



Strengthening the business case for sustainable forest management

Barriers and opportunities as seen from Cameroon, Ghana, Indonesia, Myanmar and Suriname





Strengthening the business case for sustainable forest management

Barriers and opportunities as seen from Cameroon, Ghana, Indonesia, Myanmar and Suriname

Petra Westerlaan

This report was commissioned by Stichting Bewust met Hout within the framework of the Dutch international corporate social responsibility Covenant 'Promoting Sustainable Forest Management', Working Group 4, 'Strengthening the Business Case for Sustainable Forest Management'

Financial support has been received from the Ministry of Foreign Affairs of the Netherlands.

The views expressed herein are the sole responsibility of the author and do not necessarily reflect the views of Tropenbos International, Stichting Bewust met Hout or the Ministry of Foreign Affairs of the Netherlands.

Texts may be reproduced for non-commercial purposes, citing the source

Citation: Westerlaan, P. 2019. *Strengthening the business case for sustainable forest management. Barriers and opportunities as seen from Cameroon, Ghana, Indonesia, Myanmar and Suriname*. Tropenbos International and Stichting Bewust met Hout: Wageningen, the Netherlands

Author: Petra Westerlaan

Layout: Juanita Franco (Tropenbos International)

Photos: Cover - Borneo, Indonesia, ©Adobe Stock ; page 15 - Guyana, C. Benneker (TBI); page 21 - DR Congo, J. Bolongo (TBI); page 29 - Cameroon, R. Boot (TBI); page 37 - Ghana, M. Wit (TBI); page 46 - Indonesia, ©Adobe Stock; page 58 - Burma, Myanmar, ©Adobe Stock; page 64 - Suriname, R. Van Kantten (TBI); page 74 - Peru, ©Adobe Stock; page 84 - Suriname, TBI.



Contents

Foreword	5
Executive summary	7
Introduction to main findings	9
Acknowledgements	13
List of acronyms	14
Introduction	15
1.1 Background	15
1.2 Purpose and research questions	17
1.3 Approach	18
1.4 Scope and limitations	19
Business case for responsible forest management certification	21
2.1 Motivations (not) to pursue and maintain forest management certification	22
2.2 Costs of forest management certification	24
2.3 Benefits of forest management certification	26
2.4 Bottom line: the business case for responsible forest management certification	28
Cameroon Country Profile	29
3.1 Forest management certification in Cameroon	29
<i>Quick overview Cameroonian forest and timber sector</i>	30
3.2 Bottlenecks and challenges for sustainable forest management and certification	31
3.3 Solutions and opportunities for sustainable forest management and certification	34
Ghana Country Profile	37
4.1 Forest management certification in Ghana	37
<i>Quick overview Ghanaian forest and timber sector</i>	38
4.2 Bottlenecks and challenges for sustainable forest management and certification	39
4.3 Solutions and opportunities for sustainable forest management and certification	43
Indonesia Country Profile	46
5.1 Forest management certification in Indonesia	46
<i>Quick overview Indonesian forest and timber sector</i>	47
5.2 Bottlenecks and challenges for sustainable forest management and certification	51
5.3 Solutions and opportunities for sustainable forest management and certification	55
Myanmar Country Profile	58
6.1 Forest management certification in Myanmar	58
<i>Quick overview Myanmar forest and timber sector</i>	59
6.2 Bottlenecks and challenges for sustainable forest management and certification	60
6.3 Solutions and opportunities for sustainable forest management and certification	62
Suriname Country Profile	64
7.1 Forest management certification in Suriname	64
<i>Quick overview Cameroonian forest and timber sector</i>	65
7.2 Bottlenecks and challenges for sustainable forest management and certification	66
7.3 Solutions and opportunities for sustainable forest management and certification	71
Discussion	74
Conclusion and recommendations	84
References	90

Foreword

Degradation and loss of tropical forests continues, with impacts on the environment, climate change and the livelihoods of people who depend on them. But there are important steps being made to respond to this.

In 2017, the Dutch International Corporate Social Responsibility Covenant 'Promoting sustainable forest management' was signed by the Dutch government, private sector associations, trade unions, NGOs and knowledge organisations. It was impressive to see the large number and range of actors, indicating the motivation to achieve the goal of the use of sustainably produced timber in the Netherlands becoming the norm at the end of 2020. One strength of the agreement comes from so many, all working towards a common goal.

Four working groups were established to identify key issues that should be addressed by the signatories. This report was produced under Working Group IV, 'Strengthening the business case for sustainable forest management'. It focuses on the barriers and opportunities in five selected countries that have the potential to increase their area of well managed forests for timber production: Cameroon, Ghana, Indonesia, Myanmar and Suriname.

The method used by Petra Westerlaan, author of this study, was a combination of a detailed review of published and grey literature, complemented by interviews with professionals working in the forest and timber sectors.

The result is a report that is extraordinary rich in detail. For each selected country, it identifies and lists the key opportunities and the bottlenecks that are preventing these being achieved. And based on these, recommendations are drawn. Though mirroring the broad range of actors, these are separated into those that could be addressed by either governments, industry or civil society, depending on the nature of the barrier or opportunity.

Members of the Working Group hope that the signatories of the voluntary agreement and others concerned about the continued destruction and degradation of forests worldwide, will explore these findings, and will enact at least in part, the recommendations in this report.

In doing so, together we can achieve the overarching goal of the voluntary agreement, and make a significant contribution towards the sustainable use and conservation of forests for the benefit of people's livelihoods, biodiversity and sustainable economic development.

René Boot

Director Tropenbos International

*Chair of Working Group IV: Strengthening the business case for sustainable forest management
Covenant Promoting Sustainable Forest Management*

Executive summary

A consortium of partners in the Netherlands set a goal of increasing the share of sustainably produced timber on the Dutch market, and to promote sustainable forest management globally. In 2017, the Dutch International Corporate Social Responsibility Covenant 'Promoting Sustainable Forest Management', was signed by private sector associations, the government, trade unions, NGOs and knowledge institutes. Four Working Groups were established to look at different aspects of the timber supply chains. To design an effective action plan in the framework of the Covenant, the first step taken by Working Group 4 was to undertake a study to identify bottlenecks and opportunities for sustainable forest management and for strengthening its business case in timber producer countries. This report is the result of that study.

The focus is on tropical forests and timber because globally, forest management certification has the lowest uptake in the tropics, and the corporate social responsibility risks for the timber sector are considered highest for tropical hardwoods. Data collection was undertaken through 30 interviews with key persons between January and April 2018, and a review of literature and online databases. The main questions were what are key motivations of forest managers to take up responsible forest management certification, and what are the costs and benefits, and what are the main barriers and solutions to scaling up sustainable forest management at community, private sector and government level?

Results indicated that market demand and market access are the two most important reasons for forest managers to engage in responsible forest management certification. In practice, this means export-oriented forestry businesses with markets in Europe are most likely to engage in certification. Other motivations include the availability of well-designed donor support programmes, company image and brand reputation, expected financial benefits (price premium), investors stipulating the need for certification, and pressure from NGOs, and other companies. Two other important factors are the size of the forestry operation, and current level of sustainability, as those who see a smaller gap between current practice and certification requirements are more likely to engage.

Recommendations

Promoting sustainable tropical forest management – (i) Support training in reduced impact logging, that brings environmental benefits and reduces timber harvesting costs for forest managers through increased operational efficiency. (ii) Promote the use of lesser known/used timber species, especially in countries where logging is highly selective and forests are highly biodiverse. (iii) Create additional income streams through protection of ecosystem services, and test model where this is combined with sustainable timber production.

Increasing areas of certified forests – Governments must support sustainable, responsible forest management certification, and accept reductions in harvested volume this may entail. Certification organisations must be supported to enter into dialogues with governments to further this aim. For immediate steps to increase areas of certified forests and volumes of sustainably produced timber on the Dutch market, Indonesia is an ideal focus country, as

certification is well established and is growing, and is a leader in issuing FLEGT licenses, so Indonesia should be supported as a leader in assessing how forest managers can be motivated to go beyond legality and take steps towards more sustainable forest management. Myanmar may also be another country to assess, with an interest in certification from forest managers, but the enabling environment is challenging.

Including smallholders and community forest managers – Certification is more viable for larger forest areas than for smallholders and community forests due to fixed costs. And community forest managers and smallholders are rarely linked to export markets where demand exists for sustainably produced timber. So, efforts need to be made to link them to such markets, and certification schemes need to be adapted for them. Of the five focus countries, Ghana has almost no natural forest under community management, though communities are involved in management of forest plantations. In Indonesia, Myanmar and Cameroon, areas under community management is growing. In addition, in Cameroon, Community Forest Group BV has developed a due diligence system to comply with the EUTR (the European Union Timber Regulation), with a hope that it be upscaled to other community managed forests, perhaps in the form of a legality standard. An Indonesian PEFC (IFCC) standard for smallholders and community forests will be ready for use at the end of 2018 and this could also be an opportunity for increasing areas of certified community forests. Landscape level certification may also be another avenue to be explored, when timber and other forest products could all be integrated.

The keys are to create market demand and financial incentives that can make a business case for sustainable forest management, including a price premium for certified timber, and payments for ecosystem services through responsible forest management. But a certain basis is needed, because as in many other tropical countries, weak governance, poor law enforcement, corruption and illegality are major barriers. In the long-term, there will be a focus on responsible reforestation, as forest plantations will become increasingly important, with opportunities for responsibly managed plantations through 'green' investments, requiring certification. Ghana is very involved in reforestation and plantations, but also Myanmar and Indonesia, though there is a clear need to mobilise ever more investment. A more favourable enabling environment for investment is needed in timber production countries, but they may also need to adapt their criteria to work in this commodity in tropical countries.

In the medium-term, Working Group 4 will now consider these recommendations, and how to incorporate them into a broader action plan.

Introduction to main findings

Costs and benefits of responsible forest management certification

Costs

Costs include indirect costs to bring the forest management organisation to an acceptable level of sustainable forest management, direct certification costs, and opportunity costs including reduced revenues due to lower harvested timber volumes. Reported costs vary from an average US\$1.75 per hectare (Lorent et al., 2018) to US\$7.80 USD per hectare (TBI, 2017b), and in general, decline with increasing forest concession area. Also, average costs for responsible forest management certification in the tropics are significantly higher than in non-tropical regions, and are higher for natural forests than for plantation forests. As an example, the total pre-certification costs reported for Indonesian natural forest companies pursuing FSC certification are US\$390,000 based on a 50,000-hectare concession (TBI, 2017b). In the pre-certification stage, direct certification costs account for 34-42% of the total, and indirect certification costs take up 58-66%. Major costs items to maintain certification are the monitoring of environmental and social impacts and implementing measures to mitigate negative impacts, and benefits to workers. In the maintenance of certification, direct certification are responsible for 17-27% of costs, and indirect costs make up 73-83%. Total costs for maintaining certification reported for FSC certified Indonesian natural forest companies are US\$132,000 based on a 50,000-hectare concession (The Borneo Initiative (TBI), 2017b).

Benefits

The main benefits associated with certification are increased revenues through a price premium and market access, increased operational efficiency, fiscal and legal benefits (tax breaks, reduction in fines), staff benefits (reduction in incidents and safety accidents, higher staff morale) and improved stakeholder relations. Other benefits include increased access to finance and technical support, better public image, government incentives and a more sustainable resource base. Efforts to quantify the financial benefits are anecdotal and very context-specific. Monetary benefits that are generally applicable are price premiums and increased operational efficiencies. Natural forest managers consider operational efficiencies through improved planning and reduced waste generation (as a result of the reduced impact logging techniques) a clear benefit of the process to achieve certification. Price premiums are highly variable per market segment and through time: some studies report no or almost none, whereas other studies report up to 50% of price premiums. The high variance suggested that overall, there is no clear price signal from the market for certified timber products. Of the four focus countries where certified timber is being produced, Indonesia is the only country where a willingness to pay a price premium has been reported.

Business case for responsible forest management certification

Both costs and benefits from responsible forest management certification are highly context-specific. This also makes the existence of a business case highly variable from one forest management organisation to the next. There is overall agreement that a price premium is important for the business case of certification. A point of discussion is

whether sustainable forest management and responsible forest management certification should be – and can be – as profitable as (or even more profitable than) business-as-usual. It remains an open question to what extent the financial profitability of a forest management operation can decrease, while sustainable forest management and responsible forest management certification would still be considered an interesting alternative for forest managers because of its associated (non-monetary) benefits.

Active forest management certification schemes

Indonesia - Among the countries in this study, forest management certification is highest here, with 3.2 million hectares of FSC certified forest (6 February 2018 (FSC, 2018a)), and 3.8 million hectares of IFCC (PEFC) certified forest (as of 23 January 2018 (IFCC, 2018a)). In December 2016, there were also 60 LEI (Indonesia's own SFM certification scheme) certificate holders who managed a total forest area of 2.6 million hectares, including community forests, followed by forest plantation and natural forest (TBI, 2018a). In addition, in recent years, legality certification (SVLK, the national timber legality assurance system) has become mandatory at part of the FLEGT/VPA implementation.

Suriname - The two FSC certificates (out of a total of four) covering the largest forest areas, were suspended at the beginning of 2018, leading to a spectacular reduction in the FSC-certified area from 363,000 to 46,000 hectares.

Cameroon - The area under FSC/CoC certification decreased from 1.13 million hectares in November 2017, to 0.41 million hectares in March 2018. But at the same time, legality certification under OLB (Origine de Légalité de Bois) is popular, with over 3 million hectares of forests covered under this scheme. Furthermore, there are also two forest companies certified according to Rainforest Alliance's Verified Legal Compliance (VLC) standard.

Ghana - The main forest companies are maintaining their FSC Controlled Wood certification status, whereas two forest plantation companies are full FSC FM certified. One company is certified according to Rainforest Alliance's Verified Legal Compliance (VLC) standard.

Myanmar - There are no forest management certification schemes active in Myanmar.

Bottlenecks or barriers to scale up sustainable forest management

Challenging operational context

Forest management organisations in the tropics operate in a challenging environment. This includes weak law enforcement and corruption to varying degrees, but also, government support for economic development. Land tenure and land rights issues are also common, with communities living within and in the direct vicinity of forests, and the presence of high conservation value forests and wildlife within. On top of these, each of the five focus countries had their own country-specific bottlenecks, that add complexity and make it harder to reach a generic 'one-size-fits-all' business case for sustainable forest management.

Challenges to a business case for tropical timber production?

The profitability of selective logging as practiced in natural forests throughout the tropics decreases as forests enter their second or subsequent felling cycle, because the old-growth that is found in pristine forests does not grow back within a common rotation length of 25-40 years. There is also market demand for only a limited number of timber species, whereas natural forests in certain tropical regions are characterised by high biodiversity in tree species, notably in Suriname and Cameroon among the five focus countries. This results in highly selective logging, and in the removal of only low volumes per hectare.

If more individual trees from the commercial tree species are retained, then a lower volume of these species can be harvested per logging cycle (van der Hout, pers. comm.). A lower harvestable volume means lower profit, unless volume prices increase with declining supply. In Central Africa, however, scarcity of commercially preferred tree species has not led to an increase in the prices paid for these valuable timber species. Instead, they were replaced

by alternative species from temperate forests and by alternative materials (Karsenty and Vermeulen, 2016). This means forest companies in the tropics would lose business even quicker, and it remains to be seen what would happen to the forest once there is no longer an economic interest for timber production.

Noting the natural forests will not be able to meet the increasing demand for timber, forest plantations will have a greater role in the future supply of timber. But, the lack of investment for establishment and management of forest plantations has been identified as a bottleneck in Myanmar, and in Ghana. In Indonesia (for smallholders) and in Ghana, there is a noted lack of management capacity, and that log quality and future revenues would improve from improved plantation management. Also, damage to planted areas by cattle and wildfire has been reported as an issue in Ghana.

In addition to the challenges for long-term sustainable timber production, for vertically integrated forest companies, the business case and sustainability is further affected by low efficiency in the timber processing that is characterised by an average estimated recovery rate of around 35%.

Bottlenecks for responsible forest management certification

Insufficient market demand is identified as a key bottleneck for responsible forest management certification to grow. It is mainly EU markets that demand certified, sustainably produced timber, yet the importance of the EU market for tropical timber producers has been decreasing in recent years with the large majority of tropical timber now being traded in Asian markets. Further, there is a fear that with the acceptance of FLEGT (Forest Law Enforcement, Governance and Trade) licensed timber, legality will become the new norm in European timber markets. Finally, for those without a market link or market access to the EU, such as smallholders and communities, and those producing for national and regional markets, there appears to be currently little incentive to pursue voluntary certification.

There are additional difficulties experienced with certification. These include the complexity of the certification schemes (especially the new FSC requirements on intact forest landscapes), increased visibility making certified forest managers more vulnerable to criticism, and certification being perceived as a ‘ticking boxes’ exercise to overcome EU trade barriers. Finally, current certification schemes and systems do not fit well with some national or local contexts and production systems. Particularly for smallholders and communities, it is difficult to achieve and maintain certification. Since the global trend is towards more forest being managed by communities, and so small producers would have a more significant role in the future supply of forest products, it would make sense for certification systems to work for them.

Solutions to identified barriers and opportunities to promote and scale up SFM

FLEGT – creating a level playing field

Four of the five focus countries (except Suriname) are engaged in a FLEGT-VPA process to improve forest and timber legality. Indonesia was the first country to complete the process and has been issuing FLEGT licenses since November 2017. Ghana is expected to be the world’s second country to finalise its timber legality assurance system and have it approved by the EU, later in 2018. Myanmar has engaged more recently and is currently in the preparation phase. Progress for Cameroon is unclear with the process currently halted. The FLEGT-VPA developments are positive in creating a level playing field between timber producers. Once fully implemented, the gap between business-as-usual and sustainable forest management will be decreased. From the new starting point of legal compliance, the costs for responsible forest management certification are significantly lower than from the past (and current) starting point. This does not mean, however, that forest management organisations will automatically step up to embrace legal compliance. There will still need to be incentives and expected benefits to make it worthwhile to invest in sustainable forest management.

Improving the business case for sustainable tropical timber production

There are various ways in which the profitability of sustainable forest management can be increased, and it is likely that a combination of options will need to be employed. The promotion of lesser known timber species in the market could increase harvestable volumes per hectare, thereby increasing the profitability of the forest

management operation, in countries where logging is highly selective and the stocking of currently commercial tree species is low. Reduced impact logging has environmental benefits over conventional logging, but is also known to lead to increased operational planning and efficiency, and reduced costs for the forest manager. This means that training on reduced impact logging could be a relatively easy first and important step towards sustainable forest management. Financial incentives could be offered for the production of sustainably produced timber, either through higher prices for certified timber in the market, or through favourable taxation or fee reductions by national governments in timber supply (production) countries. Increased sawmill efficiency and reduced waste production would further improve the business case for forest managers that have their own sawmills while simultaneously supporting sustainable forest management. Besides timber production, a forest could also provide space for commercial collection, processing and trade in non-timber forest products, and other services such as eco-tourism. Payments for the maintenance of forest ecosystem services could also become an additional revenue stream for those who manage their forests in a responsible manner. But it is important that those who bear the costs for responsible management of the forest resources are also the eligible beneficiaries for revenues from payments for ecosystem services.

Opportunities for responsible forest management certification

To motivate forest managers to choose for responsible forest management certification, they need to be linked to a market where a demand and price premium exists. Well-designed support programmes can help in covering part of the pre-certification costs. Government incentives, such as a reduction in the annual concession lease, could motivate sustainable forest management and responsible forest management certification. PEFC certification is growing in the tropics, for example, and there is optimism on the uptake of standards that are currently in the final stages of development. To lower the complexity and costs for maintaining certification, an idea that has been proposed is to have monitoring conducted by organisations with expertise on the social and environmental aspects of tropical forest management. As the importance of small producers and community managed forests for future timber supply will increase, efforts are needed to find solutions to make certification systems work for them as well.

Finally, global initiatives like zero net deforestation and reforestation commitments offer an opportunity for the establishment of responsibly managed forest plantations, when green investors require certification as a funding condition. A favourable enabling environment for investment is needed to increase the area of forest plantations. Once planted, management capacity is needed to grow high quality timber.

Acknowledgements

I would like to thank Stichting Bewust met Hout, Tropenbos International and the members of working group 4 of the Covenant for their confidence in my capabilities to execute this study. It has been a pleasure working with you and I am grateful for your support and feedback received on preliminary results of this study and draft versions of this report.

All interviewees are generously thanked for sharing their expertise, experiences and ideas with me. This study would not have been there without you. In particular, the valuable contributions by Glen Asomaning, Nana Darko Cobbinah, Thomas Colonna, Jos Dennebos, Wim Ellenbroek, Rudi van Kanten, Richard Laity, Edi Purwanto, Rémi Sournia and Tieme Wanders are acknowledged.

Special thanks go to René Boot and Berdien van Overeem for their overall guidance and support. Bas Loumans' thorough feedback on the internal draft report has greatly improved the quality of the report. Roderick Zagt, Marten de Groot and René Boot are also thanked for their time to review draft versions of this report. Herman Savenije, Bas Loumans and Henk Hoefsloot are thanked for their contributions during a brainstorming exercise in preparation for a workshop on how the results of this study could be translated into concrete actions that can be undertaken by various parties that are signatory to the Dutch Covenant 'Promoting sustainable forest management'.

Finally, I would like to express my gratitude to my friends, family and (digital nomad) colleagues for their support.

List of acronyms

AAC	Annual allowable cut
ASI	Accreditation Services International
CB	Certification body
CFA	Communauté Financière Africaine (franc CFA is the currency in central Africa)
CFG	Community Forest Group BV
CPI	Corruption Perception Index
ESIA	Environmental and Social Impact Assessment
EU	European Union
EUTR	European Union Timber Regulation
FAO	Food and Agriculture Organization of the United Nations
FC	Forestry Commission (Ghana)
FLEGT	Forest Law Enforcement, Governance and Trade
FM	Forest management
FMU	Forest management unit
FRA	Forest resource assessment
FSC	Forest Stewardship Council
GFTN	Global Forest Trade Network
Ha	hectare(s)
HCV	High Conservation Value
HKV	Houtkapvergunning (timber cutting license)
IDH	Initiatief Duurzame Handel (Sustainable Trade Initiative)
IFCC	Indonesian Forest Certification Cooperation
IFL	Intact forest landscape
ITTO	International Timber Trade Organization
KfW	Kreditanstalt für Wiederaufbau (German Development Bank)
LEI	Lembaga Ekolabel Indonesia (Indonesian Ecolabelling Institute)
LKTS	Lesser-known timber species
MFCC	Myanmar Forest Certification Committee
MHD	Minimum harvestable diameter
MTE	Myanmar Timber Enterprise
MTLAS	Myanmar Timber Legality Assurance System
NFPDP	National Forest Plantation Development Plan (Ghana)
NGO	Non-governmental organisation
NTFP	Non-timber forest product
OLB	Origine de Légalité de Bois (legality certification scheme by Bureau Veritas)
PAFC	Pan-African Forest Certification
PEFC	Programme for the Endorsement of Forest Certification schemes
PPECF	Programme Promotion d'Exploitation Certifiée des Forêts
PwC	PricewaterhouseCoopers
REDD	Reduced Emissions from Deforestation and forest Degradation
RIL	Reduced Impact Logging
SFM	Sustainable Forest Management
SBB	Stichting Bosbeheer en Bostoezicht
SVLK	Sistem Verifikasi Legalitas Kayu (national timber legality assurance system of Indonesia)
TBI	The Borneo Initiative
VAT	Value added tax
VLC	Verified Legal Compliance (legality certification scheme by Rainforest Alliance)
VPA	Voluntary Partnership Agreement
WWF	World Wide Fund

1.

Introduction



1.1 Background

In the Netherlands, a consortium of partners has set a goal of increasing the share of sustainably produced timber on the Dutch market, and to promote sustainable forest management globally. In line with the Dutch public procurement criteria for sourcing of timber, FSC and PEFC forest management certification are regarded as proof that timber has been sustainably produced.

Green Deal 2013-2015

In 2013, the 'Green Deal - Promoting Sustainable Forest Management' was launched with the purpose of increasing demand for third-party verified sustainably produced timber (i.e. FSC or PEFC certified) on the Dutch market, and increasing the use of certified timber in various sectors. In the period from 2013 to 2015, the Green Deal has had a clear function in terms of network creation, awareness raising and putting the importance of using sustainably produced timber on the agenda in the Netherlands. During this period, the market share of sustainably produced timber has grown. However, sustainably produced timber is not yet the norm, especially for temperate hardwood and tropical hardwood (see figures below).

Box 1.1 Key terms

Business case: This is the financial-economic feasibility or financial viability (profitability) of a business. In the context of this report, a business case for sustainable forest management includes costs incurred when adopting more sustainable forest management practices (throughout certification processes) that are offset by future (monetary) benefits – or when there is a return on investments that makes sustainable forest management an attractive alternative to ‘business as usual’.

Responsible forest management certification: PEFC or FSC Forest Management certification.

Sustainable forest management: Forest management aimed at maintaining the forest and its capacity to provide forest ecosystem services in the long-term, including sustainable provision of timber and non-timber forest products.

Sustainably produced timber: There are two responsible forest management certification schemes that comply with the Dutch public procurement sustainability criteria for timber: FSC and PEFC. Therefore, in this report, sustainably produced timber refers to that that has been certified by FSC or PEFC.

The ‘Promoting Sustainable Forest Management’ Covenant

A follow-up to the Green Deal in 2017 was the Dutch International Corporate Social Responsibility Covenant ‘Promoting Sustainable Forest Management’. This covers the period up to the end of 2020, and signatories include private sector associations, the government, trade unions, NGOs and knowledge institutes.

Partners of this Covenant have the following joint ambitions.

1. Conduct further research into the EUTR and certification schemes on international corporate social responsibility risks, and take steps to structurally address non-addressed risks.
2. Simplify administrative rules for use of sustainably produced timber.
3. Conduct research into the business case for sustainable forest management and exercise joint effort to strengthen the business case.
4. Increase the market demand for sustainably produced timber and FLEGT licensed timber, with 2020 objectives, being, more specifically, the following.
 - a. 100% of sheet material is at least FLEGT-compliant, 90% is sustainably produced (2015: 88%).
 - b. 100% of softwood is sustainably produced (2015: 86%).
 - c. 60% of temperate hardwood is sustainably produced (2015: 34%).
 - d. 95% of tropical hardwood is at least FLEGT-compliant, 75% is sustainably produced (2015: 63%).

Four working groups have been set up under the Covenant, each focusing on a specific theme. Working Group 4 has the goal to strengthen the business case for sustainable forest management in timber producer countries, so that the supply of sustainably produced timber on the Dutch market will increase.

Forest management certification worldwide

In 2016, the area of certified forest was estimated at 432 million ha, or 11% of the total forest area worldwide (UNECE and FAO, 2018). But this means that 89% of the world’s forests are not certified. The potential area of certified forests that could supply sustainably produced timber to meet global demand can be estimated using data on permanent forests used for production purposes. In 2010, the area of permanent forested land was estimated at 2.17 billion ha, or 54% of total forest area globally (MacDicken et al., 2015). At the same time, the forest area under a forest management plan was 2.1 billion ha with a near equal share between production and conservation purposes (MacDicken et al., 2015). This means that approximately 1.05 billion ha of forests can be assumed to

be permanent forested land, managed for production purposes. Assuming most certified forests are production forests, about 35-40% of global production forests were certified in 2016, being between 432 million ha (2016 data by UNECE and FAO, 2018) and 1.05 billion (2010 data extrapolated from MacDicken et al., 2015).

Most of the forested area under a responsible forest management scheme (FSC or PEFC) is found in North America, Europe, and the Commonwealth of Independent States (CIS, comprised of the former Soviet republics excluding the Baltic states). In contrast, only 15% of total certified forests worldwide are located in Africa, Asia, Latin America and Oceania (Figure 1.1, FAO and UNECE, 2018), with MacDicken et al. (2015) reporting that in 2014, only 6% of the permanent forest estate in the tropics was certified.

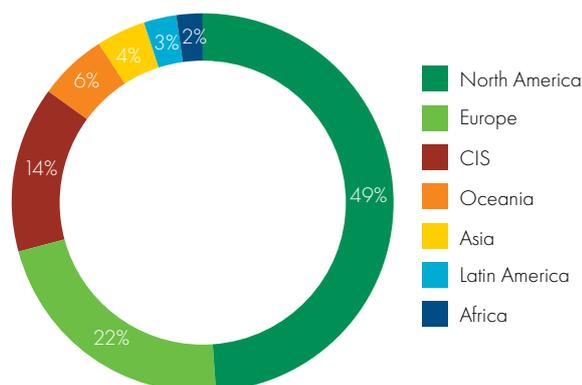


Figure 1.1. Forest area under FSC or PEFC forest management certification, per region. Source: UNECE and FAO, 2018.

From 2016 to 2017, the global forest area under FSC or PEFC forest management certification has declined with 3 million ha to 429 million ha. It has been suggested that this reduction may be a first indication that the certified forest area worldwide has peaked. In order to maintain and increase the area of forests under responsible forest management certification, efforts to lift barriers and increase the benefits of forest management certification in order to strengthen the business case for forest managers are increasingly important (UNECE and FAO, 2018).

1.2 Purpose and research questions

To design an effective action plan in the framework of the Covenant, the first step taken by Working Group 4 was to undertake a desk study to identify the bottlenecks and opportunities for sustainable forest management and for strengthening its business case.

Responsible forest management certification is often used as a proxy for and proof of sustainable forest management. It is relatively easy to measure the area of forests under a certification scheme and the volumes of timber that carry a FSC or PEFC label. Certification schemes also provide a minimum level of what sustainable forest management means in practice in different contexts. Because of the close connection between SFM and certification criteria, forest certification is considered a reasonable indicator of trends in sustainable forest management (MacDicken et al., 2015). The literature review also revealed that there are studies on the costs and benefits (i.e. the business case) of responsible forest management certification, but not into the costs and benefits of sustainable forest management.

The study thus focuses on costs and benefits, and also on the tropics, because globally, forest management certification has the lowest uptake in the tropics (MacDicken et al., 2015), sustainably produced tropical hardwood is not yet the norm on the Dutch timber market (Covenant, 2017) and corporate social responsibility risks for the timber sector are considered highest for tropical hardwood (KPMG, 2014). Five focus countries across the three main tropical regions (Latin America, Africa, South-East Asia) were chosen by members of Working Group 4, being Cameroon, Ghana, Indonesia, Myanmar and Suriname. Besides considerations of geography, selection criteria used for the selection of focus countries included relevance for the Dutch timber market (trade link in terms of m³ of timber imported), the potential for growth in certified forest area (<10% of total forest area certified), existence of a network by Covenant partners (to be able to act on identified bottlenecks and opportunities throughout the duration of the Covenant).

Eventually, the results of this study will be used to inform the working group’s workplan by providing suggestions for concrete actions that can be taken by signatories to the Covenant to remove bottlenecks and to make use of opportunities to promote sustainable forest management.

Research questions

Five research questions have been formulated to guide the work of this study:

1. What are the main motivations of forest managers to pursue responsible forest management certification?
2. What are the costs and benefits for responsible forest management certification?
3. What are active forest management certification schemes and what is the area of forests certified under the different certification schemes?
4. What are the bottlenecks or barriers to scale up sustainable forest management at the level of the private sector, communities and smallholders, and the government?
5. What are solutions to identified barriers and what are opportunities to promote and scale up sustainable forest management at the level of the private sector, communities and smallholders, and the government?

