

CLIMATE

What role do forests and governance play in countries' nationally determined contributions to the Paris Climate Agreement?

Case study from Cameroon

What role do forests and governance play in countries' nationally determined contributions to the Paris Climate Agreement? – Case study from Cameroon

Author: Michel Bruce

Contributors: Indra Van Gisbergen, Laurence Wete Soh Editors: Richard Wainwright, Marie-Ange Kalenga Cover photo: Tsimi Judith picking Gnetum (okok) in Minwoho village, Lekié, Centre Region, Cameroon. Photo: Olivier Girard / CIFOR / Flickr.com/CC

Acknowledgements

Fern and Climate Analytics are especially grateful to the following organisations and institutions for their contributions:

- Cameroon Centre for Environmental Information and Sustainable Development (CIEDD)
- Cameroon Organisation for Forests and Rural Development (FODER)
- Cameroon Ministry of Agriculture and Rural Development
- Cameroon Ministry of the Environment, Nature Protection and Sustainable Development
- Cameroon Ministry of Forestry and Wildlife
- Cameroon Ministry of Mines, Industry and Technological Development

January 2018



Fern office UK, 1C Fosseway Business Centre, Stratford Road, Moreton in Marsh, GL56 9NQ, UK Fern Brussels, Rue d'Édimbourg, 26, 1050 Bruxelles, Belgium www.fern.org

This publication was produced by Fern and Climate Analytics, with generous financial support from the UK Department for International Development (DFID). All opinions expressed in this study, however, are those of Climate Analytics, Fern and civil society partners in Cameroon, who take full responsibility for any errors.



Contents

Abbreviations and acronyms	4
Summary	5
Recommendations	6
Introduction	8
Context and aim of the study Governance analysis framework	9 10
Dynamics of forest governance in Cameroon	12
3. Situational analysis of deforestation and forest degradation in <i>Table 1. Forest zoning system in Cameroon, as defined in the Forestry Le</i>	Cameroon 14 aw of 1994 14
4. Importance of forest governance for Cameroon's NDCs	15
 5. Correlation between forest governance and deforestation in Carrigure 1. Deforestation rate in Cameroon from 2000 to 2014 Figure 2. Deforestation rate by surface area in Cameroon from 2000 to a agroecological zones Analysis results Figure 3. Forest area and deforestation rates for different forest zoning a agroecological zone Transparency Participation Coordination Accountability Figure 5. Index score for forest governance components in Cameroon 	meroon 17 17 2014, across 18 18 categories, by 19 20 21 22 23 23 23
Conclusions	25
Bibliography	27
Annexes Annex 1: Individuals met with and interviewed Annex 2: Questionnaire – forest governance components and indicator	29 29 rs for Cameroon 30

Abbreviations and acronyms

AGTER	Amélioration de la Gouvernance de la Terre, de l'Eau et des Ressources naturelles [Association for improved governance of land, water and natural resources]
PA	protected areas
VPA	Voluntary Partnership Agreement
ASD	Action for Sustainable Development
WB	World Bank
BUCREP	Bureau Central du Recensement et des Études de la Population [Cameroon Central Bureau for Population Survey and Census]
CAFT	Coopérative Agroforestière de la Trinationale [Cameroon Tri-National Agroforestry Cooperative]
CA Lomé	Climate Analytics, Lomé office
UNFCCC	United Nations Framework Convention on Climate Change
NDC	Nationally Determined Contribution
CED	Cameroon Centre for the Environment and Development
ECOWAS	Economic Community of West African States
CEMAC	Economic and Monetary Community of Central Africa
CIFOR	Center for International Forestry Research
COP	Conference of the Parties
INDC	Intended Nationally Determined Contribution
DD	Deforestation and Degradation of forests
PFE/NPFE	Permanent/Non-Permanent Forest Estate
NFE	National Forest Estate
RWE	Roundwood equivalent
FAO	Food and Agriculture Organization of the United Nations
FAOSTAT	Food and Agriculture Organization Corporate Statistical Database
FIP	Forest Investment Program
FLAG	Field Legality Advisory Group
FLEGT	Forest Law Enforcement, Governance and Trade
IMF	International Monetary Fund
FODER	Cameroon Organisation for Forests and Rural Development
SDGs	Sustainable Development Goals
ITTO	International Tropical Timber Organization
FCP	Forest Convergence Plan
EU	European Union
FMUs	Forest Management Units
GHG	Greenhouse gas

