



Status of forest certification in eastern and southern Africa sub-regions

S. K. KALONGA¹, D. TEKETAY² and D. MUTTA³

¹Environment and Forest Certification (EFC) Limited, Plot No. 21, Ally Hassan Mwinyi Road, Regent Estate, Kinondoni, P.O Box 6986, Dar es Salaam, Tanzania

²Botswana University of Agriculture and Natural Resources (BUAN), Department of Crop Science and Production, Private Bag 0027, Gaborone, Botswana

³The African Forest Forum (AFF), P.O. Box 30677, Nairobi - 00100, Kenya

Corresponding author: severinkalonga@gmail.com

ABSTRACT

There is a limited awareness and capacity, and hence slow update of forest certification in Africa. The study assessed the status of Forest Certification (FC) in the Eastern and Southern Africa sub-regions. Data on the types of certificates, number and forest areas certified, and past and on-going efforts on FC in the sub-regions of Eastern and Southern Africa were gathered through literature review and stakeholders' consultation. Data were analysed using qualitative methods and A'WOT quantitative analysis, which is a combination of Analytic Hierarchy Process (AHP) and Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses. Results showed that the initiatives for promotion of FC in the sub-regions are empirically apparent but low. The forest covers in the sub-regions were around 225 and 222 million ha for the eastern and southern Africa sub-regions, respectively. For Eastern and Southern Africa, the total area certified was 242,000 ha and 1.563 million ha, respectively. Generally, the FC has not yet taken strong root in the sub-regions due to inadequate financial, physical and human capacities.

Key words: Ecosystem services, forest restoration, green growth, forest standards, forest governance, responsible forestry

RÉSUMÉ

En Afrique, la sensibilisation et les capacités sont limitées, ce qui ralentit la mise à jour de la certification forestière. La présente étude a évalué l'état de la certification forestière (CF) dans les sous-régions de l'Afrique de l'Est et de l'Ouest. Des données sur les types de certifications, le nombre et les superficies forestières certifiées, ainsi que sur les efforts passés et en cours en matière de CF dans les sous-régions de l'Afrique de l'Est et de l'Ouest ont été recueillies au moyen d'une revue de littérature et de la consultation. Les données ont été analysées à l'aide de méthodes qualitatives et d'une analyse quantitative SWOT, qui est une combinaison d'analyses de la hiérarchie analytique (AHP) et de forces, faiblesses, opportunités et menaces. Les résultats ont montré que les initiatives de promotion de la CF dans les sous-régions de l'Afrique sont empiriquement apparentes mais faibles. La couverture forestière dans les sous-régions s'élevait respectivement à 225 et 222 million d'hectares pour les sous-régions de l'Afrique de l'Est et de l'Ouest. Pour l'Afrique de l'Est et de l'Ouest, la superficie totale certifiée était de 242 000 ha et 1,563 million ha, respectivement. En général, la CF n'est pas encore solidement implantée dans les sous-

régions en raison de capacités financières, physiques et humaines inadéquates.

Mots clés: Services écosystémiques, restauration des forêts, croissance verte, normes forestières, gouvernance forestière, foresterie responsable

INTRODUCTION

Tropical forests provide a variety of valuable ecosystem services, such as biodiversity, carbon sequestration, water source protection and scenic beauty (Sell *et al.*, 2007; Gardner *et al.*, 2009; Sasaki *et al.*, 2011). The forests of Eastern and Southern Africa (EaSA), like in other parts of tropical Africa, are species rich, thereby contributing to local economies by way of timber and Non-Timber Forest Products (NTFPs), as well as numerous ecosystem services (Owino, 2003; Biggs *et al.*, 2008). They also contribute to long-term socio-economic development objectives, and play an important role, specifically in meeting the goal of ensuring environmental sustainability (Sebukeera *et al.*, 2005; Gondo, 2010). However, the capacity of these forests to continue providing ecosystem services is reduced each year by deforestation and forest degradation (Gondo, 2010), owing to uncontrolled human activities, such as logging and fires (FAO, 2006; 2010). Furthermore, a substantial and ongoing loss of forest resources is projected to escalate in Eastern and Southern Africa (Burgess and Clarke, 2000; Nair, 2006; Mwase *et al.*, 2007; Biggs *et al.*, 2008) due to ineffective sustainable forest management (SFM) practices (FAO, 2006; German *et al.*, 2010) related to poor public forest management (FAO, 2010).

The existing forests in the sub-regions still play vital ecological, economic and livelihood roles, and the respective countries have fully realised this fact, and are beginning to strengthen the management of these resources through Sustainable Forest Management practices (Owino, 2003; Gondo, 2010). However, a challenge exists in that the initiatives in place are not effectively and efficiently meeting

the primary objectives of Sustainable Forest Management (German *et al.*, 2010; Gondo, 2010). On-going Forest Certification initiatives in the sub-regions could be one of the possible tools to meet this challenge (Barklund and Teketay, 2004) so that forests continue to contribute concurrently and progressively to the vision of green growth and economy (Muthoo, 2012). Forest Certification provides forest owners and managers with independent recognition of their responsible management practices and, hence, premium price for their forest produce (Muthoo, 2012).