1.3 Approach

The methodology of this desk study comprised of interviews with key resource persons combined with a review of written reports, (grey) literature and online databases and information sources.

Data collection

For the different research questions, the data collection strategy differed slightly. Information about main motivations from forest managers to pursue certification (research question 1) was gathered through interviews combined with literature. Data about costs and benefits of responsible forest management certification (research question 2) was obtained through reports and (grey) literature. To get an overview of the active certification schemes and the forest area under certification (research question 3), online databases served as the main source of information. The identification of bottlenecks and opportunities (research questions 4 and 5) was based on interviews with key informants and where possible complemented with information from literature.

Table 1.1. Number and types of interviewees that contributed to this desk study, per country.

Country	# Key informants*	Types of organisations covered by key resource persons
General	5	Donor, forest management certification auditor, PEFC International, FSC International, forest management expert consultant
Cameroon	5	(Ex-)managers support programme, FSC, PEFC, community forestry expert
Ghana	4	Former WWF-GFTN, government, forest management certification auditor, forest management expert consultant
Indonesia	5	Manager support programme, WWF, FSC, PEFC, NGO
Myanmar	4	FLEGT (EFI), FSC, PEFC, researchers
Suriname	10	(Ex-)manager support programmes (IDH), forest management expert consultants, forest manager, timber trader, government, NGO, FSC, community forestry expert
Total	29	

* Some key informants are resource persons for multiple countries; when two persons were involved in the same personal communication, this is counted as 1 key informant.

For each focus country, at least four key informants contributed, most engaged through semi-structured interviews (see Annex 1 for a list of guiding questions). Interviews were conducted between 24 January and 27 April 2018. Most interviews were conducted verbally (Skype, WhatsApp, mobile), via e-mail correspondence, or as an in-person meeting (see Table 1.1). In a few cases, others were contacted to gather or verify very specific information, not included in Table 1.

Written reports and (grey) literature were collected via targeted internet searches of selected key terms (e.g. “[focus country] sustainable forest management”, “[focus country] forest management certification”, “forest management certification tropics”), in addition to asking interviewees about recommended publications and through referenced reports or literature included in key publications. The relevance of publications was determined based on currency, i.e. only post-2008 (except for laws and policies) and the ability to answer the research questions. To draw a general picture of the forest and timber sector for each of the five focus countries by means of a quick introduction, the initial information sources were the country reports prepared for the FAO Forest Resource Assessment 2015, ITTO’s Biennial review and assessment of the world timber situation 2015-2016, and national REDD+ documentation.

Data analysis, validation of results and report writing

Information was first gathered from one country (Suriname), and subsequently, the approach was adapted to ensure the study’s outputs would be delivered without significant delays. Preliminary results were presented and discussed with the members of Working Group 4 at a workshop on 17 April 2018 in Lopik, the Netherlands, with feedback used to validate and revise the preliminary result. A draft report was then shared with members of Working Group 4 and selected contributors to further validate results and improve the quality of the contents. This report was written between April and June 2018, reviewed and revised between August and October 2018.

1.4 Scope and limitations

Scope

The focus of this study is on sustainable forest management with timber production as the main management objective, not non-timber forest products (NTFPs). However, in chapter 8, NTFPs are discussed as a way to improve the business case for sustainable forest management. Besides natural forests, plantation forests are also included, to the extent that this is of relevance for the countries included. The importance of plantations is particularly high for Ghana.

This study looks at the business case for sustainable forest management, whereas other land uses (e.g. oil palm plantations) are considered as alternatives. More precisely, the existence of a business case for sustainable forest management is determined in comparison with ‘business as usual’ for the forest manager. Although it may be argued that it is an unfair comparison, because business as usual may be unsustainable forest exploitation, it does reflect a starting point for the forest manager and investments that need to be made.

Both monetary and non-monetary costs and benefits of responsible forest management certification are looked at in this study. To determine whether a business case exists, only financial costs and benefits are included in the equation. All costs that a forest management organisation bears, to be in compliance with selected certification standard, are considered to be certification costs. This means that if the starting point, i.e. at the moment a forest management organisation takes the decision to pursue responsible forest management certification, is not legal compliance, certification costs include costs incurred for legal compliance. Available studies of forest management certification costs focus on FSC, as this is the oldest of the two internationally recognised responsible certification schemes (FSC and PEFC) and the one with the largest forest area under certification in the tropics. PEFC is however, growing in the tropics with large (plantation) forest areas certified especially in Malaysia, Indonesia and Brazil (PEFC, 2017) and there are a number of country standards in various stages of development (Sournia, pers. comm.).

The identification of bottlenecks and opportunities for sustainable forest management and certification focuses primarily on those experienced by the forest manager. In many instances, forest managers also do the first processing of logs and own one or more sawmills. In other words: they are vertically integrated forest-timber industries which means the business case is viewed over the entire company, not just the forest management part. Therefore, identified bottlenecks and opportunities also cover the first processing part. Finally, issues in the broader enabling environment that have an impact on forest managers have also been identified.

Limitations

At the start of the study, the author was more familiar with forest management and certification in some focus countries (Cameroon, Ghana) than with others (Indonesia, Myanmar and Suriname). This means that information from some countries was easier to digest and put in perspective, whereas for other countries an integrated picture emerged later on in the research. At the same time, this difference may have created a less open attitude towards the collection of data where interviewees may have shared more information for the unfamiliar countries and somewhat held back for the more familiar countries. On the other hand, information from own observations and experience have been used to enrich the discussion where appropriate.

By no means does this desk study pretend to be complete regarding the identified bottlenecks and opportunities for sustainable forest management and certification. When speaking to new key informants and reviewing more publications and new information it is well possible that new issues will come up that be added to the list. The aim of this study is not to be exhaustive, but to present the main items making optimum use of available time and resources. Perceived bottlenecks and challenges mentioned by key informants are mostly unverified. However, when an issue is mentioned by more than one interviewee it is considered to be of higher importance.

2.

Business case for responsible forest management certification



Different types of forest management organisations can be distinguished, from large-scale forestry companies with their own processing facilities (so-called vertically integrated operations) to small-scale community-managed forests that hire logging contractors for felling operations. Each forest management organisation operates in a specific context and experiences a unique combination of factors that determines whether there is a (perceived) business case for sustainable forest management and responsible forest management certification. It is assumed that forest managers who decide to pursue and maintain responsible forest management certification perceive the benefits to be greater than the costs, and also that there are no foreseeable barriers in the certification process that cannot be overcome.

To gain insight into the business case for responsible forest management certification, this chapter looks at the motivations from forest managers as to why or not to obtain responsible forest management certification. Then, it analyses the direct and indirect costs of responsible forest management certification, and the benefits this brings to forest managers, before concluding with a summary of the business case for responsible forest management certification from the perspective of forest managers in the tropics.

2.1 Motivations (not) to pursue and maintain forest management certification

To understand the current uptake of forest management certification in the tropics, it is useful to know the reasons and motivations for forest managers to pursue responsible forest management certification and maintain their certificate over time. At the same time, it is equally useful to ask why those that are currently not yet certified have decided not to engage in the certification process, or why they have not succeeded in obtaining certification, or have not maintained the certified status either through a voluntary decision not to continue or because of suspension by the certification body. Insight into the motivations and drivers for decisions offer ideas as to what incentives could work to adopt more sustainable practices and/or influence the decision of forest managers to engage in the certification process.

Motivations to pursue and maintain responsible forest management certification

Interviews conducted as part of this study listed market demand and market access as the most important reasons for forest managers to engage in responsible forest management certification (Asomaning, pers. comm.; van Eldik, pers. comm.; Lorent, pers. comm.; Prabowo, pers. comm.; Slesazeck, pers. comm.; Sournia, pers. comm.; Wanders, pers. comm.). This is in line with the results from the FSC global market survey of 2016 where meeting client demand was reported as the number one reason for companies to become and stay FSC certified (FSC, 2017).

Other motivations include the following.

- Availability of well-designed donor support programmes (van Eldik, pers. comm.; Ellenbroek, pers. comm.; van der Hout, pers. comm.; Prabowo, pers. comm.; Sarjito, pers. comm.).
- Company image and brand reputation (Lorent, pers. comm.; Wanders, pers. comm.).
- Expectation of financial benefits/ price premium (Asomaning, pers. comm.; Ruslandi, 2015);
- Requests from investors (Slesazeck, pers. comm.).
- Pressure from NGOs (Wanders, pers. comm.) (in certain countries)
- Not being considered a laggard (Asomaning, pers. comm.) (in certain countries).

Ruslandi (2015) studied the motivations for natural forest management companies in Indonesia to engage in responsible forest management certification. Interestingly, two groups were distinguished, each with their own dominant motivation. The first movers (obtaining FSC certification between 1999 and 2003) were motivated by professional improvement of staff, a better image of the company, and the potential to obtain government incentives (for example, through less frequent monitoring visits by the government, increased likelihood of obtaining/maintaining forest concession rights). Those who entered the certification process later (from 2004) were mainly motivated by economic reasons in terms of improved market access and a price premium. Closely linked to these motivations, box 2.1 lists key factors that influence the decisions by forest managers to pursue responsible forest management certification.

Reasons not to engage in responsible forest management certification

This includes forest managers that have never chosen to engage in the certification process, those that started the process towards responsible forest management but stopped halfway, and those that did engage but decided to stop maintaining forest management. Reasons are linked to the lack of a business case (i.e. high costs and/or low benefits), and because of other barriers that are hard to overcome, e.g. overlapping land use rights that are incompatible with responsible forest management certification.

For those that have never engaged in the certification process, the dominant reason is that there is no perceived need to pursue certification as there is no market demand (Wanders, pers. comm.). In general, the EU market is the most sensitive to responsible production and so this is where the largest demand exists for certified wood products. If there is no demand and there is no willingness to pay a price premium for responsibly produced timber, it is not worth for the forest manager to invest in adopting more sustainable forest management practices (Asomaning, pers. comm.). Another reason mentioned during interviews is that companies do not like to be at the centre of global attention (Cobbinah, pers. comm.), as this makes them vulnerable to reputational damage in case of critiques by third parties.

Box. 2.1. Key factors that influence decisions for responsible forest management certification

Market and product characteristics

Certification, being a voluntary market mechanism, is most attractive for those who are already linked to a market that is sensitive to how forest products are being produced. Export-oriented vertically integrated forestry businesses, especially those with markets in Europe (where there is a demand for certified timber), are more likely to adopt certification than forest management organisations that are supplying domestic markets or that are not directly linked to the timber market. In niche and high-end markets, there is a higher likelihood to get a price premium for certified products.

Size of the forest operation

Certification costs are relatively higher for smaller operations due to certain fixed costs which means that it is more expensive per area of forest and per volume of harvested products.

Availability of financial support or incentives

The availability of financial support by donors to cover at least part of the costs for certification is an incentive that influences the decision to pursue certification. Government incentives can also be a motivation to pursue certification.

Current level vis-à-vis sustainable forest management

Forest management organisations that face stricter legal requirements set by the government in their countries find it easier to comply with certification standards, as the efforts and financial costs are lower compared to those forest operations facing less strict rules. Besides rules as laid down in the law and implementing regulations, the level of law enforcement is perhaps even more important in the tropics. It is assumed that those who experience a smaller gap between current practice and the standard requirements are more likely to engage in certification than those who have a long way to go before getting to the level as required by the responsible forest management standard.

NGO pressure and brand image

Larger forest management organisations may be more likely to be the target of NGO pressure, and in response, may decide to pursue certification. However, once certified, there is no guarantee that they are free from further scrutiny and criticism by NGOs on their forest management or broader business practices.

Associational structures

Forest management organisations may collectively decide to support or boycott forest management certification schemes, and for those in an association, peer pressure can influence their decision.

Source: modified from Auld et al., 2008.

For forest management organisations that became engaged in the certification process but that did not continue, reasons could include the following (based on the author's own observation based on work in the Congo Basin): (i) difficulties encountered during the process which cannot be readily solved, e.g. land tenure conflicts; (ii) discouraged by administrative processes (see also Ruslandi, 2015); and (iii) changed market conditions (e.g. economic crisis).

For those that were once certified, but lost or gave up their certified status, three main reasons are given. First, the costs to maintain certification are high and are not compensated by benefits (Dennebos, pers. comm.; Ruslandi, 2015; Wanders, pers. comm.). This is in line with the reported reasons by FSC certificate holders that plan to drop their certificate: costs of certification, lack of a price premium, or inadequate demand for FSC-certified products (FSC, 2017). Second, non-compliance with the standard due to new requirements or a changing environmental context (Lorent, pers. comm.). Third, sale of forest concession (Auger-Schwartzberg, pers. comm.) which may be linked to the low overall profitability of the business (Karsenty and Vermeulen, 2016). In the certification section of every country chapter (chapter 3-7), a short description is given of the certified forest area in the past and – where available – reasons why certification was ended.

For each of the three groups of forest management organisations that are not certified, the level of forest management vis-à-vis sustainability likely differs. It can be assumed that those who were once certified are more likely to employ responsible practices as they may continue to use the management plan, engage with stakeholders, take care of staff, employ reduced impact logging techniques, etc.

2.2 Costs of forest management certification

The costs associated with responsible forest management certification can be divided into direct costs linked to audits by certification bodies and the chain of custody system, and indirect costs linked to the changes required to management plans (informed by various studies) and forestry operations including management of staff and the environment. These indirect costs reflect the changes that are required for more sustainable forest management and compliance with the forest management standard of the pursued certification scheme. Another subdivision that can be made is the costs linked to certification in the pre-certification stage and the costs incurred to maintain the certified status. Box 2.2 lists the main cost items for FSC certification as reported by WWF (2015). Since existing data on the costs of responsible forest management certification in the tropics is predominantly available for FSC certification (that exists longer, especially in the tropics), the majority of the sources used in this chapter focus on FSC certification. Although there may be some differences when it would be compared to the costs for PEFC certification, it is assumed that these differences will remain within the same order of magnitude.

In this study – unless otherwise specified – the pre-certification costs include all costs to bring the forest management organisation in compliance with the certification standard from the moment the decision was taken to pursue certification. This means that the pre-certification costs may include expenses related to bringing the forest management organisation in compliance with laws and regulations, if business as usual of the forest manager was not legal compliant at the starting point.

Box 2.2. Major cost items for FSC certification, per category

Direct costs

- Pre-assessment (or pre-audit)
- Initial FSC audit
- Chain of custody system
- Recurring audits

Indirect costs

- Environmental, social and HCV*
- Planning, procedures and inventory
- Environmental and social impact assessment (ESIA)
- Mapping and demarcation
- HCV management (including set-aside areas)

Management

- Training
- Staffing (e.g. certification manager, monitoring staff)
- New machinery

Labour

- Benefits to workers
- Safety equipment
- New labour facilities

Source: adapted from WWF, 2015.

2.2.1 Costs involved in obtaining certification

The process towards certification can be costly, depending on the starting position (i.e. current level vis-a-vis the certification standard), the size of the forest management organisation and the specific context. Staff of forest management organisations often do not have the required expertise to prepare for certification, so it is common that consultants are hired to execute studies (e.g. environmental and social impact assessment, high conservation value assessment), revise or draft plans and procedures, provide training to staff, etc. (van der Hout, pers. comm.; Ruslandi et al., 2014).

For estimated costs of certification, different figures can be found most of which are based on case studies. Table 2.1 provides an overview of reported certification costs. Unfortunately, there is not a single, comparable metric used for reported figures by the various sources. An attempt is made to present comparable figures (USD/ha) and, where necessary, calculations are explained.

Reported costs vary from an average 1.75 USD/ha (Lorent et al., 2018) to 7.80 USD/ha (The Borneo Initiative (TBI, 2017b). The studies by WWF (2015) and

PwC (2012) include case studies from various countries and regions and both report a high variation in reported costs from one forest management organisation to another. In general, certification costs per hectare decline with increasing forest concession area (PwC, 2012; Ruslandi et al., 2014). This may explain the relatively lower cost estimate by Lorent et al. (2018) for the Congo Basin where the forest area managed by forest management organisations is large, main forest companies manage roughly 200,000 to 500,000 ha of forest and some over 1 million ha (Karsenty, 2016). Further, certification costs depend on the starting point of the forest management organisation. Interestingly, the highest figure is given by The Borneo Initiative (TBI, 2017b) and this study looks at FSC certification costs that are additional to legal compliance costs. Finally, it can be assumed that absolute costs increase with time due to inflation (and increase in consultants' day rates, audit costs, etc.) which would mean that more recent data would be more accurate and that today's costs would be higher than those reported in the past.

Table 2.1. Reported certification costs for tropical forests.

Source	Tropical forests	Other forest types	Remarks
Lorent et al., 2018	1.2-2.3 USD/ha *		Coarse estimate of certification costs for natural forests in the Congo Basin
Oréade-Brèche and Nature+, 2017	3.44 USD/ha *** (12.36 USD/ m ³ ***)		FSC certification costs for natural forests in the Congo Basin, average over the first 5 years
TBI, 2017b	Pre-certification costs: 7.80 USD/ha **** (total: 390,000 USD **)		FSC certification costs of natural forests in Indonesia, additional to legal compliance.
WWF, 2015	4.95 USD/m ³ (2.66 USD/ha) *****	Temperate + boreal: 2.83 USD/m ³ Natural forest vs. plantation: 4.02 USD/m ³ vs. 2.73 USD/m ³ Average all forest types: 2.01 USD/ha or 3.74 USD/m ³ (large variation)	Pre-certification costs of 11 FSC certified operations (natural forest + plantations) across 4 continents, including 6 forest management organisations in the tropics
Ruslandi et al., 2014	4.68 USD/ha		FSC certification costs for natural forests in Indonesia
PwC, 2012	4.25 USD/ha (range 1-10 USD/ha)	Temperate + boreal: <0.5 USD/ha	Average annual certification costs over the first 5 years (based on Simula et al., 2004 and GFTN, 2011).

* calculated from the reported 1-2 EUR/ha using exchange rate by www.xe.com, accessed June 3 2018.

** calculated from the reported 334,000 EUR and 113,000 EUR using abovementioned exchange rate.

*** calculated from the reported 2.95 EUR/ha and 10.60 EUR/m³ using abovementioned exchange rate.

**** based on a forest management enterprise managing 50,000 ha (as suggested by TBI, 2017b).

***** The average costs per ha are lower (2.01 USD/ha) than the average costs per volume of harvested timber (3.74 USD/m³). When the same ratio (2.01/3.74) is applied to the reported costs for tropical forests (4.95 USD/m³) this would result in a figure of 2.66 USD/ha. This figure merely gives an indication of a possible order of magnitude and must be used with caution.

When comparing reported costs figure for tropical forests to non-tropical forests, it is clear that average costs for responsible forest management certification in the tropics are significantly higher than in non-tropical regions (PwC, 2012; WWF, 2015). WWF (2015) further report that average certification costs for natural forests are higher than those for plantation forests. The figure below shows the relative importance of the major cost items in the pre-certification stage as reported by WWF (2015). In the pre-certification stage, direct certification costs account for 34-42% (depending on whether or not training for certification would be considered an indirect or direct cost item) and indirect certification costs take up 58-66% of total pre-certification costs.

Opportunity costs

Besides the abovementioned 'out-of-pocket costs', there is also reduced revenues caused by lower harvested timber volumes due to the establishment of set-aside protection areas (PwC, 2012; Ruslandi et al., 2014; WWF, 2015; TBI, 2017b), and, in some cases, increased minimum harvesting diameters and retaining seed trees. This can

be considered as a one-time pre-certification cost or as annual foregone revenue costs. The study by PwC (2012) reports reduced revenues caused by a reduction of the annual allowable cut (AAC) as the most important cost item. A case study in Malaysia reported a 25% reduction in revenues due to the lower AAC, whereas changes to improve management operations accounted for about 4% of profit reductions and the direct costs for auditing only 1% (PwC, 2012). For forest management organisations in the tropics WWF (2015) report a conservative average opportunity cost for set-aside HCV areas of 0.74 USD/m³ (0.04-2.60 USD/m³). The Borneo Initiative (TBI, 2017b) does not report any additional costs of FSC certification compared to legal compliance costs.

2.2.2 Costs involved in maintaining certification

Once a forest management organisation has obtained certification, there are annual costs involved in its maintenance. Besides the obvious annual audits, there are costs involved in monitoring various social and environmental impacts. Also, responsible forest management practices need to be maintained and in case the forest management standard is updated, resources may need to be allocated to comply with new or updated requirements.

WWF (2015) reports average annual cost associated with maintaining FSC certification of 3.71 USD per m³ of certified roundwood equivalent, or 4.16 USD per hectare of certified forest. It is interesting that the reported maintenance costs per hectare are higher than the pre-certification costs (2.01 USD/ha). (The Borneo Initiative (TBI, 2017b)) report annual maintenance costs of FSC certification in Indonesia to be 2.64 USD/ha¹ or total costs for a forest enterprise to be 132,000 USD². Figure 2.2 shows that monitoring of environmental and social impacts and implementing measures to mitigate negative impacts account for a large share of the total costs to maintain FSC certification; combined with HCV management over 40%. The second largest cost item is benefits to workers (WWF, 2015). Direct certification costs are responsible for 17-27% of certification maintenance costs and the share of indirect costs is 73-83%, depending on whether or not staffing and training for certification would be considered direct or indirect costs.

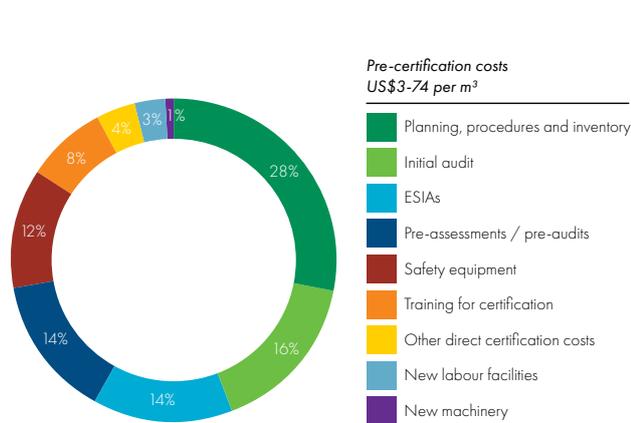


Figure 2.1. Total costs and the share of the main cost items associated with obtaining FSC certification per m³ of timber produced. Source: WWF, 2015.

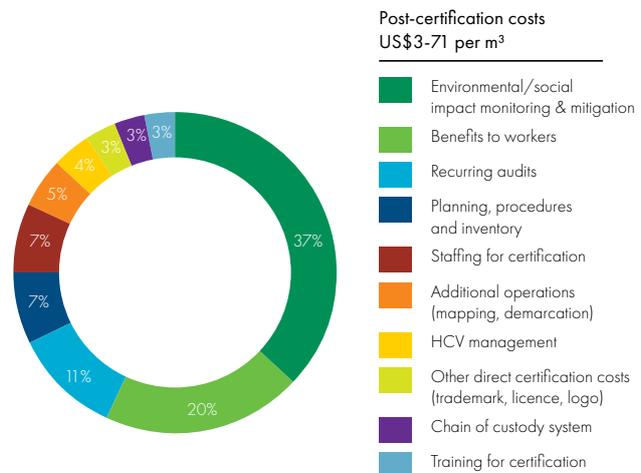


Figure 2.2. Total costs and the share of the main cost items associated with maintaining FSC certification per m³ of timber produced. Source: WWF, 2015.

2.3 Benefits of forest management certification

Box 2.3 lists the main monetary and non-monetary benefits associated with FSC certification.

Efforts to quantify the financial benefits are anecdotal and very context-specific. The fiscal and legal financial benefits, for example, depend on the country and the specific legal context. In Peru for example, forest concession holders can benefit from significant discounts on their yearly lease payment (up to 70%) through the

1 based on a forest management enterprise managing 50,000 ha (as suggested by TBI, 2017b)

2 calculated from the reported 334,000 EUR and 113,000 EUR using exchange rate by www.xe.com, accessed June 3 2018.

Box. 2.3. Major benefits from FSC certification, per category

Revenues and market access

Price premiums
Client acquisition and retention (i.e. opening up new markets and maintenance of current markets)

Operations

Operational efficiency
Management effectiveness and quality control

Fiscal and legal

Tax breaks
Reduction in legal payments
Reduction in fines and penalties

Labour and community

Reduction in incidents and safety accidents
Higher staff morale
Improved stakeholder relations

Other

Increased access to finance and technical support
Better public image
Government incentives
More sustainable resource base

Source: Modified from WWF, 2015 and combined with information from Chen et al., 2010; Ruslandi et al., 2014; Ruslandi 2015b; Dennebos, pers. comm.

adoption of various types of sustainable practices including the adoption of FSC certification (ISEAL, 2018). One of the forest management organisations included in the study by WWF (2015) reported 'other benefits' of almost 9 USD/ m³ of certified production whereas 'other benefits' were reported by only two other forest management organisations included in the study and their importance was a lot less with ~0.5 USD/m³ and ~1.5 USD/m³ of certified production. As all information is on a case study example basis, it seems that even a reliable order of magnitude cannot be given for most listed benefits. For that reason, only price premium and operational efficiencies are further explained below.

Price premiums

Price premiums are highly variable per market segment and throughout time: some studies report no or almost none, whereas other studies report up to 50% of price premiums (PwC, 2012; WWF, 2015). Price premiums also vary at the different stages of the supply chain, per country and per certification scheme (PwC, 2012). An assessment of the business case for forest management certification in the tropics by Price-waterhouseCoopers in 2011 concluded that the high variance suggested that overall, there is no clear price signal from the market for certified timber products (PwC, 2012). The study by WWF (2015) reports an average price premium of 2.57 USD/ m³ (range: 0-6 USD/m³) of certified production, with price premium and increased market access primarily reported for community and small-scale timber producers and for certain tropical timber species.

Interviews conducted as part of this desk study show that for Africa (Cameroon – or the Congo Basin in general – and Ghana), there is no or a low price premium (Asomaning, pers. comm.; PwC, 2012; Sournia, pers. comm.; Wanders, pers. comm.). For Suriname, the premium price paid for FSC certified timber is reported not to be sufficient to be a motivation to pursue FSC certification (Dennebos, pers. comm.). Tese (pers. comm.) estimates that in the market about 5-10% more is asked for FSC certified timber, but also adds that in many cases there is no willingness to pay more. Indonesia is the only country where a willingness to pay a price premium has been reported (Ellenbroek, pers. comm.). A trade survey conducted in 2016 among Indonesian FSC certified forest concessions and wood processing industries shows that price premiums were 7-13% (The Borneo Initiative (TBI, 2017a)).

Furthermore, it is common practice among forest operations that in case there is no demand for certified timber and no willingness to pay a price premium, the timber will not be sold as certified but as regular timber (Auger-Schwartzberg, pers. comm.; Prabowo, pers. comm.; Sournia, pers. comm.; Wanders, pers. comm.). This means that the costs for FSC certification need to be covered by part of the timber sales and the question is whether that share is sufficient to cover the costs for FSC certification (Wanders, pers. comm.).

Even when there is a demand, this does not always translate into a willingness to pay a premium to cover the additional costs borne by the forest manager for responsible production. For example, some giant retailers want to buy certified material, but they do not want to label it and they do not offer a very high price premium which means that in the end, the financial benefits often don't outweigh the costs (Prabowo, pers. comm.).

Operational efficiencies

All six natural forest managers included in the study by WWF (2015) reported operational efficiencies through improved planning and reduced waste generation as a result of the reduced impact logging techniques they implemented for FSC certification. Similarly, Ruslandi et al. (2014) assume that foregone revenues due to lowering the AAC will likely be partly compensated for by improved operational efficiencies. Dennebos (pers. comm.) concurs that there is an increase in operational efficiency and that this is a clear benefit of the process to achieve FSC certification.

2.4 Bottom line: the business case for responsible forest management certification

The various sources come to slightly different conclusions on whether or not there is a business case for responsible forest management certification. Based on the data presented in section 2.2 and 2.3 it is clear that not just costs, also benefits are highly context-specific. This also makes the existence of a business case highly variable from one forest management organisation to the next (WWF, 2015).

PwC (2012) reports that the business case is hard to make for many forestry operations in the tropics, amongst others because of the revenue losses due to reduction in AAC and because price premiums may not be sufficient to cover costs. The study by WWF (2015) concludes that after deducting the costs from the benefits reported by the 11 forest management organisations included in their study, FSC certified forest management organisations on average earned an additional 1.80 USD per m³ of FSC certified roundwood (or roundwood equivalent). The study also finds that the business case was strongest for forest management operations in the tropics and small/medium-sized producers, while temperate producers and large operators that were part of the WWF study experienced small losses from FSC certification. On average, it took forest management operators six years to break even on their investment for FSC certification (WWF, 2015).

Forest management organisations included in the study by WWF (2015) already made the decision to obtain and maintain FSC certification. This makes it highly likely that for their particular situation there was a perceived business case at the moment this decision was taken, unless the decision was taken based on non-economic reasons like NGO pressure. This self-selection may have resulted in a more positive image of the business case than what would be applicable to the average forest management organisation. In other words: when a business case is reported to exist among currently FSC certified forest management organisations, this does not automatically mean that a business case will exist for all other forest management organisations. A number of key factors have been identified that influence the decisions by forest management organisations to pursue certification or not, see box 2.1. Most of these factors are linked to the (perceived) existence of a business case.

There is overall agreement that a price premium is important for the business case of certification (PwC, 2012; WWF, 2015; Ruslandi, 2015; Prabowo, pers. comm.). WWF (2015) show that the business case is most sensitive to the existence of a price premium; if price premiums would be reduced by 50% or more, there would no longer be a business case for FSC certification.

A final point of discussion is whether sustainable forest management and responsible forest management certification should be – and can be – as profitable as (or even more profitable than) business-as-usual. When business-as-usual means no full legal compliance and/or involves unsustainable practices that resemble forest exploitation aimed at reaping short-term profits, this is probably not a realistic expectation. It remains an open question to what extent the financial profitability of a forest management operation can decrease, while sustainable forest management and responsible forest management certification would still be considered an interesting alternative for forest managers because of its associated (non-monetary) benefits.

3.

Cameroon Country Profile

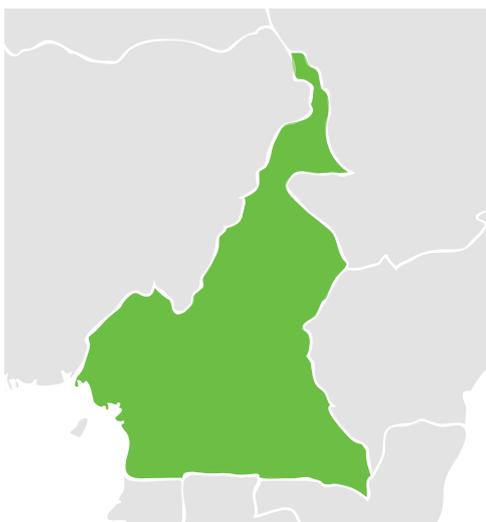


3.1 Forest management certification in Cameroon

Bureau Veritas' Origine de Légalité de Bois (OLB) is popular among Cameroonian forest companies with 3.3 million ha of forest certified under this legality scheme, dd. December 1st 2017 (Bureau Veritas, 2017). Further, there are a few forest companies certified according to Rainforest Alliance's Verified Legal Compliance (VLC) standard: Société Forestière et Industrielle de la Lokoundjé (49,595 ha) and HEVECAM S.A (rubber plantation of 40,992 ha) (Rainforest Alliance, 2018a).