GFW	Global Forest Watch
INS	Cameroon National Institute of Statistics
ISTOM	School of International Agro-Development
MINADER	Cameroon Ministry of Agriculture and Rural Development
MINEPDED	Cameroon Ministry of the Environment, Nature Protection and Sustainable Development
MINFOF	Cameroon Ministry of Forestry and Wildlife
MINIMIDT	Cameroon Ministry of Mines, Industry and Technological Development
OIE	World Organisation for Animal Health
MDGs	Millennium Development Goals
ONACC	National Observatory for Climate Change
NFP	National Forestry Programme
NTFPs	Non-timber forest products
GDP	Gross domestic product
NAP	National adaptation plan
UNDP	United Nations Development Programme
REDD+	Reducing emissions from deforestation and forest degradation, sustainable management of forests, conservation and enhancement of forest carbon stocks
RFA	Annual forestry tax
R-PP	Readiness Preparation Proposal
RRI	Rights and Resources Initiative
SOCAPALM	Société Camerounaise de Palmeraies [Cameroon palm oil company]
REDD+TS	REDD+ Technical Secretariat at MINEPDED
SF	Stumpage fee
SET	Sawmill entry tax
TNS	Sangha tri-national forest, covering parts of Cameroon, the Republic of Congo and the Central African Republic
TRIDOM	Dja-Odzala-Minkébé tri-national forest, covering parts of Cameroon, the Republic of Congo and Gabon
IUCN	International Union for Conservation of Nature – Cameroon Programme
WRI	World Resources Institute
ZICGC	Zone d'Intérêt Cynégétique à Gestion Communautaire [Community-managed declared hunting area]

Summary

Ratification of the Paris Agreement led the Parties to include forest governance issues in national discussions via the Intended Nationally Determined Contributions (INDCs), which subsequently became the Nationally Determined Contributions (NDCs).¹ In order to effectively implement their NDCs, countries will need to set priorities and identify realistic ways of meeting their climate commitments and monitoring them over time. This process also provides an opportunity to share experience in the land-use sector, which may inform implementation of the NDCs. The NDCs are thus becoming the key framework for steering national climate policies and, for countries such as Cameroon that are implementing a Voluntary Partnership Agreement (VPA)² with the European Union (EU), they provide a platform for emphasising the importance of forest governance and using it to full effect in climate talks.

This study analyses the correlation between forest governance and deforestation, and aims to improve national understanding of the challenges involved in land-use governance. The multistakeholder VPA process has created an unprecedented opportunity for dialogue on improving transparency and accountability in the forestry sector. The study shows that further efforts are needed to improve forest governance in Cameroon, in particular:

- Proper implementation of systems to enable access to information and of strategies for the dissemination and circulation of information so that all stakeholders, especially communities and women, can have a say in decisions that affect them.
- Establishment of a coordinated inter-departmental approach to move towards a culture of greater transparency and better access to information.
- The government must ensure that civil society can comment freely and independently on issues of transparency and good governance.
- There needs to be improved synergy between non-governmental organisations (NGOs) and civil society organisations (CSOs), to allow the voice of forest communities and affected communities to be better heard and reflected in climate and forestry policy and particularly in NDC implementation.
- Effective involvement of donors and other key civil society actors in the forest governance process.

¹ http://unfccc.int/focus/items/10240.php

A Forest Law Enforcement, Governance and Trade Voluntary Partnership Agreement (FLEGT VPA) is a bilateral international agreement between the EU and a timber-exporting country. It aims to improve the country's forest governance and ensure that timber imported into the EU meets all the legal requirements of the partner country. VPAs are the cornerstone of the EU FLEGT Action Plan, which was adopted in 2003 to address illegal logging and trading in illegal timber.