Forest Certification (FC) schemes emerged in 1990s as a significant and innovative avenue for standard setting and governance in the Sustainable Forest Management realm (Cashore *et al.*, 2006; Auld *et al.*, 2008). It has been strongly promoted by civil society organisations (UNEP, 2002). It resulted from public disillusionment with the failure of governments and intergovernmental bodies to improve forest management or tackle deforestation effectively, and the lack of discrimination by forest industries about the source of their products (Auld *et al.*, 2008; Marx and Cuypers, 2010). Nussbaum and Simula (2005) described Forest Certification as a process of verifying that a forest management unit (FMU) meets the requirements of a standard for forest management. The purposes of Forest Certification are to: (i) improve the social, environmental and economic quality of forest management, thereby, providing a tool to contribute to the achievement of SFM; and (ii) allow the market to reliably differentiate and purchase products coming from responsibly managed forests and provide the managers of these forests with improved market access for their products (Nussbaum and Simula, 2005).

However, inadequate capacity for Forest Certification at various levels and awareness remain among the challenges facing the promotion of Forest Certification in the sub-regions (Teketay *et al.*, 2016), and hence low uptake of the initiative. This study aimed at assessing the status of Forest Certification in Eastern and Southern African countries with a view to strengthening national capacities for Forest Certification, and to facilitating the development of Forest Certification initiatives in different eco-regions (i.e. forest types). Specifically, the study: (i) identified and analysed key elements and policies for Sustainable Forest Management and Forest Certification; (ii) identified the types and areas of forests certified and/or undergoing the processes of certification; (iii) determined the types and numbers of forest certificates issued and the consequent certified forest products and/or services; and (iv) performed a SWOT analysis of past and on-going efforts on Forest Certification in promoting forest use and trade policy while ensuring forest resources are used in a sustainable manner to meet the economic, ecological, social and cultural requirements of

the people who depend on them.

METHODOLOGY

Study Area. The study covered countries in eastern and southern African sub-regions, i.e., Kenya, Madagascar, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe (Figure 1). The extent of forest covers in the sub-regions are estimated at about 225 and 222 million ha for eastern and southern Africa, respectively (Table 1).

Review guide. Clear search strings guided by the review questions were used. A set of clear inclusion and exclusion criteria were also used. These included language (English), location (Eastern and Southern Africa) and year of publication (1990 – to date). Moreover, literature for review was searched through Google scholar, Web of Knowledge, CAB Abstract, AGRIS and institutional Websites, e.g., FSC, forest companies.

Forest types considered in the study were miombo woodlands (Figure 2), plantations and other forest types, such as wet and dry forests for

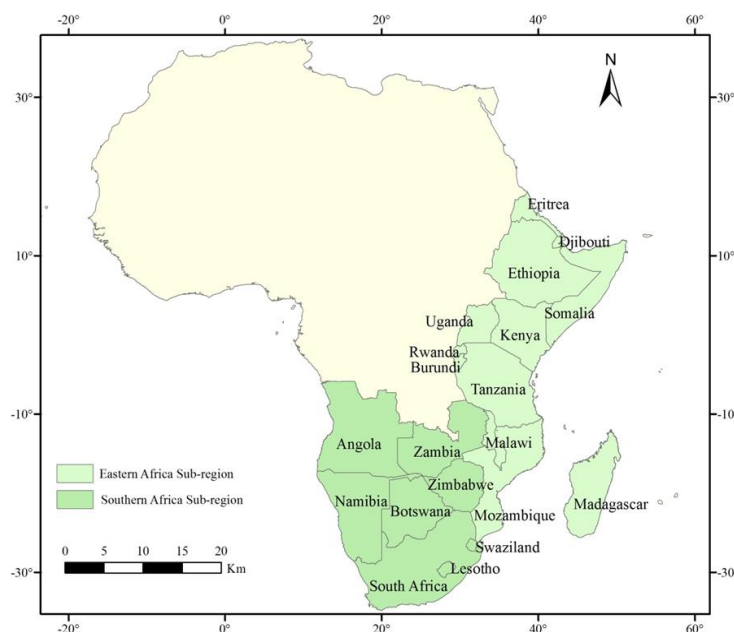


Figure 1. Map showing countries in eastern and southern African included in the study

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the respective countries. Generally, vegetation types in all these countries were dominated by woodlands, which were under similar policy and legal frameworks (e.g. forest policy and legislation) for their management, conservation and use.

The study deployed narrative review methodological approach. The type by objective was the status quo review of the Forest Certification literature. Moreover, experts, forest managers and practitioners were interviewed to share their experience and views with regards to Forest Certification in the sub-regions. Results were based on a qualitative rather than a quantitative statistical level.