At the moment, FSC is the only active scheme on responsible forest management with two companies managing FSC FM certified forests and one company managing an FSC Controlled Wood certified forest. In total these cover an area of over 410,000 ha and almost 360,000 ha, respectively (see table 3.2). Four CoC certificates are active – most of them (3 out of 4) linked to a company managing certified forests (FSC, 2018a).

Quick overview Cameroonian forest and timber sector



Forests

Total forest area % total land area
18,816,00 ha* **40%***

Forest types****



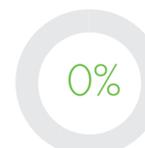
Dense
evergreen
rainforest



Dense
semi-deciduous
rainforest



Various
including
plantations



Forest
plantations
growing trend observed

Population

24,499,677**

Growth rate

+2.60%

Indigenous people

Baka pygmies

Corruption Perception Index 2017

Score: 25/100, Rank: 153/180

(Transparency International, 2018b)

Important institutions

- Forest Law of 1994
- Ministry of Forests and Wildlife (MINFOF)

FLEGT-VPA status

Signed in 2010, entered into force in 2011, currently implementing (EU FLEGT Facility, 2018a)

More legality info

WRI Legality Tool; ETTF Timber Trade Portal

Main timber markets

China, Vietnam and the EU (Belgium, Italy, UK) (ITTO, 2017)

Trade link to the Netherlands

Cameroon is the second most important country for supply of tropical sawnwood to the Netherlands (Oldenburger et al., 2016)

Trade link to Western Europe

Belgium, Italy, UK and France are listed as the most important Western European countries for timber export, principally for sawnwood (ITTO, 2017; Mahongol et al., 2016)

Forest classification****

Production forest: **7.9 million ha, 6.9 million ha of UFA**

(unités forestiers d'aménagement, forest management units; Cameroon and the EU, 2017)

Protected forest: **3.9 million ha**

Non-permanent forest: **8.5 million ha**

(including 0.24 million ha of community forest)

Note: in the FRA 2015 no forests have been earmarked for conversion (FAO, 2014a)

Forest tenure production forest

Ownership (FAO, 2014b): All forests are owned by the state, except for an extremely marginal forest area that is in private ownership.

Management: (based on 2005 data; FAO, 2014a): Public administration: **58%** (2% decentralised as communal forest); Private companies: **41%**; Communities: **1%**

Note: based on more recent data by WRI and MINFOF (2014), an increasing trend is observed of communal and community forests

Deforestation

Deforestation rate: -1,05% (220,000 ha/year)***

Direct drivers:

- slash-and-burn agriculture
- cash crop expansion
- agro-industry
- small holder development
- bush fires
- infrastructure development
- logging
- illegal and unplanned exploitation of forests for wood
- energy
- mining
- urban and rural development

Indirect drivers:

- population growth
- interregional migration
- growth of the local and international markets for timber and commodities
- fluctuations in cash crop prices
- devaluation of the CFA franc
- insecure land tenure (MINEPDED, 2017)

* as estimated for 2015 (FAO, 2014a)

** dd. March 22, 2018 (Worldometers, 2018)

*** rate in 2005 (FAO, 2014a)

**** based on data from 2004 (FAO, 2014a)

Table 3.1. Overview of FSC certified forests in Cameroon, dd. May 30, 2018 (FSC, 2018a).

Organisation	Certificate	Forest area (ha)	First year of certification
Groupe Wijma Cameroun	FSC FM/CoC	70,268	2005
PALLISCO et Partenaires	FSC FM/CoC	341,708	2008
Total	FSC FM/CoC	411,976	
Societe des Grumes du Cameroun (GRUMCAM)	FSC CW/FM	359,060	2016
Total	FSC CW/FM	359,060	

All organisations included in table 3.1 are companies with strong links to Europe in terms of ownership and trade: Wijma to the Netherlands, Pallisco to France, and Grumcam (Alpicam) to Italy.

The area of FSC certified forest used to be larger in the recent past, but for a number of reasons (sale of concessions, financial difficulties and bankruptcy, suspension of a certification body) certificates have been terminated. In November 2017, CAFECO (part of Groupe Wijma Cameroun) terminated their FSC certificate and Groupe Wijma Cameroun reduced the scope of their FSC certificate, because they sold the majority of their concessions (Auger-Schwartzberg, pers. comm.). Due to financial difficulties, SFID from Rougier Group also terminated their FSC certificate beginning of 2018. As a result, the total area of FSC certified forests decreased massively from 1,130,301 ha (beginning of November 2017) to 411,976 ha (end of March 2018). Other companies that terminated their FSC FM/CoC certification are: Société Forestière et Industrielle de la Lokoundjé S.A. (SFIL – in 2015), TRC (Transformation Reef Cameroun – in 2013) and SEFAC S.A. (in 2009). Taken all together, an additional area of over 1 million ha used to be under FSC FM/CoC certification.

3.2 Bottlenecks and challenges for sustainable forest management and certification

This section presents the bottlenecks for responsible forest management certification and sustainable forest management in a broader sense. It is important to note that in Cameroon most of the production forests are managed by companies (see table 3.1). The government manages mainly protection forest and interacts with the other forest managers by issuing permits and approvals. Although an increasing trend is observed, communities manage only a limited area of forest. Further, communities interact with other forest managers (companies and government) when they use the forests that surround them (for collecting NTFPs, hunting, etc.). Based on the dominant role of the private sector in production forest management and their link to the timber market, it is no surprise that forest management certification has been exclusively adopted by the private sector. This also means that the majority of bottlenecks encountered are categorised as belonging to the company perspective (3.3.2).

3.2.1 General challenges

Conflict situation

Tensions between the Anglophonic western part and the main Francophonic part of Cameroon have started in 2016 and intensified since last year. The English speakers feel marginalised and separatists want to create an independent state of the North-West and South-West provinces called 'Ambazonia'. In June 2018, the situation is referred to as a crisis with severe civil unrest, violent repression of protests involving torture and killings, and tens of thousands of refugees fleeing from the conflict area (Cocks, 2018). The forest management company CAFECO, subsidiary of the Dutch timber trading and processing company Wijma Kampen BV, has ceased activities in South-west Cameroon due to the intensified conflict between opposing parties and security forces. The company, as well as its FSC certificate, is dormant until peace will be restored (cameroononline, 2018).

Illegal logging

Illegal logging and associated trade is still a major issue in Cameroon (ITTO, 2017). The FLEGT processes became frozen last year from an institutional point of view (Auger-Schwartzberg, pers. comm.). The last report from the first FLEGT-VPA phase, written by an independent auditor, required several changes from the administration; they are currently working on adjustments. One issue has to do with the law that stipulates a maximum concession size of 200,000 ha; some companies are managing larger areas of forest (Auger-Schwartzberg, pers. comm.).

Corruption

With a score of 25 out of 100 and a rank of 153 out of 180 (CPI, 2018b), corruption can be considered a serious issue in Cameroon (Sprik, pers. comm.). When the issuance of permits and signatures for approvals can be bought – even when not all requirements are met – this leads to and aggravates illegal logging.

Legality as the new norm

Because of the EUTR, legality is becoming sufficient for entry into the European markets. This then makes legality become the new norm (Auger-Schwartzenberg, pers. comm.).

Dependency on donors and support

For initiatives on sustainable forest management to survive or move forward, there usually is a lack of financial autonomy and a dependence on donors in the Congo Basin. The development of the national PAFC Cameroon standard, for example, is led by a group of volunteers. Also, standard working groups in Africa need a lot of capacity building and support in various aspects: leadership, administration, fundraising, communication and marketing (Sournia, pers. comm.).

Language

The two official languages of FSC are English and Spanish. This means that all communication, official documentation and public consultations are done in these two languages. The majority of forestry sector players in Cameroon are francophone. Although the certification standards and most important materials are translated in French, not everything will be (readily) available. This has been a complaint by FSC stakeholders from the Congo Basin for years (author's personal observation). For PEFC, Sournia (pers. comm.) mentions the same language barrier for the working group developing the national PAFC Cameroon standard.

Bad image of tropical timber

Among consumers, a bad image of tropical forest is still important which translates into declined market shares for African timber (Lorent et al., 2018).

3.2.2 Company perspective

Market shifts

Historically, many companies have a link to Europe (see also section 3.2); nowadays, many companies export to both European and Asian markets. Over the last couple of years, the export market is more and more oriented to Asia and less to Europe. In Asian markets there is typically no demand for sustainably produced timber and certification. Further, the domestic and regional markets are becoming more important and there the demand for certified timber is also non-existent. The only reason to pursue certification is to supply sensitive markets; for those who sell to non-European markets, certification is not interesting (Wanders, pers. comm.).

Low to no price premium

Interviewees mention that in the Congo Basin no (interesting) price premium is paid for certified timber. Companies are motivated to pursue certification because it offers them new or continued market access to Europe (Sournia, pers. comm.; Wanders, pers. comm.).

Congestion at the port of Douala

The ITTO (2017) has already reported congestion at Douala Port in 2013 and 2014. The identified cause was insufficient loading facilities, resulting in major logistical problems for wood product exports with significant stockpiling of products awaiting shipment. Beginning of 2018, this congestion at the port of Douala – the major export point for the Congo Basin – is one of the reasons given for Rougier's financial difficulties (jeuneafrique, 2018).

Delays in payment of VAT by the government

The Cameroon government owes many companies VAT reimbursements which may result in difficulties in financial flow and liquidity. At the end of 2016, the amount of VAT to be returned to Rougier was as much as 8 million euro (jeuneafrique, 2018).

Bad image of the forestry sector, FSC certification not a protection

The forestry sector in the Congo Basin does not have a good public image. In Cameroon, there is suspicion and criticism on (il)legality and corruption of the forestry sector, including FSC certified operations.

In response to contradicting opinions and concerns of quality from different stakeholders about what happens in the FSC certified forest management organisations in the region, in 2011 FSC asked ASI to perform a systematic evaluation of all Forest Management and Controlled Wood certificates issued by CBs in the Congo Basin (FSC, 2012). The series of ASI evaluations concluded that in general the quality of FSC certificates was good and resulted in the withdrawal of one controlled wood certificate in the Democratic Republic of Congo (ASI, 2012).

In 2015, a mission by independent experts - executed in the framework of the VPA - revealed that the legality grid is not fully implemented with actors on all levels unable to provide certain documents that according to law and legislation should be available. A particular issue that came up is related to the attribution of concession rights and the limits of the total forest area to a maximum of 200,000 ha under management by one legal entity; in this regard, FSC certified companies were accused of incompliance with the Cameroon forest law (e.g. africatime.com, 2015; cameroonvoice, 2015). When looking into the details of the law and regulations, there are possibilities for working in partnership with other companies by managing areas as a subcontractor and/or having (minority) shares in other companies; when this is considered FSC certified companies are in compliance with the maximum area of concession rights attributed to them (FSC, 2015).

Despite (or because?) of being FSC certified, companies are still 'targeted' by criticism. This is also related to the FSC Policy of Association where for an FSC certified company that belongs to a bigger group or is otherwise related to other forestry companies (shared ownership), all related companies are expected to have a minimal level of forest management. A major case that got international attention is that of the German Danzer Group whose FSC certificate of IFO in the Republic of Congo was suspended after allegations of human rights violations at the associated company SIFORCO in the Democratic Republic of Congo.

FSC standard and Intact Forest Landscapes

In general, there has been some instability and complexity of the FSC standard, especially the regional Congo Basin standard of 2012. More recently, new requirements have emerged that are very impactful notably those linked to intact forest landscapes (Lorent et al., 2018). Recent discussions about intact forest landscapes (IFLs) within FSC are not at all supported by companies that operate in these areas. These companies now face uncertainty as to whether they will be able to continue their business activities under FSC certification. Further, there are no new companies interested in FSC certification as long as this issue and the effect on their operations is completely clear (Auger-Schwartzberg, pers. comm.).

3.2.3 Community perspective

Communities and smallholders generally manage a relatively (compared to companies) small forest area which means that forest operations are also on a smaller scale. The first two identified bottlenecks from the community perspective relate to this issue of scale.

Keeping good staff

According to Sprik (pers. comm.) the common idea that timber from community forests is of an inferior quality does not have to be true; it just requires careful selection of staff as well as provision of training. Community Forest Group BV (CFG) exported 350 m³ of timber coming from community forests in the period from 2014 to 2017. Because of the small scale, harvesting activities are only taking place in part of the year. When working with contractors, which is what CFG does and also what is common in community forests, it is a challenge to keep quality contractors as they are not offered work throughout the year (Sprik, pers. comm.).

No group certification possible in legal context

A solution applied to small-scale forest managers that would like to reach economies of scale is to get united in a group and organise management practices and market access centrally. Responsible forest management certification schemes also recognise the importance of scale and have included the option for group certification. Ini-

tially, CFG had the idea to set up and pursue group certification of community forests in Cameroon. However, they learned that the idea of uniting into groups does not work in Cameroon. The biggest bottleneck is the legal system which requires the forest to be directly linked to the export, otherwise it would be too complicated to organise the traceability (Sprik, pers. comm.).

Extensive red tape

In order to be able to access export markets, a community forest needs to obtain an enormous number of documents. CFG has acquired export licenses for all community forests they work with as well as all other documents that are required to be in compliance with the EUTR, according to a self-developed due diligence system. For each of the community forests, 130 documents needed to be acquired from the government. This is a cumbersome and expensive process – with fees applicable for all documents – which could be very discouraging and act as a barrier (Sprik, pers. comm.).

3.2.4 Government perspective

No government representative has been engaged in this study.

3.3 Solutions and opportunities for sustainable forest management and certification

3.3.1 General solution and opportunities

Make certification cheaper for the forest manager

An obvious way to increase the interest for the adoption of responsible forest management certification is to make it cheaper. Where scale is a problem, group certification could help (Sournia, pers. comm.). Apart from a support programme (like IDH's Congo Basin Program and KfW's PPECF) another idea would be – for an organisation like e.g. the EU – to allocate an annual SFM support budget to forest managers (Wanders, pers. comm.).

Develop the market for certified forest products

Various ideas came up to further develop the market for certified forest products. The ideas below are not necessarily only useful for Cameroon, but applicable for the promotion of responsible forest management certification in general. Therefore, these ideas are presented in the discussion.

Linking with EUTR

Cameroon has signed a FLEGT-VPA with the EU and is currently in the implementation phase. The government of Cameroon has recognized FSC forest management as well as OLB certificates granted by Bureau Veritas as "FLEGT-compliant", as stipulated in decision 0016 dd. 20 January 2016 (MINFOF, 2016). This recognition means that compliance with these voluntary certification standards are considered to fulfil all legal requirements laid down in the VPA of Cameroon. As soon as the country will have completed its timber legality assurance system and will start granting FLEGT licenses, it is expected to make controls by the FLEGT authorities quicker and easier. At the moment, certificates granted by Bureau Veritas are not approved FLEGT licenses, but they can be used for due diligence mitigation by EU timber importing companies. The Rainforest Alliance, currently the only other FSC FM certification body in Cameroon, is expected to receive the same recognition (FSC, 2016).

Cameroon is the first country in which the FSC standard is recognised as sufficient and not in need of an additional FLEGT license which avoids double-checks and sometimes also money. Even though in principle it is good news for FSC, the fact that there is a separate accreditation layer poses risks. There is a potential risk of bribes and there are stories of government officials who push to be part of the audit (Auger-Schwartzberg, pers. comm.).

Interviewees stressed that FSC and PEFC should be recognized as FLEGT compliant from a higher level – not on a national level only (Auger-Schwartzberg, pers. comm.; Lorent, pers. comm.; Sournia, pers. comm.). When within the EU Timber Regulation, a 'green light' is given to certified timber this will have a positive effect in incentivizing the pursuit of responsible forest management certification. However, the EU does not seem very keen on developing a so-called 'green lane' (Sournia, pers. comm.).

Finally, it is important that there is a strong enforcement of the EUTR within the Netherlands and in other European countries regarding timber import (Sournia, pers. comm.).

Lesser known timber species

In Cameroon there is an opportunity to increase the number of marketable timber species (van Benthem, pers. comm.; Lorent, pers. comm.). This will increase the volumes of timber that can be harvested per unit area, improving the business case.

More efficient use of the harvested tree

There are opportunities to improve the processing of logs in terms of increased sawmill efficiency. Further, there is a potential for better waste recovery (Lorent, pers. comm.).

3.3.2 Company perspective

KfW funded support programme

The Programme Promotion d'Exploitation Certifiée des Forêts (PPECF), funded by the German development bank KfW, is continuing with a second cycle. PPECF2 has a total fund of 30 million euros for 4 years. The German intention is to make it a perpetual programme if positive results will be shown (Auger-Schwartzberg, pers. comm.). Compared to the first cycle, the programme has shifted its target; PPECF2 aims to increase certification of legality – aimed at OLB - while still supporting PEFC and FSC. Besides, they have other projects a.o. supporting FSC to develop payments for ecosystem services in the Congo Basin and supporting marketing activities by ATIBT. This new approach of supporting companies step by step towards improving their forest management practices is in response to the lessons learned from the first cycle which had a limited success on achieving the initially set objective (Lorent et al., 2018).

Support programmes like PPECF and the IDH Congo Basin Program are good in putting certification under the attention of those active in the forestry sector. However, to be effective and in order to be able to make an impact it is needed that programmes provide support on areas where it is needed and avoid being too rigid. Many donors and civil society organisation have an unrealistic image of how profitable the timber sector is. This colours their idea for the extent of support that would be fair or needed as well as the form in which this support is delivered. The PPECF2 programme is designed to support the companies on those aspects where they need support, it is a flexible model tailored to their individual needs which is good (Wanders, pers. comm.).

Trade linking mission

In the second half of June 2018, Dutch timber companies will be invited to Cameroon and Gabon. The idea is to show that there exists a demand for FSC certified timber, to increase the presence of FSC as well as the forest area certified under the FSC FM standard in the Congo Basin (Auger-Schwartzberg, pers. comm.).

PAFC Cameroun standard

Cameroon is working on a PAFC standard. It is expected that as soon as the PAFC Cameroon standard will be approved, likely towards the end of 2018 (Sournia, pers. comm.), all FSC certified companies will also get certified under the PAFC Cameroon standard with support of the PPECF2 programme. This double certification will allow them to open up new markets and choose which label to sell the timber with (Auger-Schwartzberg, pers. comm.; Sournia, pers. comm.).

3.3.3 Community forest perspective

Access to markets: create legality certification system

In order for certification to be interesting, there needs to be a connection to an export market where a demand exists for responsibly produced timber. Community Forest Group would be interested to use the due diligence system they developed and create a community forestry legality certification system based on that (Sprik, pers. comm.). The upscaling of their model would facilitate the access to export markets for community forests. GIZ is also trying to establish a system for the legal export of community produced timber. Their export model is different than that of CFG with a middleman as an intermediate (Sprik, pers. comm.). No further information has been collected on this.

Certification: gap assessment

With the new PAFC Cameroon standard soon to be approved, Community Forest Group has plans to execute a gap assessment for community forests. Similar to the FSC gap analysis that was performed by a student a couple of years ago. Besides PAFC, they are also exploring the possibility to include OLB and VLC for community forests in the same assessment. CFG is currently looking for funding for such an exercise.

3.3.4 Government perspective

Tax benefits for certified entities

It has been suggested that tax benefits would be a good idea to increase the adoption of responsible forest management practices and certification thereof. In the past, there have been some attempts to look into these possibilities. It is clear that nowadays it is a very big challenge to touch the sensitive and political subject of (forestry-related) taxation benefits or reforms in Cameroon (Wanders, pers. comm.).

More SFM included in law

One option to make forest management more sustainable is for the government to include more strict requirements on sustainability in its laws and regulations. In the words of the interviewee “doing something voluntary is not the only way to get to something good” (Wanders, pers. comm.).

4.

Ghana Country Profile



4.1 Forest management certification in Ghana

There is one company certified according to Rainforest Alliance's Verified Legal Compliance (VLC) standard: Specialised Timber Products Ltd., managing a forest area of 112.77 ha (Rainforest Alliance, 2018b).

At the moment, FSC is the only active scheme on responsible forest management. In Ghana, FSC Controlled Wood is more common than full FSC FM certification. Five certificate holders are managing a total area of almost 250,000 ha of forest certified according to the FSC Controlled Wood standard, whereas an area of 11,500 ha – by two certificate holders – is certified under full FSC Forest Management certification. Eight CoC certificates are active – all of them linked to an organisation managing certified forests (FSC, 2018a).

Quick overview Ghanaian forest and timber sector



Forests

Total forest area % total land area
9,337,000* **39%***

Note: the large majority consists of open forest (>15% canopy cover <60%)

Forest types****



Primary
natural forest



Secondary
natural forest



Forest plantations
growing trend observed

Forest classification

Production forest: **1.1 million ha**, (FAO, 2014b; Ghana REDD+ Strategy, 2016), plus **0.4 million ha** of conversion forest*

Protected forest: **0.45 million ha*****

Unknown/non-designated: **7.6 million ha***** (mostly non-forest land in the high forest zone that is used for farming, Nketiah, pers. comm.)

Note: there is overlap among the abovementioned categories. For example, protected forest includes all forest reserve areas that are intended to be permanent forest, but these have been heavily degraded and now there are reforestation initiatives, including by private investors (making it production forest).

Forest tenure production forest

Ownership (FAO, 2014b): All lands, and so all forested lands, are in public ownership: owned by the traditional rulers and held in trust for them by the state.

Management: For natural forests aimed for production, management tasks are shared between the government's Forestry Commission and forestry companies; there is only one community managing a small area of natural forest (Asomaning, pers. comm.). Regarding plantation development and management, the government, private sector and communities are all involved depending on the type of plantation development scheme (FC, 2017b).

Deforestation

Deforestation rate: **-2% (135,000 ha/year)** with forest degradation generally acknowledged as more important than deforestation (Ghana REDD+ Strategy, 2016).

Direct drivers:

- agricultural expansion
- wood harvesting (logging and fuelwood)
- wildfires
- infrastructural development
- mining and sand winning

Indirect drivers:

- population growth and development
- global market dynamics for timber and agricultural commodities
- weak law enforcement
- tree tenure
- low stumpage prices and overcapacity

(Ghana REDD+ Strategy, 2016)

Population

29,207,578**

Growth rate

+2.18%

Corruption Perception Index 2017

Score: 40/100, Rank: 81/180

(Transparency International, 2018b)

Important institutions

- Forestry Commission (sitting within the Ministry of Lands and Natural Resources)
- Timber Resource Management Act (1997) plus amendments and regulations, especially the Timber Resource Management and Legality Licensing Regulations of 2017 (LI 2254)
- Trees and Timber decree (1974) and amendment act (1994)
- Forest and Plantation Development Act (2000)
- Forest and Wildlife Policy (1994 and 2011)

FLEGT-VPA status

Signed and entered into force in 2009, currently moving towards full implementation (EU FLEGT Facility, 2018a)

More legality info

WRI Legality Tool; ETTF Timber Trade Portal

Main timber markets

Domestic, China, India, EU (Germany) (ITTO, 2017; Forestry Commission, 2017a)

Trade link to the Netherlands

In 2013, Ghana supplied 0.3% of the sustainably produced timber supplied to the Netherlands, making it the 10th most important country (Probos, 2015)

Trade link to Western Europe

The EU is the most important export market for Ghana after Asia, a.o. Germany, Belgium, UK, France (Forestry Commission, 2017a)

* as estimated for 2015 (FAO, 2014b)

** dd. February 6, 2018 (Worldometers, 2018)

*** data for 2010 (Ghana REDD+ Strategy, 2016)

Table 4.2. Overview of FSC certified forests in Ghana, dd. May 30, 2018 (FSC, 2018a).

Organisation	Certificate	Forest area (ha)	First year of certification
Miro Forestry (Ghana) Ltd	FSC FM/CoC	8,070.00	2017
Form Ghana Ltd.	FSC FM/CoC	3,447.34	2010
Total	FSC FM/CoC	11,517.34	
Mondial Veneer Ghana Limited	FSC CW/FM	7,708	2017
Samartex Timber and Plywood Ltd.	FSC CW/FM	150,308	2008
John Bitar Company Limited (Suhuma)	FSC CW/FM	38,800	2011
Logs and Lumber Limited	FSC CW/FM	43,191	2011
Sunstex Company Limited	FSC CW/FM	5,799	2013
Total	FSC CW/FM	245,806	

The FSC FM/CoC certificates belong to forest plantation companies whose shareholders demand sustainable practices to be adopted. For example, on the website of Miro Forestry it is stated “As a private company, with obligations to its multi-national shareholders, Miro Forestry is determined to show measurable positive social and environmental impacts” (Miroforestry, 2018). So far, there has never been FSC-FM/CoC for natural forest in Ghana.

There are a number of companies whose FSC Controlled Wood certificates have been terminated after a couple of years in 2015 and 2016: Naja David Veneer and Plywood Limited (7,808 ha), Ayum Forest Products (MIM) Ltd. (185,690 ha) and Bibiani Logging and Lumber Company Limited (10,360 ha). Together, an additional area of over 200,000 ha used to be under FSC Controlled Wood certification.

4.2 Bottlenecks and challenges for sustainable forest management and certification

In Ghana, the area of plantation forests is growing and this trend is increasing into the future with the recently developed Ghana Forest Plantation Strategy 2016-2040. The challenges experienced with natural forests are very different from those encountered with plantations. Therefore, a distinction is made between A. natural forests and B. plantation forests for each of the four perspectives (general, company, community, government).

4.2.1 General challenges

Corruption

Ghana has a corruption perception index score of 40 out of 100 and ranks 81 out of 180 (Transparency International, 2018b). Although this means that Ghana is doing better than the global average, corruption is still an issue. Companies are frustrated by a lot of informal payments they have to make at every stage, from securing access to the resource to harvesting operations and processing. This perceived high level of corruption in the forestry sector is a source of significant frustration to them (Cobbinah, pers. comm.).

A. Natural Forests

Joint forest management responsibilities

Certification is a voluntary market-based instrument which makes it of interest to those who engage with the timber markets, the companies. In Ghana, the government’s Forestry Commission (FC) is the principal forest manager. The FC has a lot of (conflicting) roles and is basically doing everything: it is regulator, manager and in charge of monitoring. In the course of management, the FC assigns limited responsibility to forestry companies who receive the rights to harvest in the timber concessions during their 40 year lease. There are a number of related issues to this forest tenure situation.

First, this shared forest management responsibility means that companies depend quite heavily on the FC and the speed and quality of their work. The FC is responsible for forest management planning including forest inventories, the preparation of forest management plans, and the determination of the annual allowable yield. These forest

management planning items need to be in place before forestry companies start their operations, but in some - or in many - cases they are not (fully) in place. The FC's multiple responsibilities places significant pressure on their limited resources, making it difficult for them to be adequately responsive to the needs of the industry. Staffing and related logistical constraints hamper the adequate and timely delivery of key administrative and operational functions, including permitting and particularly adequate management planning for sustainable forest management. The FLEGT-VPA process has helped to deliver progress in this area, but more is needed.

Monitoring is also the responsibility of the Forestry Commission. Most established permanent sample plots have been destroyed by fire or other natural hazards which means there is no data to feed into management planning. Even if data is available, it is not analysed to feed back into the management planning. The government has no resources to do all the monitoring and companies are reluctant to take over that role.

For certification to be successful in the current situation, there would have to be a committed collaboration between the company and the FC. If there is really a strong desire to make the step forward, companies pursuing certification should initiate and develop an active collaboration with the FC to overcome practical challenges (Cobbinah, pers. comm.).

B. Plantation forests

Lack of funding

"The key challenge to the National Forest Plantation Development Plan is the absence of a reliable and adequate source of funding for plantation establishment and maintenance" (Forestry Commission, 2017b).

Destruction of planted areas

Cattle from the (semi-)nomadic Fulani herdsmen damage and destroy the young planted seedlings. Further, wildfires annually destroy planted areas (Forestry Commission, 2017b).

General condition of plantations

For the on-reserve plantations, many have not received any maintenance - in the form of weeding, pruning, thinning and fire protection - since establishment. This results in stands showing high mortality and retarded/stunted growth due to intense competition with weeds and annual wildfires. For trees that survive, boles have developed many branches and crooked shapes which reduces the quality of the timber (Forestry Commission, 2017b).

4.2.2 Company perspective

Timber processing industry crisis

The timber industry in Ghana is struggling to survive (Asare, pers. comm.), because of a variety of challenges. Ghana has an over-capacity in the timber processing industry, creating a "hunger" for trees (FAO, 2014b; Asomaning, pers. comm.); the annual allowable cut (AAC) that can be sustainably supplied by Ghana's natural forests is around 1 million m³ per year, whereas the administrative AAC and the annual sawmill capacity is 2 million m³ (Brown et al., 2016). In fact, production in Ghana exceeded 2 million m³ in 2015 (ITTO, 2017).

Moreover, the sawmills are equipped with obsolete machinery resulting in low recovery rates (Asare, pers. comm.; Asomaning, pers. comm.). In the 1980s, Ghana installed a log export ban for high value timber species and later for all species. Around the same time, there was no longer an interest in first processing in Europe, so the machinery moved from Europe to Ghana. Since then, there hasn't been renewal of this second-hand machinery. Whereas in Vietnam an 80-90% recovery rate is achieved for some products, in Ghana recovery rates are only 30-40% and there are no products like MDF which means a lot of waste is being produced (Asomaning, pers. comm.). Some companies are aiming at higher recovery rates, others are under severe stress to break even.

Further, the raw materials (the forest) are far away from the sawmills that are installed in major cities like Kumasi. This results in high transportation costs which comes on top of the high prices for electricity to keep the machinery running. The industry is currently evolving with the smarter companies relocating their processing facilities; mobile equipment is being installed at the resource base (Asare, pers. comm.).

Finally, the timber processing industry is designed for processing natural trees with large diameters, whereas the future is a shift to plantation forests. Currently, sawmills do not have the capacity to process these smaller diameter trees that will be supplied from plantations (Brown et al., 2016).

Lack of demand

The market dynamics are changing. The importance of EU markets is diminishing, whereas Asia and overland markets are growing in Ghana and for West and Central Africa in general (Cobbinah, pers. comm.; Karsenty, 2016). The government of Ghana is saying that as domestic demand is growing, export will no longer be needed in the future. However, many companies have a business model that is tailored to niche markets in Europe (Asomaning, pers. comm.).

When the FLEGT-VPA process started and the EUTR came into force, this was seen as a sign that legality is sufficient to access the European market; the future issuance of FLEGT licenses would be an alternative to responsible forest management certification (Asare, pers. comm.; Asomaning, pers. comm.). There is no real demand for responsibly produced timber. Also, certification is not needed to get market access to the EU; this would only be an issue for big companies (Asomaning, pers. comm.).

Low to no price premium

Asomaning (pers. comm.) explains that when WWF-GFTN was active in Ghana a couple of years ago supporting companies using a step-wise approach, companies were motivated to pursue full FSC certification based on the assumption that there would be a price premium. They now find out that there is no price premium, so there is no (sufficient) incentive for them to take the next step and move from FSC CW and CoC to full FSC FM/CoC. Those that currently are FSC CW certified will do everything to keep it, but there is no incentive to move further (Asomaning, pers. comm.; Cobbinah, pers. comm.).

Limited representation of certification promoters and support

Not all companies know what FSC certification means and entails (Asomaning, pers. comm.). There is no national representative from FSC in Ghana. Instead, there is a regional representative for all African forested countries based in South Africa and a sub-regional representative for the Congo Basin based in Brazzaville. WWF-GFTN used to be present and active in Ghana until 2014. As one interviewee put it “FSC certification works where WWF is [on the ground]” (Asomaning, pers. comm.).