Recommendations

Recommendations for government actors in the forestry sector

To develop transparency and coordination in land and forest governance in Cameroon:

- Promote, as widely as possible, access to information on forestry, land, mining and infrastructure for local communities and state institutions, so that participation, accountability and coordination can become a reality on the ground. This includes establishing transparency mechanisms, based on Annex VII of the VPA on public information.
- Share data and experience among public bodies throughout the country, to facilitate coordination.
- Align economic development policies and sectoral strategies with the REDD+ strategy, to facilitate planning and decision-making in the forestry and mining sectors, and in land governance.
- Promote accountability among companies in terms of human rights, and implementation of the United Nations' guiding principles on companies and human rights.
- Further promote sustainable community forestry and income-generating activities, to support communities, especially women, and local development.
- Provide civil society, local communities and human rights defenders with a forum for effective participation in land and forest governance, based on the VPA forum, and including consultation and free, prior and informed consent.
- Reassess policies and procedures for granting permits, to ensure that these are effective and free from loopholes that could give rise to corruption. Review permits that have already been granted to ensure they are compliant with existing laws and regulations.
- Ensure that institutions handling complaints about forestry and land management are accessible to all, at all levels of society.
- Strengthen mechanisms for cross-sectoral coordination, by identifying and harmonising crosssectoral strategies and objectives.

Recommendations for civil society actors

- Participate, together with public bodies, in planning, implementation and monitoring/ application of the law, so that a range of voices and rights are taken into account during decision-making processes.
- Strengthen CSOs and communities' role in independent monitoring, and advocating for compliance with regulations on land and forest governance.

- Become more involved in awareness-raising and education about community forestry activities.
- Use existing governance assessment instruments to monitor and support developments.
- Create synergy between the actions of CSOs and communities, to help improve forest governance at the regional level.

Recommendations for the European Union and international cooperation agencies

- Provide adequate support for capacity-building among government actors and civil society, to improve governance of natural resources.
- Improve coordination and cooperation between the various forest, land and climate governance processes they are backing, to make them more consistent and effective.



Introduction

Many countries have recognised the importance of forests for mitigating climate change. The 2015 Paris Agreement on climate change incorporates action on land use, including REDD+.³ Many of the Nationally Determined Contributions (NDCs) submitted by countries to the United Nations Framework Convention on Climate Change (UNFCCC) include land use and forestry targets. The Intended Nationally Determined Contributions (INDCs) will become NDCs once the countries have ratified the Paris Agreement and started taking measures towards achieving the global climate goals. Countries presented their INDCs at the 21st Conference of the Parties (COP21), outlining their planned post-2020 climate actions. To ensure that the actions proposed by the signatories are followed through, the countries will update their NDCs every five years and will issue a public report on progress achieved in fulfilling their commitments. These reports will be submitted to the UNFCCC and reviewed by technical experts. This review aims to enable countries to take stock of their achievements and ensure steady progress. The actual implementation of these periodically updated NDCs will determine whether the long-term goals in the Paris Agreement are achieved, in particular the goal of keeping the average global temperature rise by 2100 to well below 2°C and pursuing efforts to limit it to 1.5°C.

Most NDCs for African forested nations are limited in their adaptation and mitigation ambitions, (Cameroon, for example, has a reduction target of 32 per cent), and often do not include forest governance in their development plans. Implementation of the Paris Agreement therefore provides a critical opportunity for the African forested nations to revise their climate plans, filling the gaps and raising their climate change adaptation and mitigation ambitions. To achieve this objective, there is thus a real need to incorporate forest governance, in accordance with the VPA, into Cameroon's climate plans.

With this aim and in the context of this study, Fern's local partners are looking to engage with climate processes, advocating for greater inclusion of forest governance in climate policies, including those of Cameroon, as one of the African countries implementing a VPA.

Fern's local partners are looking to engage with climate processes, advocating for greater inclusion of forest governance in climate policies...

3 Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

Context and aim of the study

Context

Cameroon is located in the west of Central Africa. It has a forested area of approximately 17 million hectares, equating to 42 per cent of the national territory (Wete Soh, 2016). The country stretches from the Gulf of Guinea coast, with ports at Douala and Kribi, to the shores of Lake Chad. This extent of over 1,200 km, from the Sudano-Sahelian zone to the Equatorial zone, gives it a great diversity of climates and forest ecosystems.

The rate of deforestation rose from 0.94 per cent for the 1990–2000 period to 1.04 per cent for the following decade (FAO, 2011). Forestry sector policy favours the development of industrial-scale logging, mainly focusing on the export of raw materials with little or no processing. In terms of value, timber is the primary forest resource on the market.