Data collection. Primary and secondary data and information about the status of Forest Certification in Eastern and Southern Africa were gathered through literature review (journal papers, books, reports and website/databases of Forest Certification schemes and certified companies/entities). Other tools/approaches used were stakeholders' consultation through interviews and meetings via telephone, emails and Skype. Purposively sampling approach was used to identify stakeholders (experts, forest managers/practitioners). They were then

invited for interview and were requested to give consent for the interview. The data and information collected from interviews were used for triangulation of the facts from the literature.

Data analyses. Data and information gathered on types of certificates, number and areas certified were analysed using qualitative method. The SWOT analyses were used to identify the internal factors related to strengths and weaknesses, and external factors related to opportunities and threats of past and on-going efforts on Forest Certification in the sub-regions. The SWOT qualitative analysis was followed up with A'WOT quantitative analysis. This is a combination of Analytic Hierarchy Process (AHP) and SWOT analysis to quantify the groups and factors by weighting them (Kurttila *et al.*, 2000; Kajanus *et al.*, 2012). The weightings' scale ranged from 0.00-1.00, whereby 0.00 was lowest score and 1.00 was highest score. The qualitative information gathered from stakeholders interviews were analysed descriptively.

RESULTS AND DISCUSSION

Forest cover, distribution and certified areas in eastern and southern Africa. The extent of forest cover of eastern and southern



Figure 2. Forest Stewardship Council-certified miombo woodlands in Kilwa in Tanzania (Photo by Mpingo Conservation Development Initiative - MCDI).

Africa in September 2015 was 224,967,000 and 222,344,000 ha, respectively (Table 1). However, The FSC-certified areas for eastern and southern Africa were 242,000 and 1,563,000 ha, respectively.

At sub-regional level, the Forest Certification initiatives started in 2002 in Eastern Africa (Owino, 2003), and in 2007 in Southern Africa with the objective to facilitate, analyse and document a process by which stakeholders would formulate and agree on a regional capacity building strategy for Forest Certification promotion. Unfortunately, the

regional initiatives did not bear any promising fruits due to inadequate capacity, i.e., inadequate financial, physical and human resources, resulting in slow adoption and implementation of Forest Certification. However, there had been some successful Forest Certification initiatives at the level of individual countries since the late 1990s in the sub-regions, which have been mainly driven and supported by private forest companies (Cashore *et al.*, 2006). The southern Africa sub-region is leading in terms of forest certification because there are more forest companies compared to in eastern Africa (Table 1).

Table 1. The extent of forest cover, distribution and certified areas in eastern and southern Africa (in 1000 ha) by September 2015

Country	Forest cover	Distribution			Certified area
		Primary forests	Other naturally regenerated forests	Planted forests	
Burundi	468	156	120	192	0
Djibouti	226	0	226	0	0
Eritrea	9,013	0	9,013	0	0
Ethiopia	53,131	0	53,131	0	0
Kenya	13,778	0	13,581	197	0
Madagascar	26,939	3,036	23,488	415	0
Malawi	3,147	844	1,938	365	0
Mozambique	52,361	0	52,299	62	60
Rwanda	541	7	161	373	0
Somalia	6,363	0	6,360	3	0
Tanzania	54,044	0	53,804	240	143
Uganda	4,956	0	4,905	51	39
Total-East Africa	224,967	4,043	219,026	1,898	242
Angola	57,856	0	57,728	128	0
Botswana	45,631	0	45,631	0	0
Lesotho	145	0	135	10	0
Namibia	15,026	0	15,026	0	138
South Africa	33,799	947	31,089	1,763	1,301
Swaziland	1,082	0	942	140	125
Zambia	54,743	0	54,681	62	0
Zimbabwe	14,062	801	13,153	108	0
Total-Southern Africa	222,344	1,748	218,385	2,211	1,563

Source: FAO, 2015; FSC, 2015

Key elements and policies for SFM and Forest Certification in the sub-regions. The FSC is the only Forest Certification scheme operational in the sub-regions. The concept of Forest Certification has not yet taken strong root in all the countries of eastern and southern Africa. The status of Forest Certification initiatives observed in the sub-regions is due to individual country's efforts, which were mainly driven by private forest companies and Environmental Non-Governmental Organisations (ENGOS).

All the countries in the two sub-regions have sectoral policy and legal frameworks and institutional arrangements, which are pro-SFM. These provide an enabling environment for Forest Certification adoption and implementation in the sub-regions despite the fact that the institutions do not explicitly deal with Forest Certification legally, except Namibia, South Africa and Uganda. However, there is inadequate and unethical implementation of policy and legal frameworks for SFM, due to weak forest law enforcement and governance (FLEG), suggesting that weak FLEG was another impediment to effective adoption and implementation of Forest Certification in the sub-regions. This could be attributed to the voluntary nature of Forest Certification and the lack of legal support for Forest Certification (Mickels-Kokwe and Kokwe, 2013) in most of the countries.