The IDH Congo Basin Programme expanded its scope to include Ghanaian companies, offering support between 2013 and 2016. However, the model was not attractive for companies that had to pre-finance everything themselves and meet many requirements to be able to get reimbursed part of the expenses (Asomaning, pers. comm.).

A. Natural Forests

High cost and scale

The costs for full FSC certification are too high for the relatively small concessions, resulting in high additional costs per m³ of timber that can be sold (Wanders, pers. comm.).

A significant part will need to be dedicated to an environmental impact assessment (EIA). Although the law stipulates that operations exceeding a certain scale and sphere of impact (>40ha) need to perform an EIA, the Forestry Commission negotiated successfully with the Environmental Protection Agency in the 1990ies that an exception was to be made for forestry operations. Therefore, none of the forestry companies with logging rights in natural forests have an EIA (Asomaning, pers. comm.).

No desire to be in the spotlight

Companies don't like to put themselves out there and become at the centre of all the global attention when going for/ being full FSC certified (Asomaning, pers. comm.; Cobbinah, pers. comm.). There have been negative experiences with those who were ahead of the rest or willing to take a step forward. For example, when Ghanaian companies signed a participation agreement with WWF-GFTN, soon after an investigation started undertaken by CARE, but with reporters from the UK coming in as well. Also, when Wijma lost their certificate in Cameroon this came with a lot of negative publicity (Cobbinah, pers. comm.).

Perceived arbitrary yield allocation

There is no scientific basis established to calculate what the yield in an FMU should be. The interim yield formula that is used is based on parameters (logging cycle of 40 years, type of species, maturity and diameter classes) at the scale of forest ecosystem type (wet evergreen, moist semi-deciduous, etc.). According to companies, a lot more trees could be harvested than what is currently being allocated to them. Three years ago, a study has been published that the current interim yield allocation formula will not lead to sustainable forest management. To determine a meaningful yield allocation formula at the site level, monitoring information is needed (Cobbinah, pers. comm.).

Tenure

Once the forestry company has logged in a certain area, it never has access to it again; the timber concession comes back to the bidding pool after the 40-year lease period is over. This does not incentivize commitment to sustainability (Asomaning, pers. comm.).

Need for capacity building

Many forestry companies are family-run businesses. Family members that work in the company do not always have a background or education in forestry which means that these types of forest management organisations require expertise in all kinds of areas (Asomaning, pers. comm.).

B. Plantation forests

Besides the general challenges, no specific bottlenecks or challenges have been mentioned for companies.

4.2.3 Community perspective

A. Natural Forests

For natural forests: there is only one community managed natural forest, in central region (Asomaning, pers. comm.).

B. Plantation forests

Lack of extension services

There is insufficient support for smallholder plantation developers (Forestry Commission, 2017b).

Low prices

Loggers contracted to harvest the planted trees offer low prices to the smallholders, making the business unattractive (Forestry Commission, 2017b).

4.2.4 Government perspective

Insufficient resources and capacity

The Forestry Commission experiences resource constraints to carry out their duties (Asare, pers. comm.). For example, The Forestry Services Division has not sufficient vehicles for field monitoring (Forestry Commission, 2017b). Among companies, there is a lot of concerns about the (in)effectiveness of FC operational staff carrying out their duties. This is not just a matter of technical capacity, but also the number of staff that is there. Sometimes there are not enough FC staff to carry out certain tasks and to provide approvals and this results in delays. For example, companies have to wait until the stock survey by the FC is finalised, before harvesting operations can be carried out. The slow administrative wheel with processing applications and issuance of approvals is generally perceived as rent-seeking behaviour (Cobbinah, pers. comm.).

Political interference

The Forestry Commission is not an independent entity, but subject to political interference. This means that non-foresters can interfere in FC's work and that a powerful political entity or person may take decisions. One example is the allocation of forest resources which should be done through a bidding process. In reality, this process could be overruled by a powerful actor causing a distortion of the market-based mechanism (Asare, pers. comm.).

A. Natural Forests

Illegal logging

Protecting the forests from illegal logging is a challenge for the government (Asare, pers. comm.). The forest reserves are for the communities, but managed by the FC (i.e. the government) on their behalf. Apart from allocation going to the wider district assembly and some revenues accrued from the social responsibility agreement that is in place (which generally is very little), communities do not get any direct benefits. This is an underlying cause for illegal chainsaw logging (Asomaning, pers. comm.).

B. Plantation forests

Competition for land

There is a high competition for lands, especially in the transition zone, for planting cash crops such as cashews (Forestry Commission, 2017b).

Destruction by cattle

Cattle from the (semi-)nomadic Fulani herdsmen damage and destroy the young planted seedlings (Forestry Commission, 2017b).

4.3 Solutions and opportunities for sustainable forest management and certification

4.3.1 General solution and opportunities

Strong existing stakeholder platforms

During the VPA process, strong and active stakeholder engagement platforms have been developed. In every policy decision, FC now works together with civil society organisations and community representatives; nothing is done without involvement of forums, committees and traditional authorities (Asare, pers. comm.). These existing platforms and fora offer an opportunity to discuss relevant issues and come to solutions for topics not covered under the VPA agreement, such as the role of the FC in forest management (Cobbinah, pers. comm.).

Distinguishing from FLEGT-VPA

Ghana is far advanced in the implementation of the VPA. With recent changes to its regulatory framework, it can be expected that Ghana will be the first country in Africa and the second in the world to issue FLEGT licenses (EU FLEGT Facility, 2017). Once the VPA is fully rolled out, this legal compliance mechanism provides a good basis for transitioning towards sustainable forest management (Cobbinah, pers. comm.). There may be an opportunity to take it a step further with big companies that want to show that they are better than the rest (Asomaning, pers. comm.).

PEFC Ghana standard underway

Ghana has joined PEFC in 2016 and through the PEFC's Collaboration Fund, providing financial and technical support, is working on the development of the Ghanaian national forest certification system. The current status (March 2018) is that the standard is ready for submission, but there are no funds yet to cover the independent assessment of conformity with the international PEFC benchmark (Sournia, pers. comm.). It is unclear what the potential or likely uptake will be. One of the interviewees stated that the development of such a national standard may not necessarily be driven by an interest from forest managers, but will be "new standards may simple be developed because a small group of people not linked to the market is privately interested" (Wanders, pers. comm.).

Transparency

The government of Ghana is very likely to pass the Freedom to Information Act. This improved transparency will definitely affect the forestry sector and should have a transformational impact on ongoing efforts to improve forest governance (Cobbinah, pers. comm.).

Wider anti-deforestation initiatives

Sustainable forest management is not only about forests, also the interaction with other land uses and forest-risk commodities including cocoa, oil palm etc. Multi-stakeholder international initiatives like TFA2020 and REDD+ address deforestation and engage broadly with other sectors which provide opportunities to boost sustainable forest management in Ghana (Cobbinah, pers. comm.).

A. Natural Forests

No general solutions and opportunities have been identified for natural forests.

B. Plantation forests

Supporting policy framework for expansion of forest plantations

In 2001, the Government of Ghana launched the National Forest Plantation Development Programme (NFPDP) with the goal to develop a sustainable resource base that will satisfy the future demand for industrial timber and enhance environmental quality, thereby relieving pressure on the natural forest, and increasing forest cover (Forestry Commission, 2017b). The NFPDP has been implemented under various components, based on specific funding sources and implementation strategies. Over the period 2001 until 2016 almost 200,000 ha of plantations have been established.

The Ghana Forest Plantation Strategy 2016-2040 has the goal to “achieve sustainable supply of planted forest goods and services to deliver a range of economic, social and environmental benefits over and beyond the planned period” (Brown et al., 2016). Strategic actions to achieve this goal include the establishment of 625,000 ha of forest plantations, enrichment planting of 100,000 ha of poorly stocked and degraded forest reserves and the incorporation of trees within farming systems covering 3.75 million ha of agricultural landscapes.

Green investment in forest restoration

The area of plantation forest will be growing in the coming years. Green investors will require FSC certification which will be an opportunity for growth of responsible forest management (Asomaning, pers. comm.; Slesazek, pers. comm.). In 2017, the African Development Bank allocated a loan of 24 million of US dollars to Form Ghana for the restoration of degraded forest reserves that will be managed in accordance with the FSC Principles and Criteria. This represents the first Private Sector direct investment in restoration of degraded forests for the AfDB, and the first Forest Investment Program (FIP) private sector project in Africa (Form International, 2018).

4.3.2 Company perspective

Demand by mayor buyer organisations

Companies supplying to mayor buyer organisations who have a responsible forest management certification procurement policy are interested to become certified, there are two medium-sized companies who approached Proforest for support – ABTS (Asuo Bomosadu Timbers and Sawmill Ltd) and Mondial (Asomaning, pers. comm.).

A. Natural Forests

Offer direct support to forest companies

From the experience with GFTN, a recommendation received is to identify one or two companies and to support them, financing for example the ESIA, an HCV assessment (for new companies), etc. The GFTN-model worked with many things that were paid for (fully or partially); it took some time until the first obtained their FSC CW certificate, but once the first one achieved it all others followed within a year; there is a need for a first mover to show it is possible. If one is able to do it, the others will follow and do the same (Asomaning, pers. comm.).

B. Plantation forests

No solutions and opportunities from the private sector perspective have been identified for plantation forests.

4.3.3 Community perspective

The options for community forest management are being explored; the new policy sets out a promising framework, but greater attention should be paid to implementation on the ground (Cobbinah, pers. comm.).

4.3.4 Government perspective

Devolve management responsibility FC

There are ideas and discussions to devolve the forest management responsibility to companies (inventories etc.) and that the FC should mainly be having a role of control and monitoring. Growing calls for the devolution of management responsibility appears not to be fully supported by the government. Some industry and civil society actors interpret this perceived resistance as the FC's interest to maintain its share of the resource rent. However, the issue of devolution of management responsibility continues to have a place on the wider sector reform agenda (Cobbinah, pers. comm.).

Strong and independent Forestry Commission

As a solution to the current situation where there is political interference in the Forestry Commission with a tendency to appoint people from the government in power in the Board, Asare (pers. comm.) mentions that it is important to develop towards a strong Forestry Commission with technical expertise that will be accepted by the political class and that is acting in the interest of society. The national media commission is such an example of a government body that is totally independent of the political class.

A. Natural Forests

From the perspective of the government, no specific solutions and opportunities have been identified for natural forests.

B. Plantation forests

Sustainable Funding for Plantation Establishment and Maintenance

To ensure sustainable funding for plantation establishment and maintenance it is essential that the Forestry Commission (2017b) proposes to establish a Forest Plantation Development Fund Account. The following would be paid into this fund:

1. 20% of all plantation revenue as directed by the Ministry of Finance (2007 Budget Statement)
2. Conveyance fees for transportation of charcoal and firewood
3. Conveyance fees for transportation of plantation timber from private plantations
4. Re-introduction of a 10% re-stocking/replanting fee to be charged on all plantation timber harvested from government plantations.

Further, alternative innovative financing options should be explored that involves utilisation of private equity and payment for ecosystem services (PES) schemes (Forestry Commission, 2017b).

5.

Indonesia Country Profile



5.1 Forest management certification in Indonesia

Active forest management certification schemes in Indonesia are IFCC, FSC, LEI and SVLK.

IFCC

The Indonesian Forestry Certification Cooperation (IFCC), is the national PEFC-endorsed forest certification system in Indonesia. A year after its endorsement, Indonesia's two major pulp and paper companies – APRIL and APP – were the first to obtain IFCC certification in 2015 (PEFC, 2018a). Since then, the forest area certified to the IFCC standard increased rapidly. As of 23 January 2018, there are 60 IFCC forest management certificate holders, mostly pulpwood producers, covering an area of 3,756,901 ha (IFCC, 2018a). A further expansion is expected into the future, this time also for community owned forests, as soon as the requirements of IFCC sustainable community forest management certification will be endorsed and come into force (IFCC, 2018b). As of 6 February 2018, there are 45 IFCC CoC certificate holders (PEFC, 2018b).

Quick overview Indonesian forest and timber sector



Forests

Total forest area
85,800,000 ha*

% total land area
46%*

Population

265,664,694*

Growth rate

+1.06%

Indigenous people

Different groups - 20% of population
(IWGIA, 2018a)

Corruption Perception Index 2017

Score: 37/100, Rank: 96/180

(Transparency International, 2018b)

Important institutions

- Ministry of Environment and Forestry at national level and decentralised at provincial level
- The Forestry Law (1999) and implementing regulations
- Law on the Prevention and Eradication of Forest Degradation (2013)
- Ministry of Forestry Decree Suspension of Granting New Licenses and Improvement of Natural Primary Forest and Peatland Governance ("Moratorium") of 2011 that has since been extended every two years (SK.323/Menhut-II/2011)

FLEGT-VPA status

FLEGT licenses are being issue since November 2016 (EU FLEGT Facility, 2018c)

More legality info

WRI Legality Tool; ETTF Timber Trade Portal

Main timber markets

Japan, USA, South Korea, Malaysia, China, India, Taiwan and the EU (Netherlands, UK, Germany, Belgium), domestic market (ITTO, 2017)

Trade link to the Netherlands

Indonesia is the fourth most important country for supply of tropical sawnwood to the Netherlands (Oldenburger et al., 2016)

Trade link to Western Europe

UK, Germany and Belgium are listed as the most important Western European countries for timber export, mainly for sawnwood, plywood and secondary processed wood products (ITTO, 2017)

Forest types (MoEF, 2018)



Primary forest



Secondary forest



Forest plantations

Forest classification****

Production forest: **38.3 million ha***** (MoEF, 2018)

Protected forest: **23.9 million ha** (MoEF, 2018)

Conservation forest: **17.3 million ha** (MoEF, 2018)

Conversion forest: **6.3 million ha** (MoEF, 2018)

Forest tenure production forest

Ownership (FAO, 2014c): All forests belong to the State, except for planted trees on farms (which is especially found on Java island).

Management: (FAO, 2014c): Public administration: **90%**, Private Companies: **10%**, Communities: **0%**, growing trend

Note: the Ministry of Environment and Forestry has plans to allocate 12.7 million ha to local community management (Purwanto, pers. comm.). By 2017, the area under community management was 1.5-2 million ha (Zagt, pers. comm.)

Deforestation

Deforestation rate: **-0.7% / 684,000 ha** second largest deforester in the world (FAO, 2015)***

Note: there is a significant decline in deforestation rate from 1990-2000 to 2001-2010. At the same time, there is large-scale afforestation (1.9M ha) and reforestation (0.9M ha)** (FAO, 2014c).

Direct drivers:

- Expansion of agriculture (especially oil palm)
- mining
- illegal logging
- wildfires (often associated with drained peatlands)

Indirect drivers:

- High demand for forest-based products in domestic and international markets
- weak governance systems at national and subnational levels
- population growth

(Idrarto et al., 2012)

* dd. February 6, 2018

** 2010-2015 data. Note that data by MoEF (undated) showed deforestation of around 2.5 million ha between 2011 and 2017.

*** includes limited production forest (HPT) and permanent production forest (HP)

FSC

The first FSC certificate in Indonesia was issued in 1999. Currently, there are 40 FSC FM/CoC certificates issued, mostly to individual organisations but also including two large group certificates. Further, there is one FSC FM certificate holder and six certificates covering FSC Controlled Wood certified forests. For a complete overview, see table 5.2.

Table 5.2. Overview of FSC and IFCC certified forests in Indonesia dd. February 6, 2018 (FSC, 2018a; IFCC, 2018a).

Organisation	Certificate	Forest area (ha)	First year of certification
PT Pandu Maha Wana + PT Bina Ovivipari Semesta (site member)	FSC FM/CoC	28,220	2015
FMU Enggal Mulyo	FSC FM/CoC	690	2015
PT Rizki Kacida Reana Unit II	FSC FM/CoC	55,150	2018
PT Wijaya Sentosa	FSC FM/CoC	130,755	2016
PT. Xylo Indah Pratama - Jejawi	FSC FM/CoC	460	2016
PT Lestari Mahaputra Buana	FSC FM/CoC	351	2016
Perum Perhutani KPH Banten Ciamis, Kendal, Cepu, Randublatung, Kebonharjo, Madiun and Banyuwangi Utara	FSC FM/CoC	277,034	2016
PT. Bina Balantak Utama	FSC FM/CoC	298,710	2016
PT Karya Lestari	FSC FM/CoC	49,123	2018
PT Utama Damai Indah Timber	FSC FM/CoC	49,250	2017
PT. Sentosa Hastareksa	FSC FM/CoC	177	2016
KSU BROMO MANDIRI KTI (+ 10 group members)	FSC FM/CoC	207	2017
PT. Jati Dharma Indah Plywood Industries	FSC FM/CoC	139,470	2017
Perkumpulan Petani Rotan Katingan	FSC FM/CoC	691	2017
Koperasi Petani Hutan Rakyat Lestari	FSC FM/CoC	129	2017
PT Narkata Rimba	FSC FM/CoC	65,925	2011
PT Diamond Raya Timber	FSC FM/CoC	90,956	2001
PT. Intracawood Manufacturing	FSC FM/CoC	199,571	2006
PT Erna Djuliawati	FSC FM/CoC	184,206	2005
PT Sari Bumi Kusuma	FSC FM/CoC	147,600	2007
KSU ALAS MANDIRI KTI (+ 30 group members)	FSC FM/CoC	1,005	2008
PT Suka Jaya Makmur	FSC FM/CoC	171,300	2010
PT. Sarmiento Parakantja Timber	FSC FM/CoC	216,850	2011
PT Roda Mas Timber Kalimantan	FSC FM/CoC	69,620	2012
PT. BELAYAN RIVER TIMBER	FSC FM/CoC	97,500	2011
Pt. Xylo Indah Pratama	FSC FM/CoC	17,625	2012
PT. Gunung Gajah Abadi	FSC FM/CoC	74,980	2015
Pt. Dwimajaya Utama	FSC FM/CoC	127,300	2012
PT Gema Hutani Lestari	FSC FM/CoC	148,450	2013
PT. Ratah Timber	FSC FM/CoC	85,261	2013
Perum Perhutani – KPH Madiun	FSC FM/CoC	31,222	2013
Perum Perhutani – KPH Banyuwangi Utara	FSC FM/CoC	33,747	2013
PT. Telagabakti Persada	FSC FM/CoC	60,491	2016

Organisation	Certificate	Forest area (ha)	First year of certification
PT. Indexim Utama	FSC FM/CoC	50,734	2013
PT Graha Sentosa Permai	FSC FM/CoC	44,970	2017
PT Bintuni Utama Murni Wood Industries	FSC FM/CoC	82,120	2015
KSU Koperasi Taman Wijaya Rasa	FSC FM/CoC	253	2014
PT Carus Indonesia	FSC FM/CoC	72,170	2014
PT. Sosial Bisnis Indonesia	FSC FM/CoC	1,015	2017
PT. Forestry Ganda Utama	FSC FM/CoC	74,155	2017
Total	FSC FM/CoC	3,179,443	
KMPH Mitra Sesaot	FSC FM	185	2017
Total	FSC FM	185	
PT Pandu Maha Wana + PT Bina Ovivipari Semesta (site member)	FSC CW/FM	13,625	2015
PT. Wapoga Mutiara Timber Unit II	FSC CW/FM	169,170	2016
PT Sumalindo Lestari Jaya IV	FSC CW/FM	63,550	2017
PT MUSI HUTAN PERSADA	FSC CW/FM	285,233	2009
PT. Korintiga Hutani	FSC CW/FM	94,384	2013
Perum Perhutani	FSC CW/FM	2,125,111	2014
Total	FSC CW/FM	2,750,693	
PT. Riau Andalan Pulp and Paper (RAPP)	IFCC	262,473	
PT. Sumatra Sylva Lestari	IFCC	9,140	
PT. Wananugraha Bimalestari	IFCC	7,465	
PT. Sumatera Riang Lestari	IFCC	25,320	
PT. Satria Perkasa Agung Unit Serapung	IFCC	11,484	
PT. Arara Abadi	IFCC	294,916	
PT. Sumatera Riang Lestari Blok VI - Bayas	IFCC	35,531	
PT. Bukit Raya Mudisa	IFCC	23,140	
PT. Sumatera Rlang Lestari Blok II - Garingging	IFCC	21,346	
PT. Sumatera Riang Lestari Blok IV - Rupal	IFCC	26,931	
PT. MITRA HUTANI JAYA	IFCC	9,333	
CV Tuah Negeri	IFCC	1,480	
PT. Nusantara Sentosa Raya	IFCC	23,030	
PT. Bukit Batu Hutani Alam	IFCC	32,208	
PT. Nusa Wana Raya	IFCC	26,880	
PT. Sumatera Riang Lestari Blok V - Rangsang	IFCC	13,354	
PT. Selaras Abadi Utama	IFCC	13,600	
PT. Itci Hutani Manunggal	IFCC	161,127	
PT. Sekato Pratama Makmur	IFCC	46,062	
PT. Bina Duta Laksana	IFCC	21,345	
PT. Bina Daya Bentala	IFCC	19,377	
PT. Ruas Utama Jaya	IFCC	40,752	
PT. Mutiara Sabuk Khatulistiwa	IFCC	33,675	
PT. Sumber Hijau Permai	IFCC	30,040	
PT. Mitra Kembang Selaras	IFCC	14,800	
PT. Suntara Gajapati	IFCC	27,807	

Organisation	Certificate	Forest area (ha)	First year of certification
PT. Satria Perkasa Agung Unit Koperasi Tani Hutan Sinar Merawang	IFCC	8,681	
PT. Bukit Batabuh Sei Indah	IFCC	13,420	
PT. Merbau Pelalawan Lestari	IFCC	5,970	
PT. Citra Sumber Sejahtera	IFCC	15,360	
PT. Acacia Andalan Utama	IFCC	37,785	
PT. Sumatera Sylva Lestari – Padang Lawas	IFCC	33,390	
PT. Satria Perkasa Agung	IFCC	75,053	
PT. Adindo Hutani Lestari	IFCC	99,429	
PT. Rimba Peranap Indah	IFCC	14,434	
PT. Rimba Lazuardi	IFCC	23,340	
PT. Sumalindo Hutani Jaya II	IFCC	69,756	
PT. Surya Hutani Jaya	IFCC	156,398	
PT. Bumi Persada Permai	IFCC	60,433	
PT. Finnantara Intiga	IFCC	299,700	
PT. Bina Daya Bintara	IFCC	7,550	
PT. Seraya Sumber Lestari	IFCC	13,712	
PT. Tebo Multi Agro	IFCC	15,132	
PT. Rimba Mandau Lestari	IFCC	5,630	
PT. Bumi Andalas Permai	IFCC	192,700	
CV. Putri Lindung Bulan	IFCC	2,500	
PT. Peranap Timber	IFCC	26,894	
PT. Sebangun Bumi Andalas Wood Industries	IFCC	142,355	
PT. Rimba Mutiara Permai	IFCC	8,030	
PT. Mitra Tani Nusa Sejati	IFCC	7,480	
PT. Ekawana Lestari Dharma	IFCC	9,300	
CV. Alam Lestari	IFCC	3,300	
CV. Bhakti Praja Mulia	IFCC	5,800	
PT. Musi Hutan Persada	IFCC	296,400	
PT. Essa Indah Timber (d/h PT. Triomas FDI)	IFCC	3,736	
PT. Bumi Mekar Hijau	IFCC	250,370	
PT. Wirakarya Sakti	IFCC	293,020	
PT. Rimba Hutani Mas	IFCC	61,367	
PT. Toba Pulp Lestari	IFCC	177,448	
PT. Korintiga Hutani	IFCC	94,384	
Total*	IFCC	3,756,901	

* Note: most of the IFCC companies are forest plantations located in deep peatland. As the Ministry of Environment and Forestry is currently in the process of reallocating some deep peatland areas for hydrological protection functions, it is possible that the area of productive forest plantations as well as the area under IFCC certification may decrease once this process has been completed (Purwanto, pers. comm.).

LEI

LEI (*Lembaga Ekolabel Indonesia* – Indonesian Ecolabelling Institute) is Indonesia’s own SFM certification scheme. In December 2016, there were 60 LEI certificate holders who managed a total forest area of 2.6 million ha, including community forests, followed by forest plantation and natural forest (TBI, 2018a). The main disadvantage of the LEI certification system is that it is not internationally recognised in the market (Romero et al., 2015).

SVLK

SVLK (*Sistem Verifikasi Legalitas Kayu*) is the national timber legality assurance system (TLAS) of Indonesia. SVLK certification and related documents (SVLK certificates and export licences called V-Legal Documents) constitute proof of legality for Indonesian timber products. All timber products for international markets carry the V-legal Document or, since November 2016, the FLEGT licence (for export to the EU of all product types covered under Annex I of the VPA agreement). Indonesia has no exemptions for voluntary certification schemes; all exporters need to get V- Legal Documents or FLEGT licences to be able to export timber products.

Under SVLK, legality certification (resulting in V-legal certificates) is mandatory for all operators dealing with timber from state forest. In addition, for all forest concessions on state-owned land (plantations or natural forests), sustainable forest management certification (which includes the legality standard and results in SFM certificates or PHPL in Bahasa acronym) is mandatory and must be obtained before the initial legality certification expires after 5 years (Rainforest Action Network, 2015; Indonesia and the EU, 2018). By April 2016, all active natural forest concessions, all industrial forest plantations in production and all plantations managed by State-owned company Perum Perhutani were legally certified. In addition, 96% of all registered exporters (1800 timber producers and traders) are SVLK-certified (Indonesia and the EU, 2018).

5.2 Bottlenecks and challenges for sustainable forest management and certification

5.2.1 General challenges

Land tenure

When the government issues timber concessions, the allocated area is not free of conflict. There is frequent overlap of concessions with other land uses, such as mining, oil plantations and social forestry. This is a root problem that has been existing for a long time. Spatial planning is not done through an inclusive process; not everybody has access to the information and land use planning is not developed in an inclusive way which makes it difficult to control for civil society organisations. The concession holder is subsequently supposed to manage the conflicts and social problems related to the permit (Purwanto, pers. comm.).

The duration of forest concession lease agreements varies between 30 and 70 years. The government has the right to withdraw (part of) the concession to palm oil plantation (by converting state forest land into APL through spatial planning revision), while for mining purposes mostly through 'borrow and use' (*pinjam-pakai*) of state forest land (Purwanto, pers. comm.). For forest managers, the uncertainty of the tenure of their forest area is a bottleneck, linked to the competition of forestry with other land uses (Prabowo, pers. comm.).

Forested 'free land' under pressure

Forests that have not been allocated to any specific land use yet are under pressure for conversion into other land uses, notably palm oil, mining and forest degradation (Ellenbroek, pers. comm.; Prabowo, pers. comm.).

Minimum diameter for harvesting decreasing

The calculation of the annual allowable cut by the government is based on the minimum diameter mechanism. After many forests were over-logged, a number of measures were taken to increase timber production including a decrease of the minimum cutting diameter with 10 cm to a minimum harvestable diameter of 40 cm and 50 cm. There are concerns that the lowering of the minimum diameter for harvesting is not going to be sustainable, but that the standing stock in natural forests will decrease over time. It takes time to acquire data for tree growth rates. This leads to a more fundamental question on how the annual allowable cut should be determined for natural forests using the selective logging system and whether or not the minimum cutting diameter needs to change (Prabowo, pers. comm.).

Poor quality forest management plans

The government's forest management unit (FMU) needs to develop long-term forest management plans with a 20-year duration. Because the capacity within the FMU is quite poor, forest management plans are often devel-

oped by consultants who come from Jakarta or fresh from university with little field experience. This means that sometimes the quality of the forest management plan is not good as it is not helpful at the local level (Purwanto, pers. comm.).

No solid market

In Indonesia there are some FSC certified companies that are getting added value in their market, but many do not have a good market that values their responsibly produced timber (Sarjito, pers. comm.; Slesazeck, pers. comm.). The trade survey carried out by The Borneo Initiative over the year 2016 shows that most FSC certified forest concessions sell their logs with the FSC claim (86% of production). However, wood processing industries reported that only 38% of sales carry the FSC logo - implying that the FSC certification does not matter to all of their clients (TBI, 2017a). There are however many certified organisations that never sold any timber as FSC certified. These forest management organisations decided to pursue certification in anticipation of mayor buyer organisations who have a 100% FSC procurement policy, but market links have not yet been firmly established (Slesazeck, pers. comm.).

Limited presence of certification organisations

Both FSC and PEFC have national representation in Indonesia through FSC Indonesia and the IFCC Secretariat. According to Ellenbroek (pers. comm.) however, capacity and support for upscaling certification in Indonesia is limited. There are ideas for an alliance between The Borneo Initiative and FSC, whereby the former would take care of the certification process on the ground and the latter would work on market promotion of FSC certified timber (Ellenbroek, pers. comm.).

5.2.2 Company perspective

Land not free from conflicts

Related to the land use planning and timber concession allocation process (see 5.2.1), forest concessions are often not free from conflict (Purwanto, pers. comm.). There are social conflicts with communities and indigenous peoples who live in settlements in and around the forest. There is some encroachment into the forest concession, because local people need land for their livelihood, e.g. development of rubber or oil palm. An underlying issue is that local communities do not receive any benefit from the forest harvesting (Prabowo, pers. comm.).

Difficult location

Over time, production forests in Indonesia have been pushed into the country's interior with the better accessible areas being used for oil palm plantations etc. There, topography is difficult which increases operational costs. Also, being situated further inland, the transportation chain to the industry – that is principally located on Java island – becomes longer which further increases production costs (Ellenbroek, pers. comm.; Purwanto, pers. comm.).

Log export ban

Indonesia first enacted a log export ban in 1985. Currently, there is a ban on export of logs and sawnwood for timber coming from natural forests. Log exports from plantations are allowed since 2017 (forest legality, 2018). There are opinions that the log export ban has gone too far, resulting in negative consequences. According to the log export ban, all timber destined for export must be sawn and sanded and there is a maximum surface size set; whenever larger dimensions are being demanded, this needs to be sawn and glued back together (Ellenbroek, pers. comm.). The idea of the export ban was to regulate the illegal export and to stimulate the processing industry. Because logs need to be processed within the country, this results in artificially low domestic log prices that do not respect the value of the log (Ellenbroek, pers. comm.; Purwanto, pers. comm.). This is not a problem for vertically integrated companies, but if processing is not done by a linked industry under the same group this is problematic (Purwanto, pers. comm.).

Unfair competition with other timber sources

There is a lot of legal conversion of timber on the market, resulting from forest clearing for the development of oil palm and mining. Further, trees grown on farms are not subject to certain taxes and bear no corporate social responsibility costs (Ellenbroek, pers. comm.). This conversion and farmland timber forms an unfair competition with sustainably produced timber, because adherence to improved practices increases the production costs (Ellenbroek, pers. comm.; Purwanto, pers. comm.). Purwanto (pers. comm.) adds that although illegal logging is not as

significant as it used to be now that SVLK is implemented, illegal logging still can be an issue locally (if no transportation is required). The current business as usual is lower than the certification standard, even lower than the legal standard (Purwanto, pers. comm.).

Illegal activities by smallholders

Farmers and indigenous communities undertake illegal farming in the form of small-scale rubber or oil palm plantations) in forest concessions. Because of a lack of law enforcement, smallholders can degrade forests to shifting cultivation and there is nobody to stop them (Ellenbroek, pers. comm.).