Aim of the study

The study aims to improve forest governance by examining the link between deforestation and the forest resource governance model in force in Cameroon. The resulting recommendations will help improve the national climate plan, filling the gaps and raising the levels of ambition for Cameroon's NDCs.

Methodology

The study was structured around the following strategic priorities: (i) collection and analysis of documents on forest governance in Cameroon and the Congo Basin, and other strategic documents (agroforestry, environment, forestry legislation, etc.); and (ii) meetings with governmental and non-governmental actors, and consultations with representatives from local communities and indigenous populations (see Annex 1). These meetings were in the form of individual and group interviews.

The stage involving review of documents, data collection in the field, visits to potential sites and interviews with various actors included collecting background information using a questionnaire. Processing and analysis of this questionnaire led to the drafting of recommendations for governmental actors, civil society and the private sector, to fill the gaps in forest governance and assist in the implementation of Cameroon's NDCs.

The analysis of forest governance in relation to deforestation involved conducting a study based on documentary and field evidence, and assessing governance performance using the Governance of Forests Initiative (GFI) approach developed by the World Resources Institute (WRI). This method,

The rate of deforestation rose from 0.94 per cent for the 1990–2000 period to 1.04 per cent for the following decade.

involving forest governance indicators, is used in several countries with some of the largest tropical rainforests in the world, such as Cameroon.

The assessment is based on comparing data and information from governmental and non-governmental actors with the content of policy, legal and institutional frameworks for forest and land management in Cameroon. The United Nations Development Programme's (UNDP) Forest, Land and REDD+ Governance Index was then applied, using a contextual approach based on the governance index used by the Partnership for Governance Reform in Indonesia (Kemitraan).⁴

This index measures governance at all government levels (national, provincial and district), by triangulating field data with documentary research into forest governance.

Various aspects of good governance (transparency, participation, accountability and coordination) were assessed, in the areas of forest zoning and management, regulation of rights, forestry organisation, and monitoring and application of REDD+ legislation and infrastructure.



Governance analysis framework

⁴ Single basic assumption inherent in all definitions of governance, namely that good governance promotes the growth of democracy and contributes to the well-being of the population. Governance is therefore critical to achieving the basic objectives of any political entity, both at the national level and at lower policy levels. <u>http://gaportal.org/sites/</u> default/files/Indice-indonesien-de-gouvernance-2008.pdf (in French).

The assessment of forest governance focuses on the correlation with deforestation, which provides a basis for optimising the various action plans and implementing the NDCs. The assessment does not guarantee improved governance, but it is an important first stage in the emergence and drafting of relevant and realistic recommendations.

The 47 indicators selected for Cameroon are related to each of the aspects of governance cited above. The largest number of indicators is for coordination, covering the application of legislation and regulations, the functioning of institutions and other practical aspects.

Indicators	Components	Number of questions
Coordination	Policies and legal framework	8
	Institutional framework	4
	Cooperation and coordination	7
Participation	Participation by stakeholders	4
	Capacity and actions of stakeholders	4
Accountability	Forest resource management	7
	Financial incentives and economic instruments	2
Transparency	Forest law enforcement and prevention of corruption	5
	Transparency and accountability	6
Total number of ques	47	
Questions on forest governance indicators for Cameroon		

The selected responses have been scored on a scale from 0 (unsatisfactory) to 4 (top score for perfect forest governance), within the same framework of components used to catalogue the observations and recommendations. This results in a total of nine average overall scores for the aspects being assessed, through calculation of an average score for each component.

The scoring system is based on a scale from 0 to 4, thus representing five different grades, so where there are five possible ratings for indicator responses (A, B, C, D or E), these are simply scored according to the values 4, 3, 2, 1 or 0.

Dynamics of forest governance in Cameroon

Development of forest governance from 1994 to date

Forest governance can be described as the "modus operandi" by which officials and institutions acquire and exercise authority in the management of forest resources. "Good forest governance is characterised by predictable, open and informed policymaking based on transparent processes; a bureaucracy imbued with a professional ethos; an executive arm of government accountable for its actions; and a strong civil society participating in decisions related to the sector." (FAO, 2009). According to WRI, forest governance aims to improve participation, transparency, inclusivity and responsiveness in government practices that impact forest resources allocation and use, as well as in international instruments.