There was a positive perception towards Forest Certification in the respective countries because the stakeholders and governments were involved and/or plan to implement SFM practices to manage their forests responsibly. The construction and furniture industries, as well as government ministries, departments or agencies were willing to buy timber from certified forests, in particular through the adaptation of public procurement policies geared towards purchasing certified forest products and ecosystem services. Stakeholders from countries like Tanzania

indicated that there was on-going dialogue with the government to review the procurement procedures to accommodate the sourcing of certified forest products.

Types and areas of forests certified. The total areas of FSC-certified forests in eastern and southern African showed or reflected a situation of stagnation or decline (Figures 3 - 5). In Kenya, the first forest operation of FSC was certified in 2005 (Figure 3) for a community-based agroforestry project, but the certificate was not renewed, evidently on cost grounds; and at the time of this study, there was no forest that was FSC-certified. However, there was an on-going certification process for a charcoal project by Wild Living Resources.

In Madagascar, the first forest operation was FSC-certified in 2010, and there was no operation undergoing the process of certification. In Mozambique, the first forest operation was FSC-certified in 2006, and there were some operations undergoing the process of certification with Niassa Green Resources (Figure 3).

Since the first certificate issued in 1999 in Namibia, the trend of Forest Management certified area has since been fluctuating, and in recent years it has declined, though it was still above other countries in the two sub-regions, except South Africa. In Namibia there were no forests/operations undergoing certification. The Forest Certification under the FSC system in South Africa has gone a long way, more than in other countries in both sub-regions, with the first FSC certificate having been issued in 1997. Since then, the trend of Forest Management certified area increased in South Africa more than in the other countries in the sub-regions, until 2010. Thereafter, it has been declining, though it was still above all other countries. By the time of this study, there was no forest

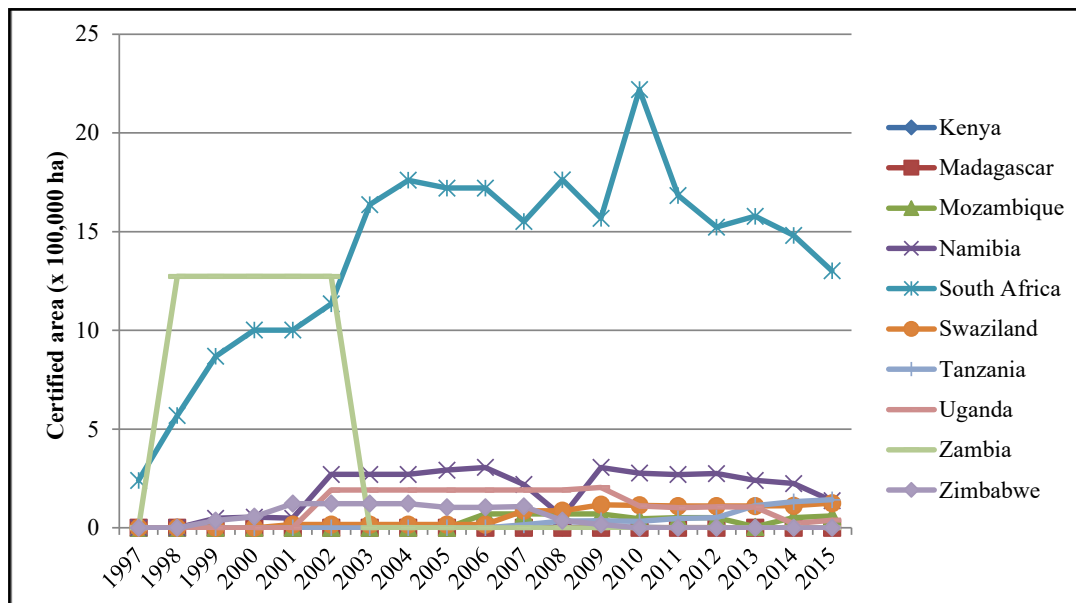


Figure 3. Forest Certified areas in eastern and southern Africa (1997 - 2015) (source: FSC, 2015)

certification going on in the country. South Africa was also distinctive in that the certification process was concentrated in plantations rather than natural forests.

In Swaziland, the first forest operation of FSC was certified in 2001, but there was no further forest certification operations going on at the time of the study (Figure 3). In the case of Tanzania, since the first certificate in 2007, there has been a rise in FM certified area, particularly during the last three years. In fact by the time of this study, it was above all the other countries in the eastern Africa sub-region (Figure 3). There were several operations undergoing the process of certification then. There were on-going initiatives with the New Forests Company (Tanzania) Ltd. The MCDI was expected to certify 7,600 ha more community natural forests in Kilwa before the end of 2015. The MCDI had plans to expand the scope of their operations outside Kilwa and Rufiji Districts. Two more districts, Tunduru in Ruvuma Region and Liwale in Lindi Region, were expected to be covered

in this expansion. Community forests of about 100,000 ha were to be FSC-certified in Tunduru before 2017; while some initial preparations were on-going to certify about 78,000 ha in Liwale, depending on the availability of funds.