No government support for increasing MHD

The government does not support a more sustainable approach towards timber harvesting. When forestry companies propose to increase the minimum harvestable diameter (MHD), this means that in the short term there will be reduced timber harvesting and so reduced income for both the company and the State. Further, annually the performance of the company is evaluated against the harvesting quota which is determined based on the harvested volume of the previous year. As a consequence of increasing the MHD, there may be years with lower volumes harvested. It can be a challenge that the harvesting quota will then be reduced based on a year with a low harvestable volume as this limits the company for future years where forests may be richer (Prabowo, pers. comm.).

Timber processing

Apart from its distance to the resource base (the forest) as mentioned above under 'difficult location', there are various issues linked to the timber processing sector in Indonesia and the timber market. First, most timber is processed into plywood which is a low price commodity. Most companies use tropical hardwood for both the exterior and the core, whereas for the core cheaper material could be used like plantation wood. Second, quality can be an issue. Most plywood factories still use machinery that was established in the 1980s/ 1990s. This old machinery results in problems with recovery rate and quality of the product. The plywood business is not as profitable as it used to be, so there is no money to invest in new machinery. Third, the volumes that are being produced and the volumes that are being demanded by the market do not match well; demand is high, so that suppliers cannot deliver sufficient for a single buyer. As a result, producers do not have a great bargaining position. In summary, there is not a common understanding nor a good match between the Indonesian producers and the timber export markets on price, quality and volume (Prabowo, pers. comm.).

5.2.3 Community perspective

Most smallholders are located on Java island where they grow fast-growing tree species like teak, albizia, pine in an agroforestry system on their own land or on district forest area (Prabowo, pers. comm.). On Java as well as in Lampung province on Sumatra there is a spirit to plant trees, the land is fertile and there is a high timber demand which means that the concept on community-based forest plantations is well developed (Purwanto, pers. comm.). On the outer islands (Kalimantan, part of Sumatra, Sulawesi) where there is still a lot of natural forests, communities can manage state forest land. This is mostly degraded natural forests that they have to restore first, before they can use it for production. The government will provide quite strict requirements, but how fast and strong the control by the government will be remains to be seen. If there is not strong control, this social forestry could become a problem (Purwanto, pers. comm.).

Market access

Smallholders and communities have difficulties to access markets (Sarjito, pers. comm.). In general, smallholders on Java cut the trees whenever they need money to pay for school fees, a marriage or a holiday. Since the tree harvesting is linked to occasional life events, it is hard to plan for the market. This also means that supply in terms of both timing (irregular) and volumes (low) does not match with demand which makes it difficult to bargain with buyers for a good price (Prabowo, pers. comm.).

Certification a misfit with national/local context

Certification schemes follow an international market approach, but this does not necessarily means it works well in the national or local context for a variety of reasons. In Asia production systems are often agroforestry, not natural forests, which means that current certification standards are not applicable. When production systems do

concern natural forest, there are no institutions to reach scale and make certification affordable; in Asia sustainable forest management and certification is done on a company by company basis. This means that those few who are certified have a high share of operational costs which comes down when forest management units would be pooled (like for example in Finland where are few certificates covering a forest area of approximately 11 million ha). Finally, environmental and social issues are often beyond the control of the forest management unit itself, so the forest manager is left to fix problems that are national, political issues (Laity, pers. comm.).

More in general, certification is seen as a ‘ticking boxes’ exercise to overcome EU trade barriers. This then leads to a 2-tiered economy where those forest managers whose situation/ context are not well adapted for certification are excluded from international markets. Finally, there is the expectation of meeting the standard, without an appreciation of a step-wise, continuous improvement of production systems. If certification does not improve itself and finds solutions for all types of forest managers, it will be used exclusively by the larger forest industry players (Laity, pers. comm.).

Financial support for certification

There is currently little private and public donor funding to support smallholders or communities that take steps towards certification (Sarjito, pers. comm.). The Borneo Initiative offers support for FSC certification, but focuses primarily on companies managing natural forests (although smallholders and communities are not excluded when they reach a certain economy of scale that allows them to cover annual certification costs).

In general, there are two types of certification support offered to smallholders. One type is when certification is supported by the buyer side, mostly sawmills that have no forests and buy the timber inputs everywhere. Typically, smallholders are supported to certification and then market price contracts are signed. The good examples have a collaboration with mentors offering their capacities and expertise to negotiate the fixed contract with buyers. A second type is NGO support for certification of smallholders. Training and financial support is offered throughout the project duration, but a link to the market for certified products is not available. Therefore, after a few years when the project is finalised and certification is achieved they struggle when having to find their market. Typically, smallholders have no negotiation power with market players; they are tree growers. This means they have difficulties to maintain the certification as the sustainability of the certificate depends on the buyer and the market and buyer links are not stable (Prabowo, pers. comm.).

Lack of maintenance of planted trees

Smallholders have no capacity in terms of silviculture to look after the planted trees; they just plant the trees and nature grows the trees without further maintenance. To improve stem quality, it would be good to educate smallholders on tree maintenance practices such as pruning. Usually, when they are certified, NGOs will introduce them to the best practices regarding plantation maintenance (Prabowo, pers. comm.). The current lack of maintenance may also be linked to high opportunity costs for smallholders that may prefer to invest time in something that yields an income on the short term rather than in 20 to 30 years from now (Boot, pers. comm.).

5.2.4 Government perspective

Shift of responsibilities

The government has different responsibilities at different levels: national parks are administered by central government, protection forest is administered by the provincial government and production forest used to be administered at the district level. Since 2016, there is a shift of power occurring from the district to the provincial government. In principle, this is a positive development, as at the provincial level there is less political influence than at the district level. However, the transition process is not very smooth. At the moment, the district has no authority to control forests, but the province is not yet ready to control all forests, so there is a lack of implementation capacity. A rough estimation would be that the transition process will be finalised in five years or so (Purwanto, pers. comm.).

Insufficient resources

The government experiences a lack of funding not having enough budget to cover the costs of their activities (Sarjito, pers. comm.). This is linked to the issue of a shift of responsibilities.

Frequent changes in State officer positions

The forest officers working as forest managers for the State are regularly called to another assignment (Sarjito, pers. comm.). This frequent change of position does not help to maintain a level of knowledge and efficiency in the State forestry department.

Changing regulatory context

The forestry sector in Indonesia is governed by many regulations that at times change fast; sometimes they are not even implemented yet and changed already. This quick change of the regulatory landscape results in uncertainty of the business environment. For example, it used be possible to work in peatland areas, but now these to become hydrological conservation areas. There is a land swap system, but it is hard to find pieces of land to swap it for (Purwanto, pers. comm.).

5.3 Solutions and opportunities for sustainable forest management and certification

5.3.1 General solutions and opportunities

Management non-allocated forested land

In between forest concessions often lies inactive forest land that has not been formally allocated for a particular land use (yet). To prevent degradation of these forested lands – which is likely to happen when they are being regarded as open access and degrade according to the tragedy of the commons – Ellenbroek (pers. comm.) sees three options:

1. Adoption by nearby FSC certified forest concessions;
2. Ecosystem restoration reserves or concessions;
3. Multi-functional forest landscapes that are being (co-)managed by communities.

For the second option, the question is who will finance the creation and protection of such ecosystem reserves. The government of Indonesia is pushing for more social forestry and agroforestry, so perhaps the third option could be an interesting pilot (Ellenbroek, pers. comm.).

Best management practices

To improve sustainable forest management, forest managers should implement best management practices (Prabowo, pers. comm.; Sarjito, pers. comm.). Reduced impact logging is considered a best management practice to minimize negative environmental (and social) impacts from logging operations in natural forests. Currently, many forest managers do not implement it because of the time and costs involved. The certified companies make efforts to implement it and some already see benefits from implementing RIL practices, in terms of efficiency of the operation (Prabowo, pers. comm.). Best management practices should become general practice or business as usual. One way of doing this is by sharing the best management practices and showing that for example proper planning of the road network is also financially more attractive (saving costs by minimizing the number of roads that need to be constructed) (Slesazeck, pers. comm.).

Diversify income streams

For the majority of forest managers, their business model is presently focused on obtaining income from timber sales. It would be interesting to diversify the business model and explore how income streams from non-timber forest products (NTFPs) and from payments for ecosystem services could complement the timber revenue and how these be integrated in the business models (Prabowo, pers. comm.; Sarjito, pers. comm.). For example, a company can include NTFPs in the scope of its certification and have a close collaboration with the local people who would then run the NTFP businesses (Prabowo, pers. comm.). Ruslandi (2015) states that payments for environmental services, including carbon payments for certified forest management, could promote certification for tropical forest in Indonesia and elsewhere. However, not all forest managers may be mandated to manage for NTFPs; in Indonesia forest concessions are generally allocated for timber production, not for other uses (Ruslandi et al., 2014).

Existence of a price premium

FSC certified timber from Indonesia positions well in the market; there is a willingness to pay a price premium (Ellenbroek, pers. comm.). A trade survey conducted in 2016 among Indonesian FSC certified forest concessions and wood processing industries shows that price premiums were on average 8% (TBI, 2017a). Ruslandi (2015) underscores that it is critical for forest managers to secure economic benefits from voluntary certification, because of the direct competition with the mandatory timber legality verification and certification schemes in place in Indonesia (SVLK and PHPL). Prabowo (pers. comm.) also mentions that if there is no appreciation of FSC certification in the market, that those who are currently certified may change their minds and drop the certificate. It is thus critical that the price premium is maintained, if the area of certified forest is to be maintained and/or enhanced (Ellenbroek, pers. comm.).

Favourable exchange rate for European market

At the moment, the exchange rates for the euro is good; contracts are worth more US dollars and Indonesian rupiahs than before. This makes the European market, which is sensitive to certification, more interesting for producers in Indonesia. A number of companies have expressed a desire to focus more on the European market for this reason. It is good to know that a market transition is not always a quick and easy thing to do; it requires obtaining certain certificates for quality assurance (CE marking) and adaptation of the sawmills to timber dimensions asked for by market players. In the end, markets are always somewhat dynamic, but fact is that although the majority of the timber stays within the Asian region (~75%), the EU and US markets remain interesting (Ellenbroek, pers. comm.).

5.3.2 Company perspective

Financial support

To promote sustainable forest management, it has proven to be very effective to support forest managers financially by subsidizing certain expensive out-of-pocket expenses in the process towards responsible forest management certification (Ellenbroek, pers. comm.; Prabowo, pers. comm.). The availability of financial support lowers the threshold of high initial investments and so incentivizes companies to try to obtain certification (Prabowo, pers. comm.; Slesazek, pers. comm.). Given the services delivered to society by managing forests in a responsible way, it can be argued that it is only fair that support programmes cover the costs borne by forest managers to voluntarily adopt more sustainable practices (Slesazek, pers. comm.).

Since 2008, The Borneo Initiative supports forest managers in the process towards FSC certification. It focuses on timber companies operating in natural forest concessions. Geographically, the focus used to be on Kalimantan (the Indonesian part of Borneo), but over time coverage has expanded to include Malaysia and Papua New Guinea. To cover certification costs The Borneo Initiative offers large forest companies a subsidy of US\$2 per ha up to a maximum of US\$300,000, small- to medium-sized concession holders (managing a forest area of 35,000 to 75,000 ha) are offered US\$3 per ha with a ceiling of US\$150,000.

There was large interest among forest companies: those interested were managing a total forest area of around 14 million ha. Some do not take the next step and engage in the process towards FSC certification, others discontinue at some stage. Beginning of 2018, The Borneo Initiative supported 26 FSC forest management certificates and 5 FSC controlled wood certificates, in total covering around 2.8 million ha of forest (Ellenbroek, pers. comm.). The objective is to expand the FSC certified area to 5 million ha by the end of 2021 (The Borneo Initiative, 2018b).

Market linking

Once certified, it is important to keep the price premium for certified forest products so that annual costs linked to certification are compensated for by a better market price. Therefore, market promotion, including the communication of the positive social and ecological impacts of certification, is critical. The Borneo Initiative aims for targeted promotion of FSC certified timber coming from Indonesia (Ellenbroek, pers. comm.). To facilitate market linkages, The Borneo Initiative organised a seminar and workshop beginning of 2018 to discuss the concerns and expectations from both the buyers end (Netherlands) and the producers side (Prabowo, pers. comm.). Finally, to overcome

the volume mismatch from the producer and the buyer end, an open question is how to organise the producers into a cooperation of some sort to increase the total volumes of timber and increase their bargaining position with buyers (Prabowo, pers. comm.).

5.3.3 Community perspective

Social forestry development

The State has allocated 12.7 million ha of forest for communities under the social forestry programme. This can be customary land, plantation forest or agroforestry systems, different types are possible. So far, the allocation has started, but no further activities have been carried out in its implementation due to lack of resources (Prabowo, pers. comm.). According to Prabowo (pers. comm.) at least 10% of the forests under the social forestry programme can become certified.

IFCC community standard

The Indonesian Forest Certification Cooperation (IFCC) is working on a standard for community forests which is expected to be ready later this year. This brings opportunities for the certification of smallholders that supply big IFCC certified pulp and paper companies with raw materials. This so-called nucleus and plasma system is expected to become an important use of the community forest standard. A second group of potential uptakers, if there are markets that require SFM claims, are smallholder involved in agroforestry systems in central Java where timber production is not the primary objective. In total there is an area of 1 to 1.5 million ha of these agroforestry systems where typically teak, mahogany, fruit trees and lesser used timber species are planted on farmland. Finally, the rubber industry could be a major driver of the use of the IFCC community forest standard. There is lots of jungle rubber that is managed by individual households. Also, the intensive rubber production is often produced at a small scale and could be brought under a community jurisdictional approach (Laity, pers. comm.).

Inclusive systems

Jurisdictional approaches could be used, so that smallholders and communities can be part of the production system and have access markets. A jurisdictional approach is basically group certification attached to a geographical region, as is currently much used in Finland and Spain. As it may not be feasible to have smallholders and communities fully certified, controlled sources could be used as an intermediary step which is more resource efficient and achievable. But then, it is critical that such controlled, low-risk production system is recognised by markets, especially for business to business where certification is used as a risk mitigation measure. There is a need to make the systems work for the majority of the timber suppliers of the future (Laity, pers. comm.).

5.3.4 Government perspective

Incentives for good behaviour

There are currently no financial incentives for forest managers to improve their forest management practices; the good guys and the bad guys are treated in the same way. To promote sustainable forest management, the government could create incentives to distinguish between those who adopt responsible practices and those who do not (Purwanto, pers. comm.).

6.

Myanmar Country Profile



6.1 Forest management certification in Myanmar

There are no FSC or PEFC certified forests in Myanmar at this stage. There are two active FSC chain-of-custody certificates (FSC, 2018a). The country also has no active forest legality certification schemes (Laity, pers. comm.).

Myanmar had an approved national standard for sustainable forest management since 1999 based on the ITTO criteria for sustainable forest management in the tropics (Forest Trends, 2012). Its standard has been revised whenever the ITTO revised its criteria and indicators (latest revision in 2014). In 2014, the standard for sustainable forest management was adapted for plantation forests (May Zun Phyo, 2017).

Myanmar's national standard for sustainable forest management is not recognised by any of the two major international certification systems and there are currently no country-adapted FSC or PEFC standards ready for use. However, a process has started to develop a responsible forest management standard for endorsement by PEFC (see 6.3).

Quick overview Myanmar forest and timber sector



Population

53,660,373 (Worldometers, 2018)

Growth rate

+0.91%

Indigenous people

multiple ethnic nationalities including the Shan, the Karen, the Rakhine, the Karenni, the Chin, the Kachin, the Mon, the Akha, the Lisu, the Lahu and the Mru (IWGIA, 2018b)

Corruption Perception Index 2017

Score: 30/100, Rank: 130/180

(Transparency International, 2018b)

Important institutions

- Forest Department of the Ministry of Natural Resources and Environmental Conservation
- 1992 Forest Law
- 1995 Forest Policy
- Community Forestry Instructions (1995, revised in 2016)
- 2001 Forest Master Plan

FLEGT-VPA status

Preparatory phase (see 6.3.1.)

More legality info

WRI Legality Tool; ETTF Timber Trade Portal

Main timber markets

China, India, Thailand, Vietnam (ITTO, 2017)

Trade link to the Netherlands

Import of 72m³ of sawnwood in 2015 equivalent to 0,03% of total sawnwood exported by Myanmar that year. (ITTO, 2017)^a

Trade link to Western Europe

Belgium, France and Italy are together responsible for ~1,5% of sawnwood exported by Myanmar in 2015 (ITTO, 2017)

Forests

Total forest area % total land area
29,041,00 ha* 45%*

Forest types**



Primary forest



Secondary forest



Forest plantations

Forest classification

Production forest: **Almost 3.2 million ha***** (FAO, 2014d)

Protected forest: **7.82 million ha****** (FAO, 2014d)

Other: **7.96 million ha******* (FAO, 2014d)

Forest tenure production forest

All forests are owned by the State, except for the area brought under community forests owned by the local people with long-term lease permission of the government (41,000 ha in 2010). There are also some forest plantations (teak and other hardwood) that are privately owned (~66,000 in 2013).

Deforestation

Deforestation rate: **-1,85% (546,000 ha/ year)****

worldwide 3rd in the list of countries with largest deforested area 2010-2015 (FAO, 2015)

Deforestation drivers:

- Agricultural expansion, particularly palm oil and rubber plantations (Enters, 2017)

* Excluding 299,000 ha of mangrove forests and other woodland

** 2015 data

*** production forests consist of 4 different so-called 'working cycles' and comprise of timber (from natural forest and plantations), non-timber forest products and local supply by community forestry (mainly fuelwood)

**** protected forests consist of 2 working cycles: protected areas system (national parks and sanctuaries) and watershed forest (for soil and water conservation)

***** This area is obtained by extracting the area of production and protection forest from the total forest area (i.e. 29.041 - 20.47 - 7.82); the number of forests without management plan is 7.96 million ha, but then the total forest area.

^a During the review process, several stakeholders noted that this volume is lower than they would have expected. For comparison: in 2013, the volume of sawnwood imported from Myanmar to the Netherlands was 389m³ (ITTO, 2015).

6.2 Bottlenecks and challenges for sustainable forest management and certification

In Myanmar, the government through the Forest Department and the State run Myanmar Timber Enterprise MTE has a large role in forest ownership, management and control, harvesting, processing and trade (Phyo Zin Mon Naing, 2016). Numbers by the FAO (2014b) show that communities and the private sector have a very limited role in forest management, even though a growing trend is observed through the establishment of community forests and privately owned forest plantations. The private sector operates the non-teak sawmills and is responsible for processing and trade of timber that is supplied by the MTE (Phyo Zin Mon Naing, 2016).

6.2.1 General challenges

Complex situation

With the country just coming out of a military dictatorship, the general context in Myanmar is difficult. Although the peace process has started and is ongoing, this is not everywhere and there are still conflict areas where the government is not in control (Colonna, pers. comm.; Riestenpatt and Steinmeyer, pers. comm.). Illegal logging is known to fund both sides of some of the conflicts in several regions in Myanmar (NEPCon, 2013).

Large-scale illegal logging and trade

In general, legality is a big constraint in Myanmar. At the moment, all timber coming from Myanmar is considered high risk (Laity, pers. comm.).

Key issues are overharvesting and illegal trade. Harvested volumes are higher than the established annual allowable cut which is an indication of unsustainable practices and large scale illegal logging (ITTO, 2017). Harvesting of teak beyond the logging quota for decades has resulted in forest degradation (Enters, 2017). To export timber, the only legal route from Myanmar is via the port of Yangon (Forest Trends, 2012; Riestenpatt and Steinmeyer, 2018). However, there is reportedly a lot of overland trade with China and other neighbouring countries (Forest Trends, 2012; MIS 1-15 September 2016 in: ITTO, 2017).

The following two examples should give an indication of the scale of this issue of illegal logging and associated trade. In the fiscal year 2016-2017, 50,000 tons of illegal timber had been confiscated and analysts suggested that the volume of confiscated teak was almost the same as the total annual allowable cut for 2016-2017 (MIS 16-30 April 2017, in: ITTO, 2017). Over the period 2001-2013 over 10 million cubic meters of logs imported from Myanmar were not authorized for harvest which equates an illegal logging rate of almost 48% (Enters, 2017).

Another aspect of this problem is traceability. In Myanmar timber is not being differentiated according to the source of origin (NEPCon, 2013; Woods, 2013). Further, the track-and-trace administration is done on paper (Riestenpatt and Steinmeyer, pers. comm.). This makes it challenging to conduct due diligence for the EUTR. A number of importers have experienced problems with Myanmar timber being considered in non-compliance with the EUTR by several competent authorities in Europe. As a result, Burmese timber has been placed in the spotlight of global publicity (Colonna, pers. comm.). The Environmental Investigation Agency (EIA) has published multiple cases on this, for example: <https://eia-international.org/denmark-sanctions-entire-burmese-teak-industry>.

An analysis of the Myanmar forest sector legality by NEPCon in 2013 states that “the policy and legal framework for managing forest resources in Myanmar is outdated and inadequate for ensuring legal and sustainable forest management” (p.32 NEPCon, 2013). An overall governance reform is needed including issues like land allocation, access to timber and the monopoly position of the state-owned MTE (Colonna, pers. comm.). Without having the necessary forest governance reform and improvement, it is very difficult for voluntary certification schemes to achieve and maintain a minimum level of consistency and credibility (Sawasdivorn and Yasui, pers. comm.).

Conversion timber

In addition to timber coming from natural forests and plantations, a significant production volume is derived from forest land conversion for economic land concessions (ITTO, 2017; Woods, 2015). Woods (2015) reports massive growth of large-scale land acquisitions for commercial agribusiness development. Between 2010 and 2013,

official statistics show that the land area allocated to private agriculture concessions increased from 2 million acres (over 0.8 million ha) to 5.2 million acres (2.1 million ha). Woods (2015) adds that these figures are an underestimate as it does not include additional concessions allocated by provincial, military, and/or non-state authorities. Although in allocated agricultural concessions large-scale forest clearance took place, with less than 25% of the cleared area planted with crops by the end of 2013 there seemed less enthusiasm for agricultural development. Therefore, Woods (2015) suggests that these agricultural concessions provide a legal way to either access valuable trees for logging or engage in land grabs for speculation purposes rather than agricultural development.

Corruption

The Corruption Perception Indicator 2017 score of 30 (out of 100) and rank 130 (out of 180) indicates that this is a severe problem. In 2013, NEPCon lists corruption as a major factor of risk at all levels of the supply chain, from the forest to export. NEPCon (2013) also notes that levels of corruption may vary across different regions in Myanmar and are linked to the security situation.

No presence certification organisations

A point mentioned by Riestenpatt and Steinmeyer (pers. comm.) is that there is currently no FSC representative in Myanmar, so the certification scheme is not very well known and there is no capacity in case there is a willingness to move towards FSC certification. There is not a national PEFC representative either. Instead, both responsible forest management certification schemes have regional representatives that cover multiple countries including Myanmar. Although awareness raising and engagement by certification organisations is important, in many cases it is not the main reason nor barrier for forest managers to pursue responsible forest management certification (Sawasdivorn and Yasui, pers. comm.).

6.2.2 Company perspective

Difficulty in accessing logs

Small and medium-sized enterprises such as woodworkers and local furniture makers (Colonna, pers. comm.) and sawmills (ITTO, 2017) experience difficulty accessing raw materials. Recently, the annual allowable cut has been reduced tremendously. As a result, many sawmills that have been in business for decades have had nothing to saw for the past three years (Riestenpatt and Steinmeyer, pers. comm.). The State-run Myanmar Timber Enterprise (MTE) is the only legal logging company; it has a monopoly position on tree harvesting for both natural forest and forest plantations (Colonna, pers. comm.; Riestenpatt and Steinmeyer, pers. comm.). The logs harvested by MTE are being sold through auctions. This has the potential to lead to illegality, because small enterprises who work domestically can hardly access auctioned timber and have to divert to informal markets (Colonna, pers. comm.).

The difficulties of the processing industries to obtain raw material does not promote investment. Riestenpatt and Steinmeyer (pers. comm.) observed some processing industries operating with machinery that was 50 years old already, although in other places they report quite a bit of capacity and quality with modern profiling machinery.

Barriers to investing in plantations

There are various barriers to private sector investment in tree plantations. First, the benefits of teak planting are unsure as long as all teak in Myanmar is legally a state-owned species. Second, land tenure insecurity is a concern for prospective investors with a risk of having to deal with farmers that currently use the land and resist to land dispossession. Other bottlenecks are difficulty to find quality seeds and seedlings and the lack of financial incentives to invest in tree plantations (Woods, 2013).

6.2.3 Community perspective

No land-use rights

About 70% of Myanmar's population lives of the land (mostly as a farmer) and a third is considered to have a forest-dependent livelihood (DFID, 2014, in: MacQueen, 2015). Under current laws there is no recognition of customary law and no person or community has land use rights or can make any claims for state forests, agri 'waste-land' and agribusiness concessions. The only legal way for people to make use of forest resources is by uniting into a forest users group in order to apply for a community forest (Woods, 2013). This lack of land use rights results in often violent conflicts when agricultural concessions are being allocated (Woods, 2015).

6.2.4 Government perspective

Lack of resources

The government's Forest Department lacks capacity and resources for its role as regulator and controller of the proper implementation of the Myanmar forest management and harvesting system and associated regulations (Forest Trends, 2012; NEPCon, 2013).

Mixed signals

Although in theory the AAC is determined on forest growth parameters to ensure sustainable yields, in practice there is a push to exceed the logging quota coming from timber revenue targets set by the Ministry and imposed on MTE (NEPCon, 2013).

6.3 Solutions and opportunities for sustainable forest management and certification

6.3.1 General solution and opportunities

Strengthening legality and enabling environment

Myanmar formally proposed to engage in the FLEGT-VPA process end of 2013 and beginning of 2014 the EU responded positively to participate in this process (Phyo Zin Mon Naing, 2016). At the moment, Myanmar is in the preparatory phase; a FLEGT dialogue is ongoing in preparation for a potential voluntary partnership agreement with the EU (Colonna, pers. comm.; Laity, pers. comm.).

The Myanmar Timber Legality Assurance System (MTLAS) was developed in 2013 by the Myanmar Forest Certification Committee in collaboration with stakeholder including national and international NGOs (Laity, pers. comm.). As part of the preparatory work, projects have been executed in 2016 to strengthen the MTLAS in order to meet international market requirements (Phyo Zin Mon Naing, 2016). The idea is to have MTLAS 3rd party certification which will provide evidence that legality requirements have been complied with (e.g. respecting the AAC) as well as some requirements that go beyond legality (Laity, pers. comm.).

Beyond legality, it is a positive development that civil society organisations are becoming stronger (Colonna, pers. comm.). Furthermore, Myanmar is going to include the forestry sector in the Extractive Industries Transparency Initiative (EITI) (Colonna, pers. comm.; Enters, 2017): <https://eiti.org/myanmar>. Increased transparency will lead to increased accountability of the forestry sector in terms of legal compliance and sustainable forest management.

Foundation for sustainable forest management and certification

Myanmar has had a long history of scientific forest management (Forest Trends, 2012). In the 1860s, a selective harvesting system has been developed for teak by Brandis. This method has many elements of sustainable forest management in it and is part of foresters' studies (Riessenpatt and Steinmeyer, pers. comm.). Also, the country has engaged in several domestic and regional initiatives that could serve as a positive foundation to those seeking to establish certification programs in Myanmar (Forest Trends, 2012). The Myanmar Forest Certification Committee (MFCC) is a multi-stakeholder organisation that was established in 2003 to facilitate developments from the timber export markets (Laity, pers. comm.).

Interest in certification

Various key resource persons (Laity; Sournia; Riessenpatt and Steinmeyer; Sawasdivorn and Yasui) expressed that in recent years an interest in certification, both internal and external, has come up. At the moment, the country is blocked by the EU to export timber and certification could be a solution to this (Sournia, pers. comm.). Within Myanmar, the Forest department and the MTE are currently the main driving forces for certification. This in response to the EU and the world demanding that timber is legal and sustainable (Laity, pers. comm.).

Rubber plantations are growing rapidly in Myanmar on degraded lands. WWF is working with the rubber industry to develop sustainable rubber production and is looking into FSC as a potential tool for certification thereof (Riessenpatt and Steinmeyer, pers. comm.; Sawasdivorn and Yasui, pers. comm.).

PEFC standard under development

In May 2017 a 3-year project has started funded by PEFC International and the Prince Albert II of Monaco Foundation to develop a responsible forest management standard for Myanmar that is to be endorsed by PEFC (Sournia, pers. comm.). This process is focused on timber coming from natural forests, mainly teak and other hardwoods (Laity, pers. comm.). MFCC is currently being restructured. After the reformation process has finalised it is expected that they can become a PEFC member and manage chain of custody certificates in Myanmar (Laity, pers. comm.). As it is complicated, a PEFC standard is not to be expected before the end of 2019 (Sournia, pers. comm.); there is optimism that it will be endorsed by 2020 (Laity, pers. comm.).

PEFC sees various potential uptakers of the PEFC standard (Laity, pers. comm.):

- Community managed plantations: this is an area of about 10,000 ha mainly planted with teak that is now about 15-20 years old (and so will be reaching maturity for harvesting within the next 5-10 years). Certification could help with marketing;
- Large-scale privately-owned teak plantations: in total covering around 200,000 ha where teak has been growing for 5-20 years. This is probably part of a sunrise industry with plantation teak becoming a major source in the coming years;
- New investors, for example in the pulp and paper industry that wish to demonstrate best practices of new plantation establishment for fast-growing species

6.3.2 Company perspective

Log export ban and in-country processing

There is not a lot of timber processing in Myanmar (Colonna, pers. comm.). However, after Myanmar enacted a log export ban in 2014, this attracted investments notably from Indian veneer and plywood manufacturers (ITTO, 2017).

6.3.3 Community perspective

Increase in community forests

The government of Myanmar has set a target to establish 918,000 hectares of community forests by 2030. Although it is unlikely that this target will be met, in recent years both government and NGOs have worked on the establishment and upscaling of community forests. The approach aims to restore degraded forest landscapes through reforestation and is based on four principal pillars: 1) securing commercial tenure 2) improving technical know-how; 3) developing business skills and 4) strengthening producer organisation (MacQueen, 2015).

Whereas in the past commercial logging was not permitted in community forests, the revision of the community forestry instructions in 2016 has shifted the focus from subsistence to commercial use. Community forests have been established for various motivations, including watershed protection, tenure security (to prevent e.g. the establishment of dams and hydropower plants), coastal protection and subsistence needs of fuelwood, medicinal plants and other NTFPS (MacQueen, 2015; Riestenpatt and Steinmeyer, pers. comm.).

Besides bringing a potential to develop community forestry enterprises³, these developments of empowering communities to manage and benefit from forest resources is also seen as a peace building platform to restore trust between the government and ethnic groups and secure peoples livelihoods (MacQueen, 2015).

6.4.4 Government perspective

Apart from the opportunities listed under the general section, no specific ones have been formulated for the government.

3 For an extensive overview see Tint, Kyaw, Springate-Baginski, O., MacQueen, D.J. and Mehm, Ko Ko Gyi, (2014), "Unleashing the potential of community forest enterprises in Myanmar", Ecosystem Conservation and Community Development Initiative (ECCDI), University of East Anglia (UEA) and International Institute for Environment and Development (IIED), London, UK.

7.

