Review 2012-2013. UNECE/FAO. Geneva, Switzerland.

UNEP, 2008. Strategy Document of the African Eco-Labeling Mechanism (AEM). UNEP. Nairobi, Kenya.

UNESCO, 2011. Adapting to Change: The State of Conservation of World Heritage Forests in 2011. World Heritage Papers 30. UNESCO. Paris, France.

Upton, C. and Bass, S., 1995. The Forest Certification Handbook. Earthscan. London, UK.

van Hensbergen, H.J., Bengtsson, K., Miranda, M. and Dumas, I., 2011. Poverty and Forest Certification. The Forest Initiative. Stockholm, Sweden.

van Kreveld, A. and Roerhorst, I. (undated). Great Apes and Logging. WWF. Zeist, The Netherlands.

van Kuijk, M., Zagt, R.J and Putz, F.E., 2009. Effects of Certification on Forest Biodiversity. Report commissioned by Netherlands Environmental Assessment Agency (PBL). Tropenbos International. Wageningen, The Netherlands.

Vogt, K.A., Larsen, B.C., Gordon, J.C., Vogt, D.J. and Franzeres, A., 2000. Forest Certification, Roots, Causes, Challenges and Benefits. CRS Press, Boca Raton, Florida, USA.

Watts, C.M., Pile, L.S. and Straka, T.J., 2012. Sustainability and Forest Certification as a Framework for a Capstone Forest Resource Management Plans Course. Open Journal of Forestry 2: 159-166.

World Bank, 2004. Report of the Forest Investment Forum 22-23 October 2003. World Bank/PROFOR. Washington D.C., USA.

World Bank, 2013. Africa's Pulse: An analysis of issues shaping Africa's economic future. World Bank. Washington D.C., USA

Yadav, M., Kotwal, P.C. and Menaria, B.L., 2007. Forest Certification: A Tool for Sustainable Forest Management. Monograph on Forest Certification and Sustainable Forest Management. Indian Institute of Forest Management. Bhopal, India.



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