The Forest Certification in Uganda had gone a long way, and it was the first country to have an FM certificate in the eastern Africa sub-region (Figure 3). The Uganda Wildlife Authority obtained a FM FSC certificate for the Mt. Elgon National Park and Kibale National Park under the Forests Absorbing Carbon Dioxide Emissions (FACE) Project in 2002. This was an early example of the use of FM certification for certifying ecosystem services and it was achieved using existing local FM standards. There were also other operations undergoing the certification process in Uganda then. There was an initiative for piloting the MAP process with financial support from the FSC International Smallholder Fund. Three private owners of small natural forests on Lake Victoria islands in Kalangala District were identified for the

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pilot scheme. The National Forestry Authority (NFA) was also in the process of certifying Kalinzu Central Forest Reserves (CFR), one of its tropical forests.

Zambia was the second country to be FSC-certified in 1998 after South Africa in the southern Africa sub-region, and in fact initially had more area certified than South Africa, but there were no forests/operations undergoing certification in Zambia then. In Zimbabwe, the first forest operation was FSC-certified in 1999, but there were no forests/operations undergoing certification at the time of this study.

Types and numbers of forest certificates and certified forest products issued. There were a total of nine and 28 FM certificates in eastern and southern Africa, respectively (Figure 4), with a few operations undergoing the certification process in Kenya, Mozambique, Tanzania and Uganda.

There were a total of two and 107 FSC CoC certificates in eastern and southern Africa,

respectively (Figure 5). Kenya was the first country in the eastern sub-region to obtain a CoC certificate in 2005 (Figure 5). However by the time of the study, the country had no CoC certificate. Since its first certificate, Kenya was the country with highest number of CoC certificates than any other countries in the sub-region up to 2011, although the number of certificates was relatively few. Since the first CoC certificate in 2010 in Madagascar, the number has increased and, thereafter, remained constant up to 2013, and declined thereafter. Mozambique received its first CoC certificate in 2011, which has been maintained to-date (Figure 5).

Namibia had three CoC certificates. Since its first CoC certificate in 2005, the number has remained relatively constant, but above the other countries in the two sub-regions, except in South Africa (Figure 5). South Africa was the first country in the southern sub-region to obtain a CoC certificate in 1997. By the time of this study, the country had 104 CoC certificates (Figure 5). Since receiving its first certificate,

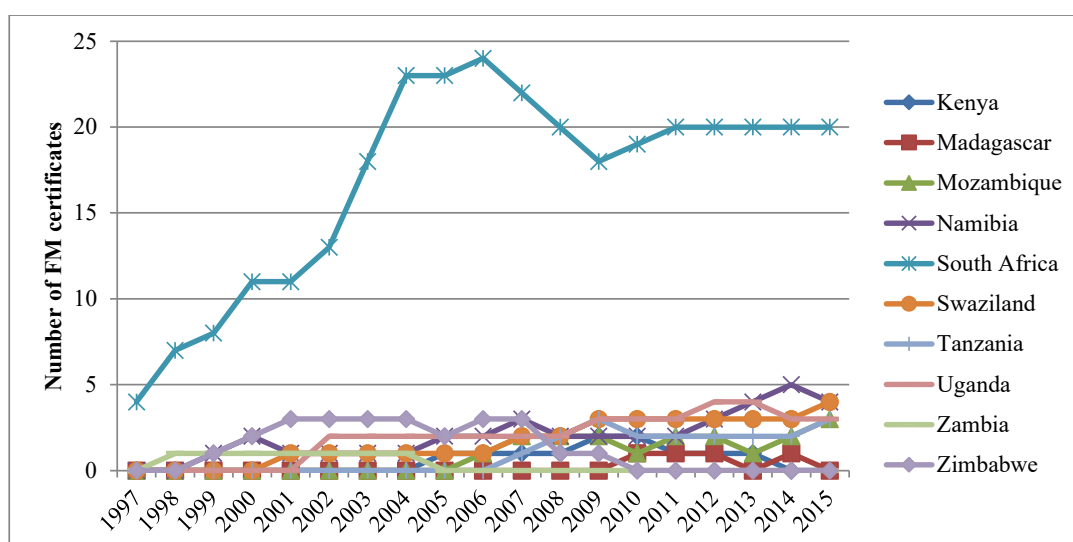


Figure 4. Number of FM certificates in Eastern and Southern Africa (1997 - 2015) (source: FSC, 2015).

South Africa remained the country with the highest number of CoC certificates in the two sub-regions.

In Tanzania, there was just one CoC certificate and the number of such certificates has been fluctuating, but increased a little above the other countries in the eastern Africa sub-region for some years; though it eventually declined (Figure 5). Uganda has not obtained any CoC certificate so far. Swaziland, Zambia and Zimbabwe no longer have any CoC certificates. Since the first certificate in 2001 in Swaziland, the number of CoC certificates has been relatively constant with a slight increase in 2007, thereafter, it declined to the current state. In Zambia, since the first certificate in 1998, the number of CoC certificates had been constant up to 2004, thereafter, the number diminished to zero. Zimbabwe received its first CoC certificate in 1999 with the number of CoC certificates fluctuating over the years up to 2009, but it also declined to zero. There was no certificate yet for

ecosystem services (e.g. Carbon, Biodiversity, Watershed, Ecotourism, etc.) anywhere in the sub-regions.