Suriname Country Profile



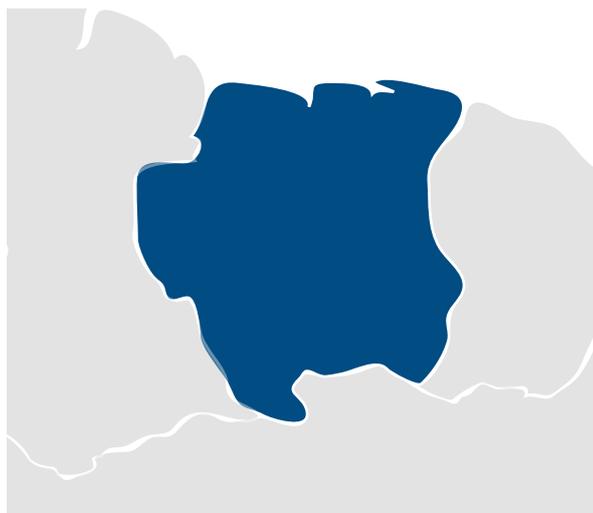
7.1 Forest management certification in Suriname

Currently, two forest management organisations are managing FSC certified forests, see table 7.1. In addition, there are seven valid FSC chain-of-custody certificates. Suriname does not (yet) have a national standard for sustainable forest management, neither for FSC nor for PEFC.

Both FSC certified organisations are private companies. Soekhoe en Zonen N.V. is a Surinamese family company and Dennebos a Dutch company. Earlier in 2018, the Greenheart Group – a multi-national company that is stock-listed in Hong Kong – lost its FSC certification resulting in an enormous reduction of 316,765 ha of forests under FSC certification which is equivalent to almost 90% of the forest area under FSC certification.

Further, there is one company that decided to let its FSC Controlled Wood certificate expire. In the past, Rainforest Alliance has issued VLC certificates to Dennebos Suriname N.V. and Soekhoe en Zonen N.V. that were valid from

Quick overview Suriname forest and timber sector



Population

566,329 (Worldometers, 2018)

Growth rate

+0.87%

Indigenous people

Indigenous Peoples and Maroons, in total making up about 25% of the population (VIDS et al., 2015)

Corruption Perception Index 2017

Score: 41 / 100, Rank: 77 / 180 (Transparency International, 2018b)

Important institutions

- Stichting Bosbeheer en Bostoezicht (SBB)
- Forest Management Act (1992)
- National Forest Policy (2003)
- Interim Strategic Action Plan (2009)
- Code of Practice (2011)

FLEGT-VPA status

—

More legality info

WRI Legality Tool; ETTF Timber Trade Portal

Main timber markets

Asia (China, India, Singapore, Taiwan) and Europe (Belgium, Netherlands) (SBB, 2016)

Trade link to the Netherlands

In 2015, the Netherlands was responsible for 3% of Suriname's timber export value (SBB, 2016)

Trade link to Western Europe

Apart from the Netherlands, the most important Western European countries that have a trade link to Suriname are Belgium (taking up 6% of the total export value) and Germany (2% of export value) (SBB, 2016)

Forests

Total forest area 15,332,00 ha
% total land area 94% (FAO, 2014e)

Forest types



Primary natural forest

Naturally regenerated forest: 1.3 million ha
Plantations: 13,000 ha (FAO, 2014e)

Forest classification

Production forest: ~4.5 million ha (FAO, 2014e) of which ~2.5 million ha allocated in concessions (MNR and SBB, 2006)

Protected forest: 2.3 million ha (FAO, 2014e)

Conversion forest: 0.1 million ha for 2013

Forests to be provisionally maintained^a: ~10 million ha

Forest tenure production forest

Ownership (FAO, 2014e): Almost exclusively by the State.

Note: No recent numbers on ownership are available and there is a great possibility that the area under private ownership has increased over the past decade (FAO, 2014e).

Management: (FAO, 2014e): Public administration^b: 85%; Private companies^c: 10%; Communities^d: 4%; Individuals: 1%

Note: Observed trends include an increase of forests managed by private companies and individuals at the expense of forests managed by public administration over the period 1990-2000. During the period 2000-2010 an increase is observed in forest management rights by communities with a decrease of forests managed by public administration (FAO, 2014e).

Deforestation

Deforestation rate: - 0.000254% (3,900 ha/year)

(REDD Suriname, 2018)

Note: Although currently a high forest low deforestation country, the FRA country report points out that "As Suriname is in the early stage of its development it might be expected that for the national development more forest area will be deforested" (FAO, 2014e).

Deforestation drivers: (AAE, 2017)

- (Gold) mining
- infrastructure development
- urban development
- agriculture

^a There is no formally established permanent forest estate in Suriname and the vast majority of forests is legally classified as 'forests to be provisionally maintained'. This means they will be maintained as forest until they are legally designated to a specific use (ITTO, 2011).

^b Includes nature reserves, Suriname Forest Service reserves, multiple use management areas, state land

^c concessions and incidental cutting licenses issued to legal persons

^d communal forests and communal timber cutting licenses (HKVs – Houtkapvergunningen)

2013 until 2016. It seems that Dennebos Suriname N.V. and Soekhoe en Zonen N.V. used this legality certification as a first step towards FSC certification. At the moment, there are no VLC certificate holders in Suriname (Lemus, pers. comm.).

Table 7.1. Overview of FSC certified forests in Suriname, dd. 30 May 2018 (FSC, 2018a).

Organisation	Type	Forest area (ha)	First year of certification
Soekhoe en Zonen N.V.	FSC FM/CoC	21,720	2015
Dennebos Suriname N.V.	FSC FM/CoC	24,605	2010*
Total	FSC FM/CoC	46,325	
Dennebos Suriname N.V.	FSC CW	10,680	2015
Total	FSC/CW	10,680	

* Previously E-Timber industry Suriname N.V.

7.2 Bottlenecks and challenges for sustainable forest management and certification

For production forests in Suriname each of the three actor groups (companies, communities and government) have a different role. The government (Stichting Bosbeheer en Bostoezicht – SBB) considers itself the forest manager as the entity responsible for the allocation of timber concessions, the approval of forest management plans and the control of adherence to its implementation (a.o. timber volumes harvested). Companies obtain harvesting rights for timber concessions (for a period of 5-20 years, depending on the concession size, renewable once) and are responsible for the day-to-day management of the forest in accordance with the forest management plan and applicable laws, regulations and codes of best practice. Communities have been allocated communal forests (under the 1994 Forest Law) or HKVs (under the 1974 Law). In theory these can be withdrawn by the government, but in reality they are renewed infinitely.

The largest share of timber production comes from concessions (63.4%), followed by HKV (10.2%), unknown sources (9.4%) and community forest (9.4%) (SBB, 2016). Since certification is most interesting to those linked to the export markets, the certification-related bottlenecks are categorised under company perspective.

7.2.1 General challenges

Roads and transportation costs

Suriname has a limited infrastructure and road network, resulting in high opportunity costs to take inland forest areas into production; the deeper into the inland, the higher the costs to get the logs to the sawmill and the market (de Wolf, pers. comm.). The rationale for the current production forest area is mainly based on economic factors such as accessibility and transport costs. Further on, no commercial timber concessions are issued further south than 4 degrees North (the southern border of the production forest) (van Kantén, pers. comm.). In the inland there are no facilities whatsoever, so it is not easy to establish a sawmill close to the forest. Let alone find employees who are willing to work in those remote areas; in general people prefer to live in urban areas (Dennebos, pers. comm.; de Wolf, pers. comm.).

The quality of the roads is also an issue: there is insufficient maintenance of the road network now that Suriname is in an economically down period. In 2011/2012 when the economy was better, there were more resources for road maintenance and it was a lot better than the situation at the moment. Lack of road maintenance also leads to conflicts with the communities living along the roads. They see their roads being destroyed by trucks transporting the heavy timber logs and block the way in protest (Pel, pers. comm.). At the same time, there is insufficient control on the trucks which often exceed the maximum allowable weight (van Kantén, pers. comm.).

High tree biodiversity, limited commercial timber species

The forests in Suriname are known by their high biodiversity, with up to 120 species per ha (AAE, 2017; van Kantén, pers. comm.). At the same time, there is a limited number of commercial tree species with only about 20-30 that are demanded in high volumes (AAE, 2017; van Kantén, pers. comm.). Especially export markets ask for specific

timber species, the domestic market accepts a wider variation of timber species as long the quality and specifications are good (Pel, pers. comm.). About 50 timber species are known as category A commercial species (export market); around 100 as category B timber species (domestic market). In 2015, Basralocus (*Dicorynia guianensis*) was responsible for over 25% of industrial roundwood production and the top three commercial timber species – with Gronfolo (*Qualea spp.*) second and Kopi (*Goupia glabra*) third – accounted for nearly 50% of industrial roundwood production for the same year (SBB, 2016). For 2016, a similar picture emerges with ten timber tree species accounting for 75% of industrial roundwood production (SBB, 2017). This discrepancy between the forest base and the market demand results in very selective logging where the total extracted timber volume is well below the legally allowed 25m³ per ha, with an estimated average of 9-11 m³ (AAE, 2017) and lately some companies reporting harvests of 16-18m³ per ha (van Kantén, pers. comm.). Further, commercial timber tree species are not evenly distributed in the forest which can make it hard to plan and promote timber species in the market or deliver the volumes as stipulated in the contract with clients. On the long term there is a risk of degrading the forest and reducing the economic value of the forest (Crabbe, pers. comm.).

SFM regulations not officially institutionalised

After a strategic action plan had been developed in 2006 (to bring the forest management act and forest policy into practice), implementation has been inexistent because the application for ITTO funding was unsuccessful back then. The use of the 2011 Code of is voluntary, not obligatory (van der Hout, pers. comm.). However, large companies do use the Code of Practice (van Kantén, pers. comm.). Nevertheless, the lack of mandatory legal status of the operational guidelines that provide procedures for silvicultural, environmental and social responsible practices hinders the governance and capability to effect a proper control on the resource (AAE, 2017).

Professionalism and mentality

According to Tese (pers. comm.) it is a challenge to do business with Surinamese timber companies as there is a lack of professionalism in the eyes of European business partners and the way of working does not match well. This may be explained by a difference in culture and mentality (van Benthem, pers. comm.; Tese, pers. comm.). Fact is, the reputation of Surinamese forest and timber sector players in Europe is not great (Tese, pers. comm.). It can take a long time before a timber shipment arrives (van Benthem, pers. comm.; Tese, pers. comm.); this makes importers reluctant to pre-finance timber orders (Tese, pers. comm.). Other factors that play a role may include logistics and personnel changes (van Benthem, pers. comm.). More reliability is needed to do business and a more investor-friendly environment needs to be created for foreign investors (van Benthem, pers. comm.).

Access to finance

ITTO (2011) lists lack of capital to acquire equipment as one key barrier for sustainable forest management. Van Kantén (pers. comm.) explains that this is still an issue as the forest and timber sector is perceived as high risk by investors. This financing status, acquired during the inland war in the eighties when many timber operations were forced to stop their activities, never changed after the war ended. De Wolf (pers. comm.) highlights that most forest management operations are family-owned and because of the small scale they lack capital to invest in their operations.

7.2.2 Company perspective

High costs

Costs for bringing the forest management unit to compliance with the FSC forest management standard are high (van der Hout, pers. comm.). This is because most forest managers need to engage consultants to execute certain studies (e.g. HCV assessment), write procedures and provide training (Dennebos, pers. comm.; van der Hout, pers. comm.). Van der Hout estimates that roughly at least 50,000 USD would be needed, depending on the size of the organisation, the starting position and the specific local context. According to experience of van der Hout (pers. comm.) the most costly items are doing an environmental and social impact assessment, revision of the management plan, training of staff in all aspects and setting up a chain of custody system.

All currently FSC certified forests have received external financial support to cover the initial costs towards FSC certification. E-Timber Industry Suriname (now Dennebos) received financial support from the Dutch Government, Suma Lumber NV (now Greenheart) received funds from WWF to work towards FSC certification (van der Hout, pers. comm.). More recently, the IDH - Guiana Shield Programme supported Dennebos, Greenheart and Soekhoe and Zn (van Eldik, pers. comm.).

Slesazeck (pers. comm.) adds that FSC certified companies in Suriname may also experience higher operational costs. Due to expensive machinery, staff with a higher educational level and related salaries, investments costs to harvest a tree are higher. This means that certified companies may decide to leave certain species that do not break even (e.g. harvesting costs 9 EUR per m³, income 7 EUR per m³) in the forest that non-certified organisations would harvest.

Insufficient price premium

The premium price paid for FSC certified timber products is not a strong incentive to pursue FSC certification (Dennebos, pers. comm.). Although the overall increase in operational efficiency, a.o. due to improved planning and capacity development within the organisation (better trained personnel), is a clear benefit of the process to achieve FSC certification, once this level has been achieved it can be maintained within the organisation without continuing FSC certification (Dennebos, pers. comm.). Tese (pers. comm.) estimates that in the market about 5-10% more is asked for FSC certified timber, but also adds that in many cases there is no willingness to pay more (see lack of market demand). Dennebos (pers. comm.) likewise reports no willingness to pay for FSC, not in Europe either.

Lack of market demand

Lack of market demand is an important bottleneck for the maintenance and growth of certification (van Kanten, pers. comm.). The importance of the Netherlands and Europe in general is quite limited being responsible for 3% and 11% of the total timber export value of Suriname. The large majority of timber is exported to Asia with China, India and Singapore together responsible for over 70% of timber export value (see also table 7.1). Of the export timber over 90% was roundwood, almost 9% was sawnwood. 99% of exported roundwood goes to Asia with China as the number one timber export country, followed by India, Singapore and Taiwan (SBB, 2016). Certification of responsible forest management is not requested by these markets; in general not many questions are asked and there is a higher acceptance of defects as long as it can be delivered quickly (van Benthem, pers. comm.; Tese, pers. comm.). The European markets are more demanding on quality as well as legality and responsible sourcing of timber. However, in many cases conformity with the EUTR is sufficient; there is no willingness to pay more for FSC certified products on the market (Tese, pers. comm.).

The difference in quality standard between the Asian and the European market means that per cubic meter of sawn timber more is paid in Europe (because they demand high quality) than in Asia (who will do refining as needed) (Tese, pers. comm.).

New requirements within FSC standard that are difficult to comply with - notably IFLs

Intact Forest Landscapes (IFLs) discussions within FSC are an issue (Dennebos, pers. comm.; van der Hout, pers. comm.; Slesazeck, pers. comm.). Forest managers operating in IFL areas may potentially be disqualified from FSC certification, because of logging restrictions in vast forest areas. According to the latest draft of the IFL indicators for the revised International Generic Indicators, there are possibilities for reduced impact logging and in general the final rules around IFL are less strict than the initial advice note (Franco, pers. comm.). However, this information has not yet reached all companies and those operating almost entirely in IFL areas have concerns about being able to maintain in business. At the same time when setting aside IFL areas companies will risk a fine by the government, that is promoting the sustainable use and production of forests; not for forests to be set aside for conservation purposes (Dennebos, pers. comm.; Slesazeck, pers. comm.).

Dennebos (pers. comm.) adds that in general, FSC should be more mindful of the practical implications of proposed new requirements and how these are going to be implemented in already challenging contexts. He is sceptical about the FSC staff and consultants that create the rules, but have too little feeling with practice and so miss the point. According to him, FSC is way too complex with too many rules and requirements. Companies do not have the knowledge and skills asked for in-house.

Gold mining activities in the forest

Gold mining is one of the most important economic activities in Surinam. There are large mining companies, but also small-scale (illegal) miners. When mining activities take place in forest concessions, forest companies and their operations can be negatively affected (because of clearcutting, pollution of water bodies). Where timber concessions overlap with gold mining concessions this puts a challenge to long-term planning (Crabbe, pers.

comm.; van der Hout, pers. comm.; de Wolf, pers. comm.). Overlapping concession rights has to do with two different Ministerial departments responsible for issuing mining and timber concessions, respectively. One of the requirements of FSC is that no unauthorised or incompatible activities take place within the forest concessions that are certified. Although FSC has an excision policy that can be used to exclude certain areas out of the scope of the certificate, in practice gold mining activities can become a real obstacle for obtaining and maintaining certification for responsible forest management. Since artisanal gold miners usually don't stick to one place but move around and continue to explore new areas this poses a risk to an organisation that wants to pursue or maintain FSC certification (van der Hout, pers. comm.). The presence of artisanal, illegal goldminers in one of Dennebos' timber concessions is the reason why for that FMU there is FSC Controlled Wood certification, not full FSC Forest Management (Dennebos, pers. comm.).

Playing by the rules

Compliance with law and legislation puts FSC certified forest managers in a disadvantaged position to competitors in the sector (Dennebos, pers. comm; Slesazeck, pers. comm); you can experience more problems with certain rules and things can get stuck somewhere, e.g. with issuance of permits (Slesazeck, pers. comm.). For example, obtaining a forest concession in the official way takes a long time (~ 5 years), whereas via the unofficial regular way of 'doing things' this is easier and less time-consuming (Dennebos, pers. comm.; de Wolf, pers. comm.). Those who play by the rules also risk being put last in line for e.g. timber controls, because government officials do not have the incentive of getting something extra for checking and approving the timber for transportation (Dennebos, pers. comm.).

Scale

For smaller concessions certification is not attractive, because the certification costs per m³ of harvested timber are higher than for larger concessions (Dennebos, pers. comm.; van der Hout, pers. comm.). Especially community forests or houtkapvergunningen (HKVs) are relatively small in size, up to 5,000 ha. Scale is a barrier here; as a single entity it is not an attractive scale to pursue FSC certification as costs will be too high (Pel, pers. comm.). According to Dennebos (pers. comm.) FSC certification would be interesting from a forest concession size of 80,000 ha or more, although the FSC certified forests managed by Dennebos are just over 35,000 ha, where one concession is full FSC FM/CoC certified (~25,000 ha) and the other FSC Controlled Wood certified (~10,000 ha). A new concession is located in IFL area.

In early 2010, there was a total of 68 licences for an area of 1.22 million ha of forest (ITTO, 2011) which means the average concession size was nearly 18,000 ha. Figure 7.1 shows the number of licences for each of the forest concession area classes in 2010. In 2014, there were 115 licences covering a total area of 1.56 million ha of forest concession (SBB, 2015).

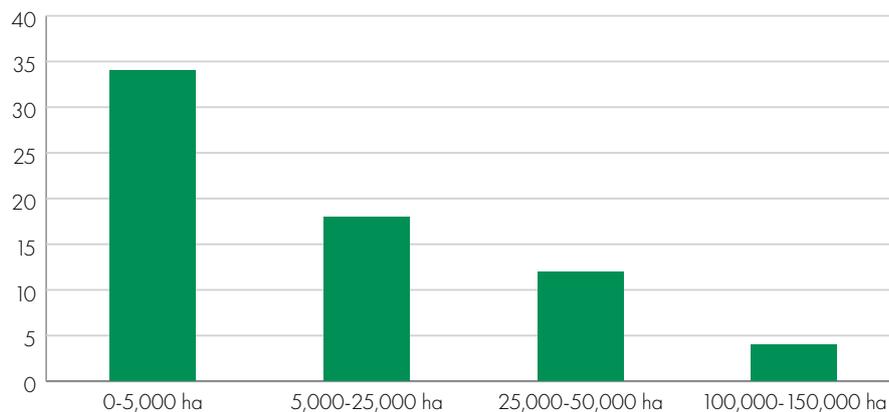


Figure 7.1. The number of concession licences per forest concession area class. Source: ITTO, 2011.

Concession length and tenure security

In accordance with the Forest Management Act (1992) forest concession rights are issued for a period of max. 20 years with one renewal, so in total forest managers can work in a forest concession for up to 40 years. The uncertainty to be able to work in the same forests for a second logging cycle does not provide an incentive for genuine long-term, sustainable planning of operations (van Kantén, pers. comm.). However, Dennebos (pers. comm.) explains that the Forest Management Act provides the government with the right to take the concessions back, but in practice concession rights are renewed more than once when SBB is of the opinion that the forest manager is serious. In that respect, Dennebos (pers. comm.) sees an advantage of being FSC certified and being viewed as an example in the forestry sector of Suriname; government would be reluctant to take away his concessions as this may cause an international uproar.

Staff recruitment and capacity

ITTO's Status of Tropical Forest Management of 2011 lists the relatively low educational level of the forestry workforce as one of the main constraints for progressing towards SFM in Suriname. Dennebos (pers. comm.) indicates that it is a challenge to find good employees and once found to keep them. Local, unschooled people often move to the city as soon as they have acquired some skills. Although everything is well organised in the forest camps, most want to be with their family and live in the city. According to Dennebos (pers. comm.) Suriname is not known for its hard workers which is why he employs many Asians and Guyanese. Van Kantén (pers. comm.) does not perceive a low educational level of the forestry workforce as a major constraint, explaining that there are qualified workers from Guyana and abroad as well as consultants; although these may be able to offer support, they are expensive.

Multiple forest companies employ workers from Guyana, but these workers do not always have a working permit. These 'illegal' employees have been perceived as an obstacle to FSC certification (van Eldik, pers. comm.).

Underdeveloped timber processing sector

In 2014, the total national sawmill capacity was estimated at 850,000m³ roundwood input or 340,000 m³ of sawnwood production per year (SBB, 2015). Around 70% of the total roundwood production is processed within the country by the local processing industry (SBB, 2015), 30% of the timber being exported as roundwood (SBB, 2016). Most sawmill equipment is outdated which results in low stem recovery rates and sawnwood of poor quality (Pel, pers. comm.; Tese, pers. comm.). Pel (pers. comm.) estimates that the current recovery rates are around 35-40% and that it is technically possible to reach recovery rates of 70-80%, even though this means that more advanced sawing techniques need to be employed. The potential recovery rate of 70-80% is considered to be optimistically high and unrealistic by others (van Kantén, pers. comm.).

7.2.3 Community perspective

There are two types of community forests: 1) communal forests, established for the benefit of tribal inhabitants of the interior under the 1992 Forest Management Act; and 2) timber cutting licenses – houtkapvergunningen (HKVs) – that have been issued to tribal inhabitants of the interior under the Timber Act of 1947 (that was replaced by the Forest Management Act in 1992). In 2014, there were 88 valid licences for HKVs and communal forests combined, covering an area of 619,959 ha (SBB, 2015).

Land rights

There are currently no provisions in Suriname's Constitution for tribal rights of land tenure, but indigenous (Amerindians) and maroon people do claim such land rights. In the past, the state issued cutting licenses (HKVs - houtkapvergunningen) to indigenous people and maroon people and although these can be withdrawn, in practice they are being renewed indefinitely. In neighbouring country Guyana, the indigenous (Amerindian) people have ownership over forest areas (van der Hout, pers. comm.). The Association of Indigenous Village Leaders in Suriname (VIDS) in collaboration with the Association of Saramaka Authorities (VSG) and the Forest Peoples Programme (FPP) fight for the official recognition of indigenous and tribal peoples' rights in Suriname, addressing the issue to international bodies notably the United Nations Committee on the Elimination of Racial Discrimination. Since 2005, three cases have been brought forward to the Inter-American Court of Human Rights (EEA, 2017; VIDS et al., 2015).

The Suriname government has a special commission that works on this complex issue with different perceptions as to how the forest land should be divided. The general public does not understand why forest-dependent livelihoods need a large area and why the native people need the land to continue with their traditional lifestyles in the first place. Every government that comes into power makes promises to solve the land rights issue, but does not succeed to do so (van Kantén, pers. comm.).

Unsustainable harvesting practices in smaller concessions

For large concessions, the Code of Practice prescribes reduced impact logging techniques to minimize the damage of harvesting to the residual stand. For medium-sized and small-sized concessions, the Code of Practice is less strict and conventional logging is more the norm. It is common that community forests of HKVs are logged by contractors. These enter the forest to harvest what is of value, without further care for the future of the forest and the damage done to the residual stand resulting in forest degradation (van Kantén, pers. comm.). Because no 100% inventory is required for these smaller forest concessions, planning is far from optimal which in turn results in greater forest degradation and less structured timber extraction.

7.2.4 Government perspective

Insufficient resources

There is a lack of financial resources, which undermines capacity to monitor, supervise and provide guidance to forest operators (AAE, 2017; Crabbe, pers. comm.).

7.3 Solutions and opportunities for sustainable forest management and certification

7.3.1 General solution and opportunities

Promotion of LKTS

One of the options to improve the business case for responsible forest management is the promotion of lesser known (or lesser used) timber species (LKTS) in the market. Harvesting multiple species reduces the commercial impoverishment of forests by avoiding very selective logging practices for only a handful of species for which a market demand exists. At the moment, the maximum allowable cut of 25m³ per ha – equivalent to approximately 6 trees per ha (van Kantén, pers. comm.) – is not reached by forest managers, the majority does not even come close. When the harvested volume per ha increases, the costs for certification are spread out over a larger timber volume, decreasing the costs of FSC certification per m³ of harvested timber. The government of Suriname is in favour of the promotion of LKTS species and eventually has the desire to go to a situation where only processed timber is being exported, no more roundwood export (van Kantén, pers. comm.). To promote LKTS, it is important that from the market there are no demands/ prescription on species, but on timber quality and specifications (van Benthem, pers. comm.).

It is interesting to know that there has been a major shift in the use of commercial timber species from around 1980. Certain forest areas were inaccessible due to the civil war, as a result of which previously low value species from other areas were being used and these turned out to be highly suitable for some demanding applications (ITTO, 2011).

Mainstream reduced impact logging

There are currently two ways of logging that are practiced: reduced impact logging and conventional logging. Conventional logging results in more damage to the residual stand. These conventional logging practices should be transformed to reduced impact logging (van Kantén, pers. comm.). This includes changing practices of the logging contractors that are hired to harvest timber from community forests, HKVs and some medium-sized concessions. Those that already adopt RIL practices are closer to certification and could be the first to think of for upscaling, but it needs to be linked to a market demand (van Kantén, pers. comm.). Support for a training programme on Reduced Impact Logging and other best management practices (conform the Code of Practice) would be welcome (Crabbe, pers. comm.).

Develop market demand

Market demand is the primary driver to pursue certification, but in most cases there is no willingness to pay for FSC. If the area under responsible forest management certification is to increase, there needs to be a market that asks for it (Tese, pers. comm.). With 90% of timber export from Suriname going to Asia, Europe has a limited influence. On the short-term, match-making between buyers that demand certified timber and Surinamese suppliers could be an opportunity; on the long-term, development of a demand for certified timber in Asia could be a potential strategy.

Simplify certification

One suggestion received is to explain FSC certification in a very simple (“Jip en Janneke”) manner (Dennebos, pers. comm.), although this may help to some extent it is not likely to be the main solution. It is generally acknowledged that consultants are needed to support forest managers to prepare the organisation for certification; all FSC certified companies in Suriname have been supported by consultants (and received funds to cover the costs for this technical support). Further, once achieved it is a challenge to maintain the quality system; with all the planning, monitoring and evaluation involved, a (semi-)scientific background is needed to understand this (Slesazek, pers. comm.).

REDD+ and payments for ecosystem services

In the national REDD+ strategy, SFM is mentioned as having a high potential for further promotion with in the future fines for those companies that do not comply with good practices and provoke forest degradation (van Kantén, pers. comm.). Van der Hout (pers. comm.) is a bit reserved and states that for companies REDD+ would likely not be so attractive, as they would probably see restrictions with increased government controls and monitoring, and no additional income.

To improve the business case for FSC certification (or avoid killing the business case), payments for ecosystem services could provide additional revenue streams to forest managers that protect ecosystem services through their responsible forest managing practices. If stringent requirements for the protection of IFLs are going to be incorporated in the FSC standard, then a compensation mechanism needs to be designed for the protection of these forest to maintain a viable business case for those operating in IFL areas. It is important that in the discussions and in the design the government is engaged and on board, because the national policy is to push for higher timber production and a forest manager risks losing its concession rights when production is not sufficiently high (Dennebos, pers. comm.).

Develop a national certification standard

There is no nationally-adapted FSC standard in Suriname, nor a national forest management standard endorsed by PEFC. With the fear of IFL requirements making FSC certification impossible, PEFC certification is seen as a potential option (Dennebos, pers. comm.). This would entail the development of a national forest management standard conform the standard development process requirements. This is not likely an opportunity on the short-term.

7.3.2 Company perspective

Development of the timber processing sector

The majority of the timber that is exported leaves Suriname as roundwood. In Asia, the primary and secondary processing takes place. This means, provided that the Asian markets would be interested in sawnwood, there is an enormous opportunity for Suriname to invest in further developing the timber processing sector to capture more value adding in-country, create employment and economic growth (van Benthem, pers. comm.; Crabbe, pers. comm.; Tese, pers. comm.). Van Kantén (pers. comm.) specifies that further development of the processing industry is needed based on the export market needs. The government of Suriname is pushing for this; according to Dennebos (pers. comm.) there is talk of enforcing an export ban on a couple of timber species to create employment. He adds that this would then mean that people will need to be attracted to immigrate to Suriname to keep the sawmills going, because the Surinamese themselves would not be interested in those jobs.

For the support of a processing industry, there is a need to build up trade-specific skills and know-how (Dennebos, pers. comm.; Tese, pers. comm.). A couple of suggestions received for what could be done from the Netherlands

include the creation of a fund to co-finance the salary of an expert from Europe to set things up, tax benefits for an expert to build up the timber processing sector, and the potential to engage experienced volunteers that would like to be involved in such projects after their retirement (Dennebos, pers. comm.).

At the community forest level, a similar opportunity exists. Currently, logging contractors are commonly hired for timber exploitation. They then pay timber royalties to the community and subsequent processing and value-adding takes place elsewhere. This means that those at the beginning of the chain do not earn much (Pel, pers. comm.).

Professionalisation

There is a need for professionalisation of the forest and timber sector to create an enabling environment for doing business and create a good climate for investing (van Benthem, pers. comm.; Tese, pers. comm.). Tese (pers. comm.) sees an enormous potential, comparing Suriname with Brazil that is one of the main timber exporters to Europe and regarded as a reliable and professional business partner with knowledge and know-how. As Suriname and Brazil are neighbouring countries, timber species are very similar; the difference in the success of marketing their timber is thus caused by other factors. He proposes that European market players/ clients invest time and resources to create their “ideal dancing partner”.

7.3.3 Community perspective

Join forces to reach scale

To address the issue of scale, an option would be to aggregate to reach scale. The possibility to pursue group certification may be interesting, especially for community forests and HKVs (van der Hout, pers. comm.). There are currently initiatives for the first project of community forest certification (van Kantén, pers. Comm.; Pel, pers. comm.). Joining forces may also be an opportunity for larger companies to ensure they can deliver on their promises and are able to ensure their clients with consistent timber supplies of certain volumes. The FSC certified companies already have the intention collaborate in this way (van Kantén, pers. comm.).

7.3.4 Government perspective

New control system

The SBB is currently in a trajectory to update and adapt its entire forest control system. The current system is 20 years old and does not fit well with today’s higher production volumes. The intention is to have an efficient control system making use of technology (currently everything is done on paper). This should avoid long waiting lines for timber controls and perhaps favour those that are certified for responsible forest management. Lots of internal trainings will be required to ensure the proper implementation and use of this new system and the SBB welcomes all support to roll this out (Crabbe, pers. comm.).

Procedure concession overlap

Work is ongoing to develop a procedure to address the issue of overlapping forest and mining concessions (Crabbe, pers. comm.).

8.

Discussion



This chapter discusses the similarities and differences of issues (bottlenecks and opportunities) across the five focus countries that were part of this study.

8.1 Forest management and certification

There are similarities and differences in the way the forestry sector is organised across the five countries and the uptake of certification, depending amongst others on the extent of the forest resources, population density and related development, pressures from other land uses and historic governance regimes.

Forest resources characteristics

Among the countries included in the study, Suriname is the most forested with ~94% of the land area forested of which over 90% covered with primary forest. In the other four countries around 40-50% of the total land area consist of forest land with varying levels of intactness and degradation. Half of Indonesia's forest resources consist

of primary forest, the rest is largely secondary natural forest. For Cameroon, Ghana and Myanmar almost 90% of their forests is classified as secondary forests.