The revision of forestry policy in Cameroon has been strongly influenced by international environmental strategies and guidelines. The legal framework for forest classification distinguishes between "permanent forest estate" and "non-permanent forest estate", equivalent to the categories of "classified area" and "protected area" used in other African countries (Oumba, 2016). The National Forest Estate (NFE) is subdivided and gazetted into two different land allocation categories, each with specific use rights and management regimes (WRI, 2011): Permanent Forest Estate (PFE) and Non-Permanent Forest Estate (NPFE).

Forestry legislation and forestry companies

Article 37 of Cameroon's 1994 Forestry Law is more specific in relation to regional and international trading, and trading for industrial use intended for export. Article 9, Paragraph 2 of the 1994 Forestry Law provides a list of special products subject to charge. Before commencing timber trading activities, every operator must obtain a logging permit issued in accordance with strict procedures, and logging rights are for a maximum of one year (MINFOF, 2009).

"Good forest governance is characterised by predictable, open and informed policymaking based on transparent processes; a bureaucracy imbued with a professional ethos; an executive arm of government accountable for its actions; and a strong civil society participating in decisions related to the sector." (FAO, 2009) In most countries in the Congo Basin, logging remains the main source of paid employment in the private sector...

Logging truck from Cameroonian Fabrique de Paquets (FIPCAM) near Ngon Village, Ebolowa District, Cameroon. Photo: Olivier Girard/CIFOR



3. Situational analysis of deforestation and forest degradation in Cameroon

Current forest cover in Cameroon

The PFE consists of lands designated to remain as either forest or wildlife habitat. This estate comprises production forests and protected areas (PAs). The NPFE – including community forests – consists of forested lands that may be converted into other land uses. However, the extent and composition of the NPFE continues to change as new areas are gazetted and others are declassified and returned to the status of unclassified forest land (Table 1).

National Forest Estate				Source: Forest Atlas	of Cameroon, WRI 2011
Permanent Forest Estate (PFE)		Non-Permanent Forest Estate (NPFE)			
Council forests	State Forests	Unclassifie		Community	Private Forests
	Forest Reserves Integral ecological reserves Production forests Recreation forests Teaching and research forests Plant life sanctuaries Botanical gardens Forest plantations	Protected Areas • National parks • Game reserves • Hunting areas • Wildlife sanctuaries • Buffer zones • Zoological gardens (public)	Forests	rorests	

Table 1. Forest zoning system in Cameroon, as defined in the Forestry Law of 1994

The Food and Agriculture Organization of the United Nations (FAO) estimates for 2014 give an area of 19,036,000 hectares meeting its definition of forest⁵ whereas the combined area of forest in the PFE and NPFE for the same year was 18,643,152 hectares (MINFOF, 2017). It therefore emerges that 392,848 hectares of forest were not identified as part of either the PFE or the NPFE, assuming comparable methodologies were used for both assessments (FAO and MINFOF).

Rate of logging in Cameroon

In most countries in the Congo Basin, logging remains the main source of paid employment in the private sector, particularly in remote rural areas (CIFOR, 2013). In Cameroon, for example, the exploitation of forest and wildlife resources includes practices such as: (1) industrial logging for timber (including council forests and plantations); (2) community and individual logging of artisanal timber; (3) logging for wood energy; (4) use of non-timber forest products (NTFPs); (5) village hunting and hunting for sport; (6) ecotourism; and (7) environmental services and own use (water, charcoal, soil).

4. Importance of forest governance for Cameroon's NDCs

Climate change is now perceived as a major threat to achieving poverty reduction targets in many African countries, and to achieving the Sustainable Development Goals (SDGs). SDG 15 relates to forests, which cover 30 per cent of the planet's surface. These forests provide food security and shelter and are vital for combating climate change and protecting biodiversity and indigenous populations.

In most forest regions with significant forest density, such as most countries in Central Africa, we can observe pressure on environmental resources, the development of illegal logging, an upsurge in poaching and environmental, social and economic problems. In response, these countries have developed several initiatives, at both national and regional levels, such as the Forest Convergence Plan (FCP) by the Central African Forest Commission (COMIFAC), to address the challenges and regulate abusive exploitation of the forest in order to combat poverty. These initiatives are designed to support the economic and social development plans for these regions, through the integrated and sustainable management of natural resources and ecosystems, based on the protection, regeneration, replenishment and resilience of ecosystems in the face of existing and new challenges.