SWOT analyses of Forest Certification in the sub-regions. Figure 6 summarises the suggested reasons for the current low development of Forest certification in the sub-region, including barriers to and benefits of FM certification. The weightings of the SWOT factors (see Figure 6) by A'WOT application showed the highest weight for inadequate appropriate capacity as a weakness for Forest Certification adoption/promotion and implementation in the sub-regions (human, physical and financial resources), i.e., no locally-based accreditation and certification bodies, and standards, among all other factors. The increased costs of FM and production had the least weight as a threat for Forest Certification adoption/promotion and implementation in the sub-regions. The weightings of the SWOT groups showed weaknesses to be predominant followed by opportunities. Strengths and threats

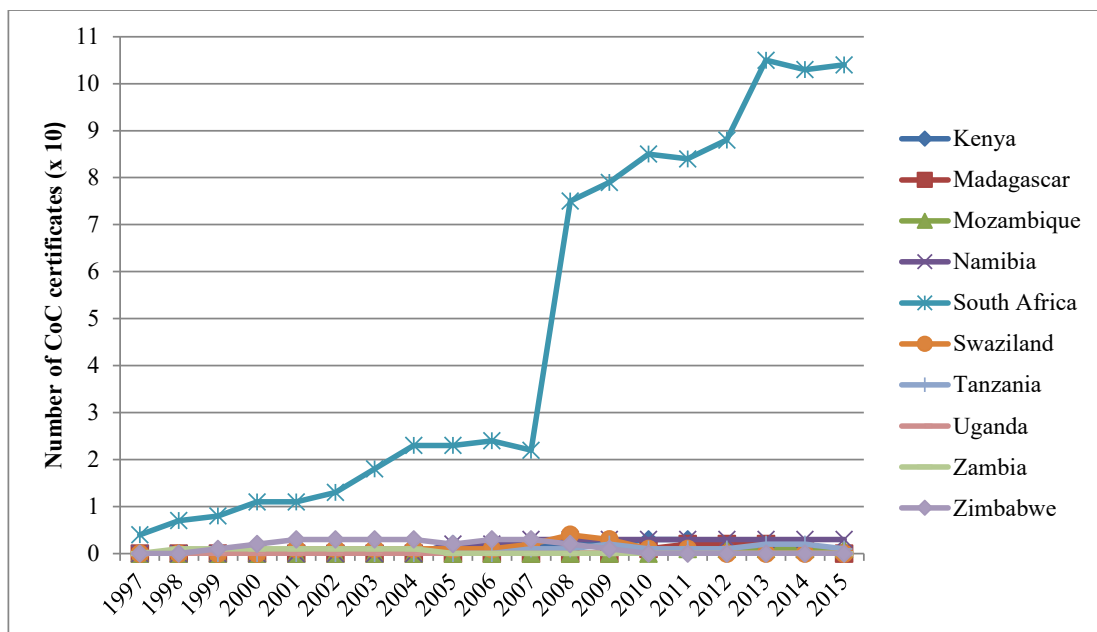


Figure 5. Number of CoC certificates in Eastern and Southern Africa (1997 - 2015) (source: FSC, 2015)

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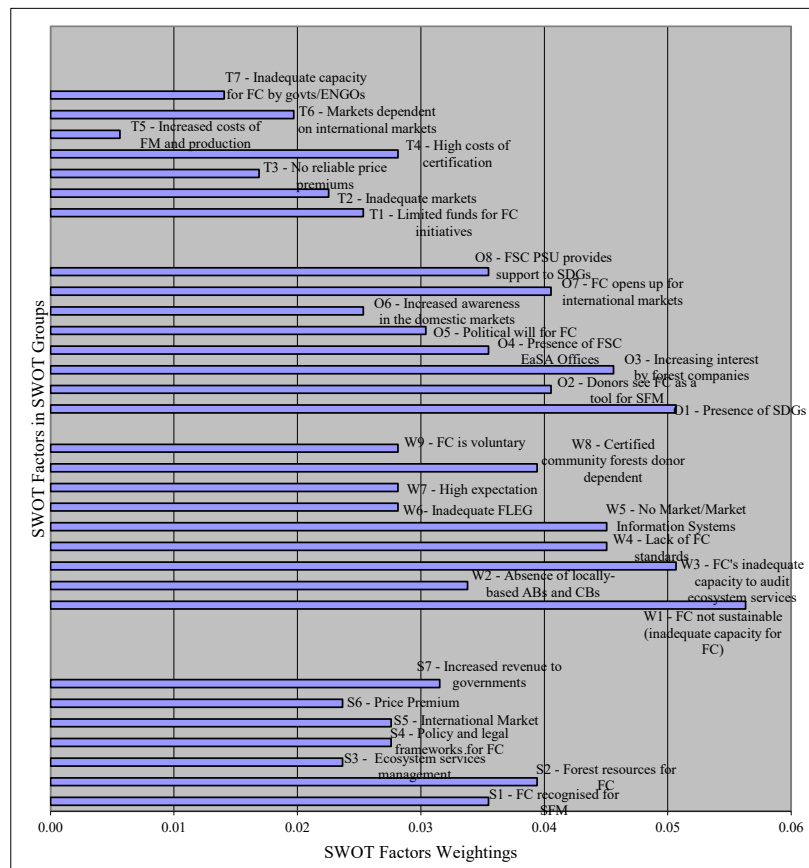