In the tropics, a selective harvesting system is practiced for logging in natural forests. This means that a limited number of trees are felled, whereas the rest of the forest can regenerate until the next logging cycle. Typically, harvesting intensity is 1-2 trees per hectare for Central Africa (Gourlet-Fleury et al., 2013), around 3-4 trees per ha for Suriname (van Kantén, pers. comm.), and more than 8 trees per ha for primary forests in Indonesia (Sist et al., 1999). The harvested volume depends amongst others on the degree of tree species diversity, the stocking density of commercial tree species and the forest terrain conditions that determine accessibility of high value tree species (topography, water etc.). Asian tropical forests are typically less heterogeneous than African forests and Suriname's forests are characterised by a particularly high biodiversity. The stocking density is related to whether logging takes place in a primary forest or in a logged-over forest on its second or more felling rotation.

Countries and regions that have seen a reduction of forest resources due to past deforestation and forest degradation (notably Ghana, but also parts of Indonesia and Myanmar) are focusing their efforts on forest restoration and forest plantation establishment, often using either high value tropical hardwoods such as teak or fast-growing species to feed the pulp and paper industry. In Indonesia, Cameroon, Ghana and Myanmar, 0-5% of the forest resources are forest plantations (based on data from the country reports prepared for the global forest resources assessment 2015) with increasing trends being observed.

Roles of government, private sector and communities

In all countries the large majority of natural forests are owned by the State, except for Ghana where the land is owned by the traditional authorities held in trust for them by the State. The main actors – the government, the private sector and communities – each have a different role in forest management. The government is the regulator and issues user rights for forest resources and controls whether forest users respect the applicable rules and conditions. The government also manages protection forest (national parks, etc.). For production forests, typically timber concession rights are issued to forestry companies (mostly private sector, some State-owned companies in Asia) for a fixed number of years, often with the possibility for renewal of the lease. The government may be involved as a co-manager of the forest sharing forest management responsibilities with the concession holder (like in Suriname and Ghana) or it may have a less hands-on role (e.g. in Cameroon).

The forest area under community management is relatively low in the five focus countries, 0-4%. However, increasing trends are observed with efforts to expand the area of community forests in Indonesia, Myanmar and Cameroon. In Suriname the question is not to expand the area under community management, but to acknowledge land rights of indigenous peoples and maroons who demand land ownership – not just user rights that (theoretically) can be withdrawn. In addition to the growing importance in area, the role of community forests is changing as well. Traditionally, the focus of community forests has been primarily on subsistence use (collection of fuelwood, medicinal plants, etc.) and small-scale commercial activity to support forest-dependent livelihoods. Nowadays, there is an increasing focus on commercial activity. In Ghana, communities are engaged in forest plantation establishment.

Forest certification

Among the five countries included in this study, forest management certification uptake is highest in Indonesia with 3.2 million ha of FSC certified (dd. 6 February 2018 (FSC, 2018a)) and 3.8 million ha IFCC (PEFC) certified (dd. 23 January 2018 (IFCC, 2018a)) and this number seems to be growing. With the first FSC certificate issued in 2001 (Ruslandi et al., 2014), the country has a long history of experience with forest management certification. In recent years, legality certification (SVLK) has become mandatory, so forest managers are already aware of certification as a tool. The presence of support programme The Borneo Initiative has helped to create incentives for natural forest managers to engage in the process and achieve FSC certification. In Cameroon and Suriname, the forest area under FSC certification has dropped tremendously over the last year. In Suriname the 2 FSC certificates (out of total of 4) covering the largest forest area have been suspended in the beginning of 2018 leading to a spectacular reduction from 363,000 ha to 46,000 ha. In Cameroon the area under FSC/CoC certification decreased from 1.13 million ha in November 2017 to 0.41 million ha in March 2018. At the same time, legality certification under OLB (*Origine de Légalité de Bois*) is popular over 3 million ha of forests covered under this

scheme. In Ghana, the main forest companies are maintaining their FSC Controlled Wood certification status, whereas full FSC certification has been obtained by two forest plantation companies. At the moment, there are no forest management certification schemes active in Myanmar.

8.2 Key bottlenecks

There are a number of bottlenecks that were mentioned for multiple countries, whereas others were very country-specific. In this section, only the key bottlenecks are discussed some of which are related to sustainable forest management and the forestry business in general (8.2.1), others directly to responsible forest management certification (8.2.2).

8.2.1 Bottlenecks related to forest management

Challenging operational context

As in many other developing countries in the tropics, the challenging operational context or issues linked to this were mentioned as a bottleneck in all five focus countries of this study. Difficulties mentioned include overlapping land use rights and tenure insecurity (mining, agricultural expansion), corruption (all five focus countries have CPI scores below 50 (Transparency International, 2018b)), illegal logging and legal conversion timber (unfair competition), a lack of capacity and resources within the government and a lack of government support for sustainable forest management.

Issues timber processing industry

Many certified forest companies are vertically integrated which means the mills for first processing are part of the same group (in some countries this is even a requirement for obtaining forest concession lease rights). For those companies, the business case is looked at on the level of the entire group. For that reason, a number of bottlenecks have been identified that are related to the timber processing industry in the focus countries. In all five countries, old machinery and low recovery rates (~35%) have been mentioned as a bottleneck leading to high waste production and reduced quality of timber. The distance between the forest source and the processing facilities and associated high transportation costs have been mentioned in Suriname (where sawmills are installed in cities for infrastructure and personnel reasons), Ghana and Indonesia (where production forest has been pushed inland and the majority of sawnwood and plywood production is taking place on Java island). High production costs are mentioned as an issue in Ghana (due to high energy costs) and Indonesia (because the core of plywood is also made out of high value tropical hardwood). A final bottleneck mentioned for Indonesia (both for communities and enterprises) and Suriname in relation to the timber processing industry is the mismatch between timber volumes produced and volumes demanded which puts forest managers in a disadvantageous negotiation position.

Country-specific issues

On top of these shared difficulties, for every country, specific challenges were mentioned. For Cameroon these were the conflict situation in the west of the country, congestion at the port of Douala and delays in return of VAT (resulting in constraints in financial flow and liquidity problems) plus a bad image of the forestry sector in the Congo Basin region (for which FSC offered no protection).

In Ghana, the shared forest management responsibility between the government and the private sector is an important reason why there is no 'full FM' certification for natural forests. Other Ghana-specific bottlenecks mentioned are the overcapacity of the processing industry (leads to overharvesting), that currently installed processing facilities are not designed to process smaller diameter logs from plantations, and the political interference in the government's forestry commission.

For Indonesia, a variety of country-specific bottlenecks have been identified. Issues directly related to sustainable forest management are: the forested 'free land' is under pressure from conversion into other land-uses, the allocated timber concessions are not conflict-free and the MHD is decreasing. From a governance perspective, challenges reported are the fast-changing regulatory context, the frequent changes in State forest officer positions and the current shift of responsibilities from the District level to the Provincial level causing a power vacuum. A final bottleneck is the log export ban which is regarded as a cause of artificially low log prices on the domestic market, negatively affecting the business case for forest managers that do not have their own processing facilities.

In Myanmar there are conflict areas where the government has no control. Land-use rights are not recognised under the law which results in conflicts at allocated agricultural or forestry concessions. Specific forest management related challenges include overharvesting and illegal trade, traceability, the monopoly of MTE and the difficulty for sawmills to access logs.

Currently, there are no provisions in Suriname's Constitution for tribal rights of land tenure, yet indigenous (Amerindians) and maroon people do claim such land rights. Regulations on sustainable forest management have not been institutionalised and are only partly implemented with especially unsustainable harvesting practices in smaller concessions. Other identified bottlenecks are: access to finance, staff capacity and recruitment, an underdeveloped timber processing industry (little capture of value added through processing), and professionalism of Suriname business partners (mismatch in the way of doing business between European and Surinamese business partners).

Business case for sustainable selective logging in tropical forests?

It can be questioned whether there is a business case for sustainable selective logging in tropical rainforests and whether this is going to be the model of the future. Forests become economically poorer as soon as the most valuable species are harvested. Even though yield allocations may be sustainable and calculated based on a minimum harvestable diameter, in subsequent rotations there will no longer be the old growth as found in primary forest during the first logging cycle. It remains to be seen whether it is still financially lucrative to log in the same forest for a second, third or even fourth round. In Ivory coast for example, all African mahoganies (commercially the most interesting species) were gone at some point; in Belize there is intensive silvicultural management to keep mahoganies, but there are high costs involved in this (van der Hout, pers. comm.).

In central Africa, logging is highly selective and the majority of the forest companies are logging in secondary forest. Numerous large companies have changed ownership over the last decade with vendors mentioning low profitability as a reason to sell their assets (Karsenty and Vermeulen, 2016). This points to the same argument: if commercial tree species are not maintained, the financial sustainability of forest management is questionable. If commercial tree species were to be maintained – which is possible from an environmental perspective – this would mean that a lower volume of these commercial tree species can be harvested per logging cycle (van der Hout, pers. comm.). A lower harvestable volume also means a lower profit, unless volume prices increase with declining supply. In central Africa, scarcity of commercially preferred tree species has not led to an increase in the prices paid for these valuable timber species; instead, they were being replaced by alternative timber species from temperate forests and by alternative materials (Karsenty and Vermeulen, 2016). This means forest companies in the tropics would be out of business even quicker and it remains to be seen what would happen to the forest once it is taken out of production.

Forest plantations

Lack of funding for the establishment and management of forest plantations has been identified as a bottleneck in Myanmar (no favourable climate for private investments in tree plantations) and in Ghana. In Indonesia (for smallholders) and in Ghana, a lack of management capacity has been identified as a key bottleneck for forest plantations; stem quality and future revenues would improve from proper plantation management. Finally, destruction of planted areas by cattle and wildfire has been reported as an issue in Ghana.

8.2.2 Bottlenecks related to certification

Insufficient market demand

Certification, being a voluntary market tool, is most interesting for those who are linked to a market that asks for it and/or rewards responsibly produced forest products. Globally, it is mainly in EU markets that a demand exists for FSC and PEFC certified timber. Changing market dynamics and institutional landscapes have resulted in a decreased global demand for timber that is certified according to a responsible forest management scheme.

First, the importance of the EU market for tropical timber producers has been decreasing in recent years. Nowadays, the large majority of tropical timber is destined to Asia, with China as the number one importer of tropical timber globally. Further, regional markets are becoming of greater importance. In Asian and regional markets, a demand for legally sourced or responsibly produced timber products is low to virtually non-existent.

Second, with the implementation of the EUTR, legality is sufficient and has become the new norm. Now that most countries are not yet issuing FLEGT licenses, responsible forest management certification is still used as part of an importer's due diligence system. It remains to be seen whether in the future, when imported timber comes with FLEGT licenses as proof of legality, there will still be a demand for FSC and PEFC certified timber when this is no longer needed as a risk mitigation measure. Additionally, there is a concern that FLEGT licensed timber can become a green lane for importers, even if timber is sourced from other countries. In that way, FLEGT would have a negative effect on responsible forest management certification as there is no green lane for certified timber to comply with EUTR requirements (Nijman, pers. comm.).

Finally, it is mainly large-scale, vertically integrated forest companies with a link to the EU export market that have the forests under their management certified. For those without a market link to the EU (smallholders and communities, those producing for national and regional markets), there is no demand and no incentive to pursue voluntary certification.

Unclear business case

The costs of obtaining and maintaining responsible forest management certification in the tropics are significant. In the pre-certification stage, the largest share of the costs are linked to 1) revisions of management plan and the execution of necessary studies (ESIA, HCV); 2) the pre-audit and initial audit; and 3) the provision of safety equipment and training to staff. Foregone revenues from a reduced AAC is another important cost of certification. During the maintenance stage, environmental monitoring and management represents the largest share of the certification costs followed by benefits to workers (WWF, 2015).

Benefits from certification include a (potential) price premium for certified timber (although highly variable per market segment), an increase in operational efficiency and in some countries fiscal and legal financial benefits. Benefits that are harder to quantify in financial terms include improved market access, stakeholder relations, government incentives, and access to finance and technical support.

Although a clear benefit, once operational efficiency has been achieved it can be maintained within the organisation without continuing certification (Dennebos, pers. comm.). It is common practice that when no price premium is paid, sustainably produced timber is sold without a claim. When supply is higher than demand this means that the certification costs would need to be offset by that part of the timber volume that is sold as certified. This makes it hard to reach a business case for certification. Both costs and benefits are highly dependent on the specific context (ecological, social, institutional) of the forest management organisation and the level of sustainability when entering the certification process. For that reason, the existence of a business case can be best assessed on a case-by-case basis.

It is acknowledged that price premiums are important to incentivize voluntary responsible forest management certification. For the future, it is unclear how markets would respond and what would happen to the price premium in case sustainable forest management and certified forest products would become more mainstream. Possibly, the competitive advantages experienced by first adopters would diminish; alternatively, markets would adapt and prices would reflect the costs of responsible forest management instead of forest exploitation.

Difficulties with certification

Difficulties have been reported with the FSC forest management standard, increased visibility and with certification as a tool.

Difficult requirements

Interviewees mention the complexity of the FSC certification scheme as a bottleneck with continuous updates resulting in increased difficulty to comply with the standard. Especially the recently added requirements on intact forest landscapes make managers of natural forests in Suriname and in the Congo Basin reluctant to pursue FSC certification, as they are afraid the increased harvesting restrictions will put them out of business. In Indonesia IFLs were not mentioned as a bottleneck.

Increased visibility

Certified companies are more closely monitored by global organisations than companies who decide not to put themselves ‘out there’. In Ghana, not wanting to be put in the spotlight has been mentioned as one of the reasons why forest companies do not want to move towards full forest management certification. For Cameroon a difficulty mentioned is that NGOs still remain critical about forest companies’ practices and that FSC certification does not provide protection.

Certification as a tool

In Asia, and perhaps elsewhere in the global south, certification is seen as a ‘ticking boxes’ exercise to overcome EU trade barriers (Laity, pers. comm.) or as a tool for Europeans to take advantage of their local resources (Sawasdivorn and Yasui, pers. comm.), thereby undermining national sovereignty.

The current certification schemes and systems do not fit well with some national or local contexts and production systems. For example, smallholder agroforestry systems with trees on farms are common in Asia, but – until recently⁴ – could not be covered under the existing certification schemes (Laity, pers. comm.). Because of the costs involved, a certain scale of operation is required before certification becomes a serious option (for it to break-even or even become profitable). This means that it is hard for smallholders and communities to achieve and maintain certification. Initiatives taken thus far with group certification and SLIMF⁵ standards have only partly resolved this problem.

Since the global trend is towards more forest being managed by communities and so small producers would have a more significant role in the future supply of forest products, it would make sense for certification systems to work for them.

Limited certification promoters

Interviewees for multiple countries (Ghana, Indonesia, Myanmar) mentioned the lack of or limited presence of certification organisations and/ or promoters in the country as a bottleneck for its further upscaling.

8.3 Key opportunities

8.3.1 Opportunities related to forest management

Legality as a solid foundation

To what extent business as usual can be considered sustainable forest management depends on what is required by law and to what extent law enforcement is successful in practice. All countries but Suriname are engaged in a FLEGT-VPA process to improve forest and timber legality. Indonesia was the first country to complete the process and has been issuing FLEGT licenses since November 2017. Ghana is expected to be the world’s second country to finalise its timber legality assurance system and have it approved by the EU in 2018. Myanmar has engaged more recently and is currently in the preparation phase. Progress for Cameroon is unclear with the process currently halted.

Through amongst others legal reforms, the creation of stakeholder discussion platforms and increased transparency, FLEGT processes create a good basis and an enabling environment for promoting sustainable forest management (Cobbinah, pers. comm.; Colonna, pers. comm.). Without a certain level of forest governance, it is hard for voluntary forest management certification schemes to work well (Sawasdivorn and Yasui, pers. comm.).

In Suriname, the national forest law and regulations are considered to provide a good foundation for sustainable forest management and certification (van der Hout, pers. comm.; de Wolf, pers. comm.). Furthermore, compared to other countries in the tropics enforcement of the forest law is also quite good (van Benthem, pers. comm.).

4 PEFC has recently launched its new international sustainable forest management benchmark (meta standard that all endorsed national schemes must comply with) which includes provisions for the certification for trees outside forests, thereby making it accessible for agroforestry systems and trees planted on farms (PEFC, 2018c).

5 Small and Low Intensity Managed Forests; certain criteria do not apply for SLIMF forest managers

PwC (2012) report that for the average forest company in Cameroon nearly 60% (with a range of 50-90%) of the costs of FSC certification were related to legal compliance, for Indonesia a figure of 68% (with a range from 50-80%) is reported. If the forestry sector in a country is brought to a level of being in full compliance with applicable laws and associated regulations, and legality becomes the new norm, this will reduce the gap between business as usual and responsible forest management. In this way, the FLEGT processes may be an opportunity for responsible forest management certification (Colonna, pers. comm.), just like legality certification can make it easier to take the next step (van Eldik, pers. comm.). On the other hand, it cannot be assumed that forest managers will voluntarily go beyond legal requirements, especially if there are no associated (financial) benefits for them that come along with such additional efforts and investments (Wanders, pers. comm.).

To incentivize forest managers to go beyond legal compliance, various ways are explored for synergies between FLEGT and responsible forest management. In Cameroon, FSC certification is considered as FLEGT compliant (MINFOF, 2016). At the same, however, the less demanding OLB certification has gotten the same FLEGT compliant status (MINFOF, 2016), so can be questioned whether this will be effective to promote the pursuit of FSC certification in Cameroon. For Indonesia, Ruslandi et al. (2014) suggest that SVLK and PHPL audits could be combined with audits for responsible forest management to reduce costs and increase efficiency. This could work well if the audit team assessing compliance with the legality scheme is the same as the auditors assessing compliance with the responsible forest management standard. Certification bodies are trying to work towards this (TBI, 2017b).

A different way of strengthening sustainable forest management is not to try and achieve this through a voluntary certification system, but to revise legal frameworks to include more strict and encompassing requirements on responsible and sustainable forest management (Wanders, pers. comm.). With legality becoming the new norm through the EUTR and similar market entry requirements on timber elsewhere in the world (US Lacey Act, Japanese Clean Wood Act, Australian Illegal Logging Prohibition Act), it could be an alternative to – instead of looking at voluntary certification – raise the level of sustainability and responsible practice in the forest management sector reflected in the legal framework.

Improve the business case for SFM

There are various ways in which the profitability of sustainable forest management can be increased. Below, six options to improve the business case for sustainable forest management are described. It is likely that there is no silver bullet solution, but that a combination of the below options will need to be employed.

Promote LKTS

First, in those countries where logging is highly selective and the stocking of commercial tree species is low (among the five focus countries: Suriname and Cameroon), lesser known (or lesser used) timber species can be promoted (van Benthem, pers. comm.; van Kantén, pers. comm.; Lorent, pers. comm.).

Mainstream RIL

Second, the use of reduced impact logging practices could be mainstreamed (as mentioned by interviewees for Suriname and Indonesia), as this is not only beneficial to the environment but also financially attractive because of improved operational efficiency. This can be considered an important step towards certification. It is likely that because of initial costs involved in changing harvesting practices combined with recurrent training costs (for new staff and to refresh knowledge and skills), this is currently not widely adopted. A support programme could probably easily convince forest managers to adopt reduced impact logging techniques.

Financial incentives

Third, financial incentives could be given for the production of sustainably produced timber, either through demanding/promoting that higher prices are being paid for certified timber in the market or through favourable taxation (Wanders, pers. comm.) or fee reductions by the national government in timber supply (production) countries (like in Peru - ISEAL, 2018). Another option that could be looked into is whether favourable taxation by governments in timber demand countries would be possible (indirectly leading to a willingness to pay more for sustainably produced timber).

Increased processing efficiency

Fourth, with current recovery rates estimated to be around 35% there is a large potential for sawmill efficiency gains and increased waste recovery (Asomaning, pers. comm.; Lorent, pers. comm.). This should lead to more efficient use of the harvested tree, thereby improving the business case. Investments in new machinery – potentially including new production lines – would be required as well as training of personnel. New machinery and well-trained staff in sawmills will also improve the quality of the timber products which could improve the business case (access to EU markets, higher price for higher quality).

Integrate NTFPs

Fifth, apart from timber, the business case of forest management could be improved by expanding the range of forest products harvested and sold. Beyond timber, non-timber forest products could be commercialised (as suggested by interviewees for Indonesia – Prabowo, pers. comm.; Sarjito, pers. comm.) or responsible (eco)tourism enterprises could operate in forest areas where no active harvesting is taking place.

Karsenty and Vermeulen (2016) propose such an idea for central Africa that they refer to as “Concessions 2.0”. Key elements of Concessions 2.0 are the mapping and recognition of customary land use rights of different local communities, timber revenue sharing based on the mapped customary rights areas, commercial harvesting of non-timber forest products by land use right holders in association with the concessionaire, and inclusive governance for overlapping land use rights. Through the establishment of a close collaboration in the form of joint ventures between the concession holder and the community, commercial NTFP harvesting can improve the business case for sustainable forest management (Karsenty and Vermeulen, 2016; Prabowo, pers. comm.). Institutional changes may be required to make such combined timber and NTFP harvesting possible (Karsenty and Vermeulen, 2016; Ruslandi et al., 2014). For this model to work well, Karsenty and Vermeulen (2016) see numerous hurdles that need to be overcome, including the difficulty to build mutual trust between concession holders and local communities.

PES

Finally, besides broadening the scope of business activities into NTFPs and recreational services, another potential income stream is payments from ecosystem services (PES). Well-managed forests provide a range of ecosystem services to humanity, including carbon sequestration and storage, biodiversity conservation and watershed services. It is in global, regional and/or local society’s interest that tropical forests are managed well to preserve the various valuable ecosystem services they provide. All focus countries, except for Myanmar, are participating in REDD+ and benefitting from support by the Forest Carbon Partnership Facility through the Readiness Fund to prepare for future benefitting from compensation from reduced deforestation and forest degradation. Further, Cameroon, Ghana and Indonesia have project proposals in the pipeline for the Carbon Fund. FSC International has launched the Ecosystem Services Procedure in May 2018 which is a voluntary tool aimed to facilitate access to ecosystem services markets for managers of FSC certified forests.

Forest plantations

Besides selective logging in tropical forests, forest plantations will play a more important role in timber supply in the future. WWF’s Living Forests Model projects a significant increase in timber demand over the coming decades, which can be met by expanding the share of the world’s natural forests that is managed for production combined with establishing new tree plantations (WWF, 2012). Global reforestation commitments may be seen as an opportunity where (impact) investors could ask for sustainable establishment and management of these forest plantation and require certification as a condition for funding.

8.3.2 Opportunities and solutions related to certification

Increase market demand

Economic incentives are the most important motivation for forest managers to pursue responsible forest management certification. This means market demand needs to grow and better price premiums need to be offered (Stam, pers. comm.). Various ideas were expressed to increase market demand, some of which may fit better with the work on communication by parallel working group 3, also established under the Covenant ‘Promoting Sustainable Forest Management’.

Creating final consumer demand

FSC and PEFC are not globally known and recognised by consumers as a brand they know so that it can grow mainstream. PEFC is still quite small as a brand; the scheme is not yet global. FSC exists globally and has developed the market in certain countries and market sectors. In order to create final consumer demand, efforts to increase brand recognition would be welcome (Sournia, pers. comm.).

Develop new market sectors

There are certain market segments where a demand exists for certified forest products (for example, central African timber that is used for waterworks purposes (Lorent et al., 2018)), other market segments can be developed (Sournia, pers. comm.).

Strict public procurement policies

Governments should be very strict with the implementation of their public procurement; instead of stating it as a preference, it should systematically be FSC and/or PEFC (Sournia, pers. comm.). Further, increased monitoring efforts could be a way to hold governments accountable for the implementation of their policies. For example, it could be considered to establish a group of NGOs that is going to play a watchdog role (Stam, pers. comm.). A concrete project proposed by Stam (pers. comm.) is to assess a number (20) of public procurement projects as case studies.

Lobby major companies

Another action that is part of developing market demand is lobbying big companies (like Unilever, Procter and Gamble) to commit to sustainable sourcing policies and ensure its implementation. Besides companies based in the Netherlands, multinationals (with headquarters in the Netherlands) could be asked to make their procurement policies applicable worldwide, so that they prescribe FSC/PEFC everywhere resulting in a global impact (Sournia, pers. comm.).

Lobby within the EU

Other EU countries, especially in Western Europe, could be engaged/ lobbied to following the example of the Netherlands also demand strict public procurement policies and monitor its implementation (Sournia, pers. comm.).

Target China/ Asia

Since the large majority of tropical timber is exported to Asia with China being the number one importer, increasing the market demand in China could have a major impact on sustainable forest management and certification. There are some efforts on this with EFI engaged in an EU-China dialogue around forest governance in which the EU and China work together to combat illegal logging and associated trade globally through the Bilateral Coordination Mechanism on Forest Law Enforcement and Governance (Colonna, pers. comm.). IDH has one project on this (Stam, pers. comm.) and WWF-GFTN has been working on this for some years.

PEFC certification schemes

With many standards under development, PEFC is expanding in the tropics. In Indonesia, an area of 3.8 million ha is currently certified under the PEFC endorsed IFCC scheme and the IFCC community forest standard is underway and expected to become operational later in 2018. The PAFC Cameroon standard is expected to become available end of 2018, the Ghanaian PEFC standard is ready for assessment and recently a project has started in Myanmar.

There is optimism about the potential for uptake of the new PEFC standards (Laity, pers. comm.). Although the PEFC certification scheme may be favoured over the FSC scheme by forest managers because of some aspects (for example: the absence of requirements around intact forest landscapes that are difficult to comply with; the pride for a national standard; and no FSC 'tiredness'), it will likely not be the key solution as other bottlenecks will remain (notably high costs – assuming indirect and direct costs between FSC and PEFC certification will not differ immensely but be in the same order of magnitude) and it is unclear how PEFC tropical timber will position in the market. It remains to be seen to what extent the availability of PEFC standards will result in a growth of certified forest area over the coming years. For Cameroon, it would also be interesting to see whether the anticipated double certification (FSC + PEFC) would improve the business case for forest managers.

Reduce costs and complexity

Well-designed support programmes can be an incentive to pursue responsible forest management certification by reducing the costs in the pre-certification stage. In Indonesia, The Borneo Initiative has been active for 10 years and has supported FSC certification of 2.8 million ha of natural tropical forest. In Cameroon (and the other Congo Basin countries), PPECF has just started a second phase of its programme to support concession holders towards adopting more sustainable forest management practices.

Another option to reduce costs is to reduce the tasks of the forest manager. The largest share of the costs for maintaining certification is environmental monitoring and management. When monitoring tasks could be carried out by a monitoring organisation this would reduce the complexity of certification for the forest managers as well as the costs (Wanders, pers. comm.).

Inclusive certification systems

Current certification systems are not very well suited for small producers and community forests. Yet, the global trend is towards more forest being managed by smallholders and communities which means they will become increasingly important for future timber supply. If certain markets will continue to demand responsible forest management certification, it would make sense for certification systems to work well for small producers and community forests, so that they can become part of the system.

Current solutions

Both FSC and PEFC have provisions for group certification as an option for smallholders to aggregate and reach scale, so that third party certification becomes more affordable. Further, there are separate standards with less stringent requirements available for community forests and/or smallholders. PEFC has recently launched its new international sustainable forest management benchmark (meta standard that all endorsed national schemes must comply with) which includes provisions for the certification for trees outside forests, thereby making it accessible for agroforestry systems and trees planted on farms (PEFC, 2018c).

During this study, two interviewees were included that are first-movers to take the initiative in linking community forests to export markets for commercial production. In Cameroon, Community Forest Group is working with a number of community forests to legally export timber to the Netherlands according to a self-developed due diligence system. In Suriname, there are ideas to test FSC certification of a community forest.

New ideas

UNECE and FAO (2018) mention the upcoming trend of landscape approaches and landscape certification. Laity (pers. comm.) suggests that jurisdictional approaches could be used, so that smallholders and communities can be part of the production system and have access to global markets. As it may not be feasible to have smallholders and communities fully certified, controlled sources could be used as an intermediary step which is more resource efficient and achievable. But then, it is critical that such controlled, low-risk production system is recognised by markets, especially for business to business where certification is used as a risk mitigation measure (Laity, pers. comm.).

In organic agriculture, participatory guarantee systems are used as a cost-effective alternative to third party certification which is better accessible for small producers (IFOAM, 2018). The potential applicability of PGS in the context of community forest management could be worth looking into.

9.

Conclusion and recommendations



This chapter briefly describes the bottlenecks and opportunities for promoting sustainable forest management and for strengthening its business case. Finally, recommendations are formulated on how sustainable forest management can be promoted in the tropics in general and what the most promising actions are in each of the five focus countries with an overall focus on strengthening the business case for forest managers.

9.1 Bottlenecks or barriers to scale up sustainable forest management

Challenging operational context

Forest management organisations in the tropics operate in a challenging environment with weak law enforcement, corruption, a government push for economic development, land tenure and land rights issues, communities living within and in the direct vicinity of the forest and the presence of high conservation values and wildlife within the forest. On top of these general challenges in the tropics, each of the five focus countries had their own country-specific bottlenecks that add complexity and make it harder to reach a business case for sustainable forest management.

In Cameroon and Myanmar, barriers include the conflict situations in (parts of) the country. Other bottlenecks identified in Cameroon are congestion at the port of Douala and delays in return of VAT (affecting the financial liquidity of companies) plus a bad image of the forestry sector in the Congo Basin region. In Myanmar, other bottlenecks include overharvesting and illegal trade, traceability, the monopoly of state-run Myanmar Timber Enterprise and the difficulty for sawmills to access logs. In Indonesia bottlenecks include the fast-changing regulatory context, the log export ban (which is regarded as a cause of artificially low log prices on the domestic market) and a decrease of the minimum harvestable diameter. In Ghana, the shared forest management responsibility between the government and the private sector is an important reason why there is no 'full FM' certification for natural forests. Further, the political interference in the government's forestry commission is considered a challenge. In Ghana and Suriname, a mismatch has been identified between the forest resources base and the timber processing industry. Identified bottlenecks for Suriname include unsustainable harvesting practices in smaller concessions, access to finance, staff capacity and recruitment, and professionalism of Suriname business partners.

Business case for tropical timber production?

The profitability of selective logging as practiced throughout the tropics decreases as forests enter their second or subsequent felling cycle; the old-growth that is found in pristine forests does not grow back within the 25-40 years' rotation length. Further, there typically exists a market demand for only a limited number of timber species whereas forests in certain tropical regions are characterised by high tree biodiversity, notably for Suriname and Cameroon among the five focus countries. This means highly selective logging and low yield volumes per hectare.

If commercial tree species were to be maintained this would mean that a lower volume of these commercial tree species can be harvested per logging cycle (van der Hout, pers. comm.). A lower harvestable volume also means a lower profit, unless volume prices increase with declining supply. In central Africa, scarcity of commercially preferred tree species has not led to an increase in the prices paid for these valuable timber species; instead, they were being replaced by alternative timber species from temperate forests and by alternative materials (Karsenty and Vermeulen, 2016). This means forest companies in the tropics would be out of business even quicker and it remains to be seen what would happen to the forest once there is no longer an economic interest for timber production.