Figure 6. Graphical interpretation of the results of pairwise comparisons of SWOT groups and factors for SWOT analyses of past and on-going efforts of forest certification in the sub-regions. (Note: the higher the value means the higher weight given to the SWOT factor and vice versa).

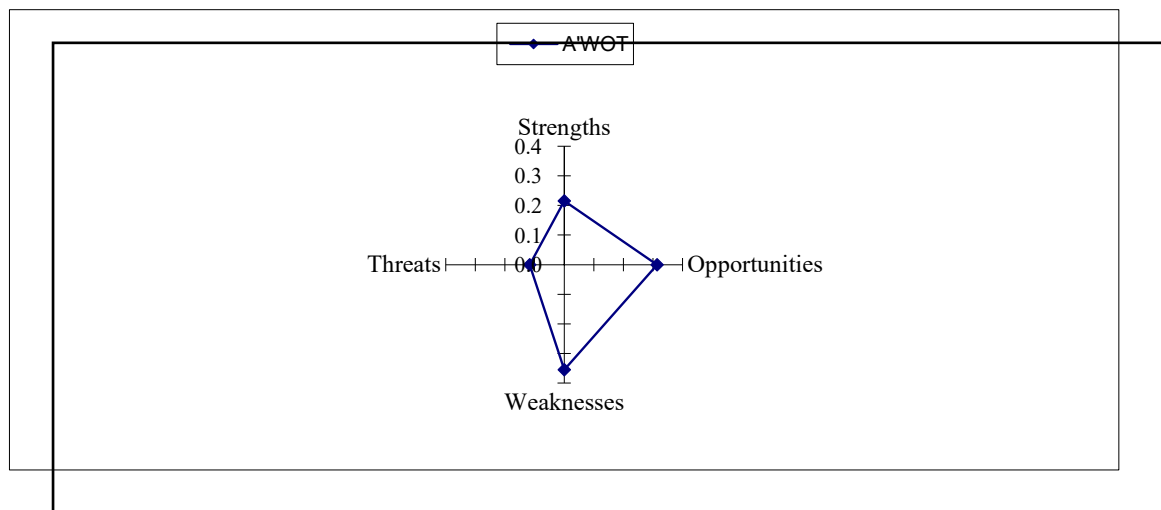


Figure 7. Relative importance of SWOT groups in an A'WOT application to SWOT analyses of past and on-going efforts of forest certification in the eastern and southern Africa sub-regions.

were the least (Figure 7).

The past efforts on Forest Certification in the sub-regions have brought some positive social benefits to stakeholders. For instance, stakeholders revealed that there was a general trend across countries in improved communication between forest companies/entities and their rural neighbours through outreach programmes, as well as their workers through employment. There were improved working conditions, including signing of work contracts, transparent collective bargaining and higher remuneration above the minimum government rates, and provision of health insurance and safety at the work place. Furthermore, through outreach programmes, certified companies/entities work with their neighbours on community-based projects, such as infrastructure development, including rural roads construction, schools, health centres and water supply in the sub-regions. All these observations corroborate with literature that forest certification improves workers' conditions and welfare (see e.g., Karmann and Smith, 2009; Cerutti *et al.*, 2014; Kalonga and Kulindwa, 2017).

The Forest Certification enables businesses and consumers to make informed choices about the forest products they buy, and drive positive change by engaging the power of market dynamics, i.e., supply and demand (FSC, 2012). However, the availability of certified forest products markets and market information was limited in the sub-regions and this affected certified forest products businesses in the sub-regions. Similarly, Purbawiyatna and Simula (2008) reported that consistent information on production and trade data on certified products and markets was unavailable worldwide, particularly in the two sub-regions. This in turn was due to the lack of markets but the availability of certified products itself constrained market development. In addition, marketing structures and information systems for certified forest

products were largely absent in the two sub-regions. This implies that there was inadequate consumers' awareness and preference for certified forest products in the sub-regions. This was attributed to the fact that customers were uninformed about and could not differentiate between certified and non-certified forest products in the market. The absence of Forest Stewardship Council National Offices further limited the ability to promote certification and certified products locally. However, consumers in the sub-regions normally opted for low priced products.

In the international markets where certified forest products have reliable markets (Cashore *et al.*, 2006), there were still limited marketing information systems linking the owners of forest resources, primary producers and the traders in these markets (Kalonga *et al.*, 2014). There were significantly more markets established in Europe and America (Ham, 2006; Njovu, 2006; Dieckmann and Muduva, 2010; Mickels-Kokwe and Kokwe, 2013). However, these markets were dominated by a few buyers (through closed marketing structures), who were aware of what certified forest products are, hence they tend to control the market, resulting in no effective competition, and do not pay premium prices to producers (Kalonga *et al.*, 2014). The Forest Certification market information systems are of paramount importance to stakeholders because they provide a reliable source of information on the markets, which recognise and promote responsible forest management and reward it accordingly (FSC, 2012). This implies that market information systems for certified forest products/services in the sub-regions could inform producers and consumer groups of the economic, environmental and social benefits that Forest Certification brings (Karmann and Smith, 2009).

Despite the marketing constraints, stakeholders viewed Forest Certification as a useful

management tool that can guide them in their day-to-day operations. At the same time, Forest Certification had brought a keen awareness of the social issues related to forestry, i.e., existence of better communication mechanisms between foresters, their rural neighbours and employees (Ham, 2006). This illustrates that Forest Certification focuses not only on ecological aspects of harvesting for timber production but also includes social and economic issues (Duchelle *et al.*, 2014). Also Forest Certification works towards ensuring that economic and social benefits of well-managed forests are shared equitably throughout the value chain of forest products (FSC, 2007; Kalonga *et al.*, 2014). Moreover, the social positive impacts of Forest Stewardship Council include material benefits for workers such as good working conditions, employment of local workers with higher wages and improved workers' training (Cerutti *et al.*, 2014; Kalonga *et al.*, 2014). At community level, benefits include community-based projects, such as infrastructure development, including rural roads construction, schools, health centres and water supply in the sub-regions. This finding was also reported by Kalonga *et al.* (2014) in a study about benefits that communities derive from certified forests.

The environmental benefits and the potential for related economic gains have increased importance in Forest Management, not only in the context of preserving high conservation values such as wildlife and endangered species in general but more and more in the mitigation of climate change effects and the protection of water resources. Forest Stewardship Council had a unit dedicated to the certification of ecosystem services and was launching a scheme for the payment for forest ecosystem services, particularly for carbon sequestration and water sources (FSC, 2015b). These have the potential for generating new income revenues for local populations.

The Forest Certification initiatives, among others, enable greater market security (international markets in particular) and higher prices for forest products to forest owners, managers and timber dealers (Njovu, 2006; Quaedvlieg *et al.*, 2014). These act as market incentives (e.g. the opportunity for premium prices) and drivers of certification (Meijaard *et al.*, 2014). Such markets could provide reliable income to forest owners/managers and local suppliers in addition to providing opportunities for expansion (Njovu, 2006). However, the perceived market advantage of obtaining Forest Certification did not materialise to the degree that some certificate holders expected in the sub-regions. This corroborates the findings by Kalonga *et al.* (2014). From a market perspective, certification should lead to a premium price, which could pay for the incremental cost of good stewardship by forest managers, and for the certification costs (Meijaard *et al.*, 2014). However, certificate holders were not receiving premium prices for their forest products. These observations were also confirmed by Kalonga *et al.* (2014).

One of the biggest barriers to Forest Certification was the initial cost, especially for smallholder private owners and communities (Cashore *et al.*, 2006). Certification typically increases management costs by 5% -20% without clear financial returns (Wong, 2005). Costs are a combination of the direct costs of registration and audit and indirect costs related to additional management inputs to prepare for audit. Nevertheless, the costs of forest management and production were perceived as the least threat in the implementation of Forest Certification in the sub-regions, and some of the initial costs could be reduced through the application of the FSC International Smallholder Fund, the SLIMF standard and MAP.

CONCLUSIONS

The initiatives for strengthening SFM employing Forest Certification through the adoption and

implementation of its best practices in eastern and southern Africa sub-regions were apparent but low. The Forest Certification acted as a market-driven management and conservation tool. The adoption and promotion of Forest Certification in the sub-regions would contribute to the wise use of forest resources, which would in turn, promote conservation values at the same time enhancing restoration of degraded forests and the socio-economic wellbeing of people who depend on forests. The sub-regions have good enabling policies and legal frameworks for the implementation of responsible forest management. Thus, it should not be unduly difficult to certify more forests.

RECOMMENDATIONS

Much more work still needs to be done in terms of capacity building to make Forest Certification a norm in the management and governance of forests, and certainly, a lot more work is needed in relation to smallholder private natural forests and community forests. Market development is also a priority both in terms of access to market information and the promotion of the benefits of forest certification and certified products and services.

To ensure that there is an effective and efficient adoption and implementation of Forest Certification in the sub-regions, the development of frameworks and policies for SFM and Forest Certification should capitalise on the existing opportunities to address the prevailing weaknesses and hence, enhance the strengths to overcome the threats.

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STATEMENT OF NO CONFLICT OF INTEREST

The authors declare that there is no conflict of interest in this paper.

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