Forest plantations will have a greater role in the future supply of timber. Specific bottlenecks have been identified for plantations. Lack of funding for the establishment and management of forest plantations has been identified as a bottleneck in Myanmar (no favourable climate for private investments in tree plantations) and in Ghana. In Indonesia (for smallholders) and in Ghana, a lack of management capacity has been identified as a key bottleneck for forest plantations; stem quality and future revenues would improve from proper plantation management. Finally, destruction of planted areas by cattle and wildfire has been reported as an issue in Ghana. In addition to the challenges for long-term sustainable timber production, for vertically integrated forest companies the business case and sustainability is further affected by the challenges in the timber processing industry that is characterised by low efficiency with an average estimated recovery rate of around 35%.

Bottlenecks for responsible forest management certification

Conventional logging is often based on forest exploitation instead of forest management. Currently, many forest management organisations in the tropics are not operating in full legal compliance. Those that take a step forward towards legal compliance and responsible forest management certification need to compete in the market place with illegally produced timber and legally produced conversion timber.

Insufficient market demand is identified as a key bottleneck for responsible forest management certification to grow. It is mainly in EU markets that a demand exists for sustainably produced (i.e. certified) timber, yet the importance of the EU market for tropical timber producers has been decreasing in recent years with the large majority of tropical timber destined to Asia. Further, there is a fear that with the acceptance of FLEGT licensed timber, legality will become the new norm on the European timber market. Finally, for those without a market link or market access to the EU (smallholders and communities, those producing for national and regional markets), there is no incentive to pursue voluntary certification.

Further, the business case for responsible forest management certification is unclear. The costs of obtaining and maintaining responsible forest management certification in the tropics are significant. Benefits from certification include a (potential) price premium for certified timber (although highly variable per market segment), an increase in operational efficiency and in some countries fiscal and legal financial benefits. Both costs and benefits are highly dependent on the specific context (ecological, social, institutional) of the forest management organisation and the level of sustainability when entering the certification process.

There are a couple of difficulties experienced with certification. These are: complexity of the certification scheme (especially the new FSC requirements on intact forest landscapes), increased visibility making certified forest managers vulnerable to critiques, and certification being perceived as a ‘ticking boxes’ exercise to overcome EU trade barriers and undermining national sovereignty. Finally, current certification schemes and systems do not fit well with some national or local contexts and production systems. Particularly for smallholders and communities it is difficult to achieve and maintain certification. Since the global trend is towards more forest being managed by communities (and so small producers would have a more significant role in the future supply of forest products), it would make sense for certification systems to work for them.

9.2 Solutions to identified barriers and opportunities to promote and scale up SFM

FLEGT creating a level playing field

All five focus countries but Suriname are engaged in a FLEGT-VPA process to improve forest and timber legality. Indonesia was the first country to complete the process and has been issuing FLEGT licenses since November 2017. Ghana is expected to be the world’s second country to finalise its timber legality assurance system and have it approved by the EU in 2018. Myanmar has engaged more recently and is currently in the preparation phase. Progress for Cameroon is unclear with the process currently halted. The FLEGT-VPA developments are positive in creating a level playing field between timber producers. Once fully implemented, the gap between business-as-usual and sustainable forest management will be decreased: from the new starting point of legal compliance, the costs of responsible forest management certification are significantly lower than from the past (and current) starting point. This does not mean, however, that forest management organisations automatically will step up from legal compliance. There need to be incentives and expected benefits in place to make it worthwhile to invest in sustainable forest management.

Improving the business case for sustainable tropical timber production

There are various ways in which the profitability of sustainable forest management can be increased. It is likely that a combination of options will need to be employed. The promotion of lesser known timber species in the market could increase harvestable volumes per hectare (thereby increasing the profitability of the forest management operation) in countries where logging is highly selective and the stocking of commercial tree species is low.

Reduced impact logging not only has great environmental benefits over conventional logging, but is also known to lead to increased operational planning and efficiency and reduced costs for the forest manager. This means that RIL training could be something that is relatively easy to ‘sell’ to forest management organisations as a first and important step towards sustainable forest management.

Financial incentives could be given for the production of sustainably produced timber, either through paying higher prices for certified timber in the market or through favourable taxation or fee reductions by the national government in timber supply (production) countries.

Increased sawmill efficiency and reduced waste production would further improve the business case for forest managers that have their own sawmills while simultaneously supporting sustainable forest management.

Besides timber production, a forest could also provide space for commercial NTFP collection, processing and trade, and/ or other services such as eco-tourism. Payments for the maintenance of forest ecosystem services could become an additional revenue stream, especially for those who manage their forests in a responsible manner. It

is important that those who bear the costs for responsible management of the forest resources are eligible beneficiaries for PES revenues.

Opportunities for responsible forest management certification

To motivate forest managers to choose for responsible forest management certification, they need to be linked to a market where a demand exists, including a willingness to pay a price premium. Well-designed support programmes can help in covering part of the pre-certification costs. Government incentives (such as a reduction of the annual concession lease) could also work well as a motivation to pursue and maintain sustainable forest management and responsible forest management certification. PEFC certification is growing in the tropics and there is optimism on the uptake of standards that are currently in the final stages of development. To lower the complexity and costs for maintenance of certification, an idea that has been proposed is to have monitoring being taken care of by monitoring organisations that have expertise on the social and/ or environmental aspects of tropical forest management. As the importance of small producers and community managed forests for future timber supply will increase, efforts are needed to find solutions to make certification systems work for them also.

Finally, global initiatives like zero net deforestation and reforestation commitments offer an opportunity for the establishment of responsibly managed forest plantations, when green investors require certification as a funding condition. A favourable enabling environment for investment is needed to grow the area of forest plantations. Once planted, management capacity is needed to grow high quality timber.

9.3 Recommendations for interventions

This section provides recommendations on what type of interventions should be undertaken to strengthen the business case for sustainable forest management for forest managers. The assumption here is that when there is a stronger business case for sustainable forest management, more forest managers will adopt sustainable practices and pursue responsible forest management certification. Given the different contexts in each of the five focus countries in terms of the forest resources, the roles of actors in forest governance and the current level of uptake of certification as a tool for sustainable forest management (see section 8.1), certain interventions will be more applicable and likelier to be successful in some countries compared to other countries.

When actions carried out in the framework of the Covenant are expected to have a potential for upscaling, it is also useful to look at the comparability of a country's context to other tropical forested countries and at global trends in tropical timber production. Finally, certain interventions will require more time for implementation than others.

Promoting sustainable tropical forest management in general

Reduced impact logging is known to bring both environmental benefits and reduce the timber harvesting costs for the forest manager through increased operational efficiency. Supporting RIL training could be a concrete intervention to promote sustainable forest management. This could for example be useful in Suriname for logging contractors that work in by community-managed forests (timber cutting licenses – HKVs).

To strengthen the business case for forest managers, a concrete action that can be taken from the market end is to promote the use of lesser known (or lesser used) timber species. This is especially useful in countries where logging is highly selective and forests are characterised by high tree biodiversity like in Cameroon and Suriname. Besides expanding the number of tree species that can be harvested, the business case for sustainable forest management could be strengthened by creating an additional income stream through revenues from the protection of ecosystem services. It would be interesting to test a model where sustainable timber production would be combined with an additional income stream from the protection of ecosystem services (for example carbon, biodiversity and/ or watershed services), especially if this model has the potential to be copied to other forest managers. The key challenge will be to link ecosystem services markets or buyers to responsibly managed forests and to arrive at an interesting deal for both parties (a significant additional revenue stream for the forest manager as well as interesting benefits offered to the buyer that pays for the protection of ecosystem service(s)).

Growing certification

When the aim is to increase the area of certified forests and the volume of sustainably produced timber on the Dutch market, the short-term best bet would be to look at Indonesia where certification is already well established and has shown a steady growth over recent years. Indonesia already issues FLEGT licenses, so there is a legal basis as a starting point. With the assumption that in the coming years, more countries will start issuing FLEGT licenses, Indonesia could be an interesting country to look at how forest managers can be motivated to go beyond legality and take a step further to sustainable forest management. There, the key will be market demand and financial incentives to make the business case for sustainable forest management. The most promising financial benefits in the Indonesian context would be a fair price for sustainably produced timber (price premium for certified timber) and payments for protecting ecosystem services through responsible forest management.

It is important that the government supports sustainable forest management and responsible forest management certification and the reduction in harvested volume this may entail, so that forest managers are not confronted with conflicting signals. It is suggested that certification organisations enter into a dialogue with the government with the aim to cultivate such support.

For the medium-term, Myanmar could be an interesting country to look at. There is an interest in certification and steps are taken that show progress into this direction. At the same time, the enabling environment makes it quite challenging for certification to work well at the moment. Although a certain basis is needed, in many other tropical countries where things like weak law enforcement, corruption and illegality are an issue, the first certified forest management organisations operated like 'islands of good governance and responsible forest management'. A first mover in Myanmar could point out the difficulties that need to be overcome and could be an example which offers inspiration.

For the long-term, it would be interesting to focus on responsible reforestation. Because of deforestation and a growing timber demand worldwide, the role of forest plantations for timber production will become more important in the future. There is an opportunity for the establishment of responsibly managed forest plantations, when green investors require certification as a funding condition. Among the five focus countries, Ghana is focusing the most on reforestation using various models for the establishment and management of forest plantations. The area of forest plantations is also growing in Myanmar and Indonesia. There is a need to mobilise funding for the establishment and management of forest plantations. On the one hand, a favourable enabling environment for investment is needed in timber production countries. On the other hand, investors may need to adapt their criteria to work for the context and realities of tropical countries. Once planted, management capacity (technical, financial, labour) is needed to grow high quality timber.

Including smallholders and community forest managers

Because of certain fixed costs, certification is generally more suitable for larger forest areas rather than for smallholders and community forests that are often smaller in size. Furthermore, community forest managers and smallholders are often not linked to the export market where a demand exists for sustainably produced timber. Looking at the globally expanding area of forests under community and smallholder management and their growing importance for future timber supply, two things are needed. First, they need to be linked to the export market where a demand exists for sustainably produced timber. Second, certification schemes need to work for them. Of the five focus countries, Ghana has almost no natural forest under community management, although communities are involved in reforestation and management of forest plantations. In Indonesia, Myanmar and Cameroon the area of forest under community management is growing.

In Cameroon, Community Forest Group BV has developed a due diligence system to comply with the EUTR. The organisation has proven that it works for timber export from community managed forests. It could be interesting to upscale this system to other Cameroonian community managed forests, perhaps in the form of a legality standard as well as guidance and support in meeting all requirements.

The Indonesian PEFC (IFCC) standard for smallholders and community forests that will be ready for use end of 2018 could be an opportunity for increasing the area of certified community forests. This would only be effective if

there is a business case for forest managers. This means support to achieve the certification and financial benefits to cover maintenance costs of certification (in the form of a good price for sustainably produced timber and/or other forest products and/or other financial benefits like PES).

An alternative approach would be to accept that certification as it currently functions is not an attractive option for community managed forests, because of a lack of an attractive business case (due to scale). Then an alternative way needs to be found, so that they are not excluded from the timber market which demands certification as proof of sustainably produced timber. It could be worth looking into landscape-level controlled wood certification, so that timber or other forest products can be integrated into the value chain as low risk, coming from controlled sources.

References

- AAE: Asesoramiento Ambiental Estratégico, (2017), "Background information for the Suriname National REDD+ Strategy", November 2017, pp.1-46.
- Africatime.com, (2015), "Aucune entreprise d'exploitation forestière n'est «légale» au Cameroun", August 31 2015: <http://fr.africatime.com/cameroun/articles/aucune-entreprise-dexploitation-forestiere-nest-legale-au-cameroun>, accessed 27 March, 2018.
- ASI, (2012), "ASI Compliance Audits in Congo Basin", by Etienne Kuzong, <http://asi.df-kunde.de/wp-content/uploads/downloads/2012/08/July-2012-Update-ASI-Compliance-Audits-in-Congo-Basin.pdf>.
- Auld, G., Gulbrandsen, L.H., and McDermott, C.L., (2008), "Certification Schemes and the Impacts on Forests and Forestry", *Annual Review of Environment and Resources*, DOI: 10.1146/annurev.enviro.33.013007.103754.
- Bureau Veritas, (2017), "Liste des organismes certifiés OLB Exploitant Forestier", 01-12-2017, Version 4.0: DO 071005A, <http://www.bureauveritas.com/olb>.
- Cameroon and the EU, (2017), "Rapport annuel conjoint 2016 Sur la mise en oeuvre de l'APV FLEGT au Cameroun", pp.1-20.
- cameroononline, (2018), "Dutch wood company Wijma ceases activities in Southwest-Cameroon", August 1 2018: <https://www.cameroononline.org/dutch-wood-company-wijma-ceases-activities-in-southwest-cameroon/>.
- cameroonvoice, (2015), "Un rapport européen épingle les pratiques illégales des sociétés occidentales dans l'exploitation forestière au Cameroun", August 21 2015: <http://www.cameroonvoice.com/news/article-news-19946.html>, accessed 27 March 2018.
- Chen, J., Innis, J.L. and Tikina, A., (2010), "Private cost-benefits of voluntary forest product certification", *International Forestry Review*, 12 (1), 1-12.
- Cocks, Tim, (2018), "Anglophone Cameroon's separatist conflict gets bloodier", Reuters, 1 June 2018: <https://www.reuters.com/article/us-cameroon-separatists/anglophone-camerouns-separatist-conflict-gets-bloodier-idUSKCN11X4RS>.
- Convenant, (2017), "Convenant Bevorderen Duurzaam Bosbeheer", 22 March 2017, pp. 1-23.
- Enters, T., (2017), "Drivers of deforestation and forest degradation in Myanmar", December 2017, MONREC, REDD+ Myanmar and UN REDD Programme, pp.1-32. Online available: http://www.myanmar-redd.org/wp-content/uploads/2017/10/Myanmar-Drivers-Report-final_Eng-Version.pdf.
- EU FLEGT Facility (2017): http://www.euflegt.efi.int/ghana-news/-/asset_publisher/FWJBfN3Zu1f6/content/new-regulations-in-ghana-important-milestone-for-full-vpa-implementation-1.
- EU FLEGT Facility, (2018a): <http://www.euflegt.efi.int/cameroon>, accessed March 27, 2018.
- EU FLEGT Facility, (2018b): <http://euflegt.efi.int/ghana>, accessed May 30, 2018.
- EU FLEGT Facility, (2018c): <http://www.euflegt.efi.int/indonesia>, accessed 10 April 2018.
- FAO, (2014a), Global Forest Resources Assessment 2015 – Country Report Cameroon, Rome, pp.1-104.
- FAO, (2014b), Global Forest Resources Assessment 2015 – Country Report Ghana, Rome, pp.1-91.
- FAO, (2014c), Global Forest Resources Assessment 2015 – Country Report Indonesia, Rome, pp.1-107.
- FAO, (2014d), Global Forest Resources Assessment 2015 – Country Report Myanmar, Rome, pp.1-86.
- FAO, (2014e), Global Forest Resources Assessment 2015 – Country Report Surinam, Rome, pp.1-87.
- FAO, (2016), Global Forest Resource Assessment 2015 – How are the world's forests changing? Second edition. Online available: <http://www.fao.org/3/a-i4793e.pdf>.
- FCPF, (2017), REDD+ annual country progress reporting Suriname, July 2016 – June 2017.
- Forest legality, (2018): <https://forestlegality.org/content/logging-and-export-bans>, accessed 15 May 2018.
- Forest Trends, (2012), "Forest Certification in Myanmar", Information Brief No 3, September 2012, pp.1-4.
- Forestry Commission, (2017a), "Report on Export of wood products September 2017", Forestry Commission TIDD, pp.1-31.
- Forestry Commission, (2017b), "NATIONAL FOREST PLANTATION DEVELOPMENT PROGRAMME – Annual report 2016", Forest Services Division, Forestry Commission, Ministry of Lands and Natural Resources, December 2017, pp.1-16.
- Form International, (2018): <http://www.forminternational.nl/news/form-ghana-restoration-project-secures-major-afdb-funding/>, accessed 8 April 2018.
- FSC, (2012), "FAQ on Congo Basin Standard development process", February 2012: http://pfbc-cbfp.org/docs/research_docs/Facilitation%20canadienne%202011/FSC%20-%20201202%20FAQ%20Congo%20Basin%20

- Std%20FINAL.pdf, accessed 27 March, 2018.
- FSC, (2015), “Responses to concerns about illegal practices of FSC Certificate Holders in Cameroon”, dd. 15 December 2015.
- FSC, (2016), “FSC Briefing – Cameroon Recognizes FSC Forest Management Certification as FLEGT-Compliant: A Welcome Precedent”, April 2016.
- FSC, (2018a), Certificate Search: <https://info.fsc.org/certificate>, last accessed 6 February 2018 (Indonesia) and 30 May (Cameroon, Ghana, Myanmar, Suriname).
- FSC, (2018b): <https://ic.fsc.org/en/news-updates/id/1700>, accessed 8 April 2018.
- Ghana REDD+ Strategy, (2016), *Ghana REDD+ Strategy 2016-2035*, pp.1-102.
- Gourlet-Fleury, S., Mortier, F., Fayolle, A., Baya, F., Ouédraogo, D., Bénédet, F. and Picard, N., (2013), “Tropical forest recovery from logging: a 24 year silvicultural experiment from Central Africa”, *Philosophical Transactions of the Royal Society B: Biological Sciences*. 2013 Sep 5; 368(1625): 20120302. doi: 10.1098/rstb.2012.0302.
- Indonesia and the European Union (2018), “Annual report May 2015 - Dec 2016 – Implementation of the Indonesia-EU FLEGT Voluntary Partnership Agreement”: http://www.euflegt.efi.int/documents/10180/432038/Indonesia_annual_report_2015-16_web_low.pdf/16c4e537-c399-0cde-cbdf-1f5996833a9f, accessed 6 February 2018.
- Indrarto, G. B., Murharjanti, P., Khatarina, J., Pulungan, I., Ivalerina, F., Rahman, J., Prana, M. N., Resosudarmo, I. A. P. and Muharrom, E., (2012), *The Context of REDD+ in Indonesia: Drivers, agents and institutions*. Working Paper 92. CIFOR, Bogor, Indonesia.
- IFCC, (2018a), *IFCC Sustainable Forest Management Certificate Holder*, last updated 23 January 2018.
- IFCC, (2018b): <http://www.ifcc-ksk.org/>, accessed 6 February 2018.
- Ifoam, (2018): <https://www.ifoam.bio/en/organic-policy-guarantee/participatory-guarantee-systems-pgs>, accessed 8 June 2018.
- ISEAL, (2018), “Peru and FSC: Incentivising responsible timber exports”, *Governments and Private Sustainability Standards: an ISEAL case studies series*, February 2018: https://www.standardsimpacts.org/sites/default/files/ISEAL_FactSheet_Peru.pdf.
- ITTO (International Tropical Trade Organization), (2015), “Biennial review and assessment of the world timber situation 2013-2014”, Yokohama, Japan, pp1-34: http://www.itto.int/annual_review/.
- ITTO, (2017), “Biennial review and assessment of the world timber situation 2015-2016”, Yokohama, Japan, pp1-53: http://www.itto.int/annual_review/.
- ITTO, (2018), *Tropical Timber Market Report 16-31 January 2018*.
- IWGIA, (2018a): <https://www.iwgia.org/en/indonesia>, accessed 10 April 2018.
- IWGIA, (2018b): <https://www.iwgia.org/en/myanmar>, accessed 22 May, 2018.
- Jeuneafrique, (2018), “Industrie : Rougier a la gueule de bois”, March 13, 2018: http://www.jeuneafrique.com/mag/540962/economie/industrie-rougier-a-la-gueule-de-bois/?utm_source=Newsletter_JA_Eco&utm_medium=Email&utm_campaign=Newsletter_JA_Eco_13_03_18
- Karsenty, A., (2016), “The contemporary forest concessions in West and Central Africa: chronicle of a foretold decline?”, *FAO Forestry Policy and Institutions Working Paper 34*, Rome 2016, pp.1-70.
- Karsenty A., and Vermeulen, C., (2016), “Toward “Concessions 2.0”: articulating inclusive and exclusive management in production forests in Central Africa”, *International Forestry Review* Vol.18(S1),
- KPMG, (2014), “MVO Sector Risico Analyse - Aandachtspunten voor dialog”, September 2014, Minister of Foreign Affairs and Development Cooperation and Minister of Economic Affairs, pp.1-169.
- Lorent, R., Perthuisot, N., Dassie, E., Midré, M. and Grandjean, J.P., (2018), “PROGRAMME DE PROMOTION DE L’EXPLOITATION CERTIFIÉE DES FORÊTS PHASE II (PPECF II) – 1er rapport semestriel septembre 2017 à mars 2018”, COMIFAC and KfW, version draft de 15 mars 2018.
- MacDicken, K.G., Sola, P., Hall, J.E., Sabogal, C., Tadoum, M. and de Wasseige, C., (2015), “Global progress toward sustainable forest management”, *Forest Ecology and Management*, 352: 47–56.
- MacQueen, D.,(2015), “Community forest business in Myanmar: pathway to peace and prosperity?” IIED, Report of an advisory mission 10-18 December 2015, pp.1-36.
- Mahonghol, D., Ringuet, S., Nkoulou, J., Amougou Ondoua, G. and Chen H.K., (2016), “Les flux et les circuits de commercialisation du bois: le cas du Cameroun”, TRAFFIC edition, Yaoundé, Cameroon and Cambridge, UK.
- May Zun Pho, (2017), “Chronology of Criteria and Indicators for Sustainable Forest Management”, unpublished (PowerPoint presentation) obtained via personal communication with B. Cho.
- MINEPDED – Ministère de l’Environnement, de la Protection de la Nature et Développement Durable, (2017), *Mid-Term Progress Report REPUBLIC OF CAMEROON*, Forest Carbon Partnership Facility (FCPF) Readiness Fund, January 2017.
- Miroforestry, (2018): <http://www.miroforestry.com/sustainability/overview#play>, accessed May 8, 2018.
- MoEF, (2018), “The state of Indonesia’s forests”, Ministry of Environment and Forestry, Republic of Indonesia, Jakarta, July 2018, pp.1-148.

- NEPCo, (2013), *“Myanmar forest sector legality analysis”*, September 2013, pp.1-41.
- Oldenburger, J., Voncken, F., Penninkhof, J. and van Benthem, M., (2016), *“Duurzaam geproduceerd hout op de Nederlandse markt in 2015”*, Probos, November 2016 Wageningen, pp1-66.
- PEFC, (2017), *PEFC Global Statistics: SFM and CoC certification – Data Sep 2017*. <https://www.pefc.org/resources/webinar/747-pefc-global-certification-forest-management-chain-of-custody>.
- PEFC, (2018a): <https://www.pefc.org/news-a-media/general-sfm-news/1873-indonesia-celebrates-its-first-pefc-certified-forests>, accessed 6 February 2018.
- PEFC, (2018b): https://www.pefc.org/find-certified/certified-certificates/advanced-search/?certification_body_notification=CoC&country=ID+%28Indonesia%29&certificate_status=Valid&action=search&searchtype=advanced_search&page=1, accessed 6 February 2018.
- PEFC, (2018c): <https://www.pefc.org/standards-revision/new/2526-going-beyond-forests-pefc-to-open-certification-to-farmers-and-agroforestry-give-your-feedback-now>, accessed 8 June 2018.
- Phyo Zin Mon Naing, (2016), *“5th sub-regional training workshop on timber legality”*, 6-8 December Jakarta, Indonesia, Myanmar Ministry of Natural Resources and Environmental Conservation,
- PwC: Pricewaterhouse Coopers, (2012), *“Mainstreaming sustainability in the tropical timber industry - Phase 1 and 2 Report”*, November 2012, IDH Sustainable Trade Initiative internal report.
- Rainforest Alliance, (2018a), <https://www.rainforest-alliance.org/business/forestry/verification/transparency/vlovlc-summaries-cam>, accessed 4 February 2018.
- Rainforest Alliance, (2018b), <https://www.rainforest-alliance.org/business/forestry/verification/transparency/vlovlc-summaries-gha>, accessed 21 August 2018.
- Rainforest Alliance Network, (2015), *“False assurances – a briefing for international buyers and customs authorities on how Indonesia’s timber legality verification system fails to protect community rights”*, pp.1-16.
- REDD Suriname, (2018): <http://www.surinameredd.org/nl/reddplus-suriname/>, accessed 24 January 2018.
- Riesterpatt, D. and Steinmeyer, A., (2018), *“Report on Field Trip at Myanmar Timber Enterprise Tanintharyi Region, Myeik Extraction Agency”*, unpublished, pp.1-10.
- Romero C, Putz FE, Guariguata MR, Sills EO, Maryudi A and Ruslandi. (2015), eds. *“The context of natural forest management and FSC certification in Indonesia”*. Occasional Paper 126. Bogor, Indonesia: CIFOR.
- Ruslandi, Klassen, A., Romero, A.C., and Putz, F.E., (2014), *“Forest Stewardship Council certification of natural forest management in Indonesia: Required improvements, costs, incentives, and barriers” – Chapter 15 Part II Case Studies in: IUFRO WFSE book Forests under pressure: Local responses to global issues*, pp255-273.
- Ruslandi, (2015), *“Assessment of drivers of self-selection into natural forest management certification”*, chapter 5 in: Romero et al., 2015.
- SBB, (2015), *Surinaamse Bosbouwsector 2014*, Stichting voor Bosbeheer en Bostoezicht, pp.1-46.
- SBB, (2016), *Bosbouwstatistieken – Productie, export en import van hout en houtproducten in 2015*, Stichting voor Bosbeheer en Bostoezicht, pp.1-42.
- SBB, (2017), *Surinaamse Bosbouwsector 2016*, Stichting voor Bosbeheer en Bostoezicht, pp.1-45.
- Sist, P., Sabogal, C. and Byron, Y., (1999), *“Management of secondary and logged-over forests in Indonesia – selected proceedings of an international workshop 17-19 November 1997”*, CIFOR.
- TBI: The Borneo Initiative, (2017a), *“Trade survey year 2016 among Indonesian FSC certified forest concessions and wood processing industries”*, May 2017, pp.1-13.
- TBI: The Borneo Initiative, (2017b), *“technical working paper on the additional costs of FSC-certification relative to mandatory requirements in natural forest concessions in Indonesia”*, July 12, 2017, pp.1-15.
- The Borneo Initiative, (2018a): <https://theborneoinitiative.org/certification-progress/>, accessed 11 May 2018.
- The Borneo Initiative, (2018b): <https://theborneoinitiative.org/about-us/>, accessed 20 May 2018.
- Transparency International, (2018a), *“Corruption Perception Index 2017 - Results brochure”*: www.transparency.org/cpi.
- Transparency International, (2018b), *“Corruption Perception Index 2017 - Global map graphic and results table”*: www.transparency.org/cpi.
- UNECE and FAO, (2018), *“Forest Products, annual market review 2016-2017”*, pp. 1-137.
- VIDS: The Association of Indigenous Village Leaders in Suriname (VIDS), The Association of Saramaka Authorities and The Forest Peoples Programme, (2015), *“A Report on the Situation of Indigenous and Tribal Peoples in Suriname and Comments on Suriname’s 13th - 15th Periodic Reports (CERD/C/SUR/13-15)”*,
- Committee on the Elimination of Racial Discrimination, 87th Session (2015), 14 July 2015.
- Woods, K., (2013), *“Timber Trade Flows and Actors in Myanmar: The Political Economy of Myanmar’s Timber Trade”*, Forest Trends, November 2013, pp.1-18.
- Woods, K., (2015), *“Commercial agriculture expansion in Myanmar: links to deforestation, conversion timber and land conflicts”*, Forest Trends, March 2015, pp.1-56.
- Worldometers, (2018), <http://www.worldometers.info/world-population/>, accessed February 6 (Ghana, Indonesia, Myanmar, Suriname) and March 22 (Cameroon) 2018.

WRI and MINFOF, (2014), "Cameroon's Forest Estate", December 2014: http://www.wri.org/sites/default/files/uploads/CMR_Poster_2014_english.pdf.

WWF, (2012), "WWF Living Forests Report: Chapter 4 Forests And Wood Products", pp.1-39.

WWF: Breukink, G., Levin, J. and Mo, K., (2015), "Profitability and Sustainability in Responsible Forestry – Economic impacts of FSC certification on forest operators", WWF Report.

Personal communication

- Asare, Alexander, Resource Management Support Centre of the Forestry Commission, personal communication, April 3, 2018.
- Asomaning, Glen, Nature and Development Foundation Ghana, personal communication, 28 March 2018.
- Auger-Schwartzberg, Mathieu – Regional Director FSC Congo Basin, personal communication, 24 January 2018.
- Benthem, van Mark, director Probos and coordinator Lesser Known Timber Species initiative in Suriname, personal communication, 12 February 2018.
- Cobbinah, Nana, Proforest West Africa and Rainforest Alliance auditor, personal communication, 6 April 2018.
- Colonna, Thomas, European Forestry Institute Asia Regional Office, personal communication, 12 April 2018.
- Crabbe, Sarah, SBB, personal communication, 14 March 2018.
- Dennebos, Jos, owner of forest company in Suriname, personal communication, 6 March 2018.
- Eldik, van, Tim, ex-director IDH Guiana Shield Programme, personal communication, 30 January 2018.
- Ellenbroek, Wim, Programme director The Borneo Initiative, personal communication, 9 February 2018.
- Franco, Diana, FSC International, personal communication, 5 April 2018.
- Hout, van der Peter, van der Hout Consulting, personal communication, 25 January 2018.
- Kanten, van Rudi, director Tropenbos Suriname, personal communication, 25 February 2018.
- Laity, Richard, PEFC International representative for South East Asia, personal communication, 3 April 2018.
- Lemus, Adolfo, manager Rainforest Alliance certification meso-America, personal communication, 5 February 2018.
- Lorent, Romain, director KfW PPECF Programme, personal communication, 19 March 2018.
- Nketiah, Samuel Kwabena, ex-director Tropenbos Ghana, personal communication, 4 June 2018.
- Pel, John, personal communication, 23 February 2018.
- Prabowo, Hartono, Director FSC Indonesia, personal communication, 3 April 2018.
- Purwanto, Edi, Director Tropenbos Indonesia, personal communication, 27 April 2018.
- Riestenpatt, Dirk and Steinmeyer, Angela, volunteering for WWF Myanmar (regular positions in forestry operations in Germany), personal communication, 4 April 2018.
- Sarjito, Joko, Director WWF Indonesia, personal communication, 10 April 2018.
- Sawasdivorn, Kobrat and Yasui, Shizuka, FSC South East Asia, personal communication, 26 March 2018.
- Slesazeck, Bernd, auditor Control Union, personal communication, 2 March 2018.
- Sournia, Remi, PEFC International, personal communication, 4 March 2018.
- Sprik, Leonard – Community Forest Group B.V., personal communication, 7 February 2018.
- Stam, Nienke, IDH Sustainable Trade Initiative, personal communication, 19 March 2018.
- Tese, Virgil, timber trader Surinam – Netherlands, personal communication, 5 March 2018.
- Wanders, Tieme – ex-director IDH Congo Basin Program 2011-2016 and active consultant in Ghana, personal communication, 23 February 2018.
- Wolf, de Rutger, consultant Form international, personal communication, 25 January 2018.



Tropenbos International
P.O. Box 232
6700 AE Wageningen
the Netherlands
✉: tropenbos@tropenbos.org
www.tropenbos.org



Stichting Bewust met Hout
Westeinde 6
1334 BK Almere
the Netherlands
✉: info@bewustmethout.nl
www.bewustmethout.nl