Oil palm nursery in a Herakles Farms concession area. Herakles is pushing ahead with its plans for a huge palm oil plantation with complete disregard for Cameroonian law and the opposition of local people, who fear they will lose their farms and their livelihoods to the US-based corporation. Photo: Greenpeace/Alex Yallop



The INDCs, which became NDCs after ratification of the Paris Agreement, included measures designed to achieve the global climate goals. There are obvious links in that the commitments made by countries as part of the NDCs will have to take on board the role of forest governance as described in the FCP (COMIFAC, 2016) and other policy instruments, in particular national forestry policies which will need to ensure steady progress in the management and sustainable protection of ecosystems at the national level.

Why is it essential to improve forest governance in order to achieve the NDCs?

It is estimated that 17.4 per cent of global greenhouse gases are emitted by the forestry sector, mainly from deforestation and forest degradation. Moreover, the forests in the Congo Basin, spanning six of the countries in the region – including Cameroon – are among the largest in the world and represent more than 70 per cent of Africa's forests. In 2005, the agricultural development strategies pursued by the Cameroon government focused on an agricultural model that could be described as extensive: the use of large areas of farmland for monocultures for export, primarily rubber and palm oil, but also for food crops (rice), as reported in the studies by Dkamela (2011) and the Cameroon Centre for the Environment and Development (CED, 2010). The aim of this programme was to increase Cameroon's agricultural production by 50 per cent over the period 2005–2015, with 25 per cent more land cultivated. This strategy was only partly in response to increased national demand for food products; the main aim was to take advantage of growing international demand for biofuels (Dkamela, 2011).

Integration of forest governance into national strategies

Whereas the VPAs relate to the forestry sector and aim to combat illegal logging, the NDCs have a wider scope and encompass not only the forestry sector but also other sectors such as transport, agriculture, waste, energy, industrial processes and product usage. They provide a variety of opportunities and mobilise a broader spectrum of national actors to address the challenges encountered in the land-use sector.

It is estimated that 17.4 per cent of global greenhouse gases are emitted by the forestry sector, mainly from deforestation and forest degradation.

5. Correlation between forest governance and deforestation in Cameroon

Given its significant forest capacity, Cameroon is a key player in climate change mitigation policies involving the forestry sector in the Congo Basin sub-region (IUCN, 2013).



Figure 1. Deforestation rate in Cameroon from 2000 to 2014

As shown in Figure 1, deforestation was historically around 0.1 per cent each year in the early years of the millennium, after which Cameroon has seen a gradual increase in its deforestation from 2005, with a peak in 2010, reaching a deforestation rate of around 0.23 per cent a year in 2014. Figure 2 also shows the disparity between the country's different agroecological zones (AEZs),⁶ in terms of the dynamics of deforestation. AEZ 1 (Sudano-Sahelian zone) and AEZ 3 (high plateau zone) have relatively low and stable rates of deforestation: average annual rates of 0.06 per cent and 0.04 per cent respectively since 2000. AEZ 1 has, however, seen a significant loss of savannah forest with low forest cover. AEZ 2 (high savannah zone) does not show a clear trend, with increases in deforestation in some years followed by years of low deforestation activity. However, AEZ 2 shows the highest average annual rate of deforestation: 0.07 per cent or 68,900 hectares, representing 9 per cent of national deforestation over the 14 years under consideration (2001–2014)⁷. Finally, AEZ 4 (unimodal forest zone) and AEZ 5 (bimodal forest zone) have shown a gradual increase in deforestation, especially since 2010 (Figure 2).

⁶ AEZ 1: Sudano-Sahelian zone; AEZ 2: high savannah zone in the North region; AEZ 3: high plateau zone covering the West, North-west and small areas of the South-west and littoral regions; AEZ 4: forest with unimodal rainfall covering most of the South-west and littoral regions, and small areas of the Central and Southern regions with bimodal rainfall; AEZ 5: forest with bimodal rainfall.

⁷ Author's note: Approximately 3.9 million hectares (49 per cent) of the AEZ 2 land area is covered by forests and wooded savannah (Institut National de l'Information Géographique et Forestière, France, 2016). Of this area, 80 per cent is wooded savannah and the rest is made up of dense forest. This zone has seen the highest rate of deforestation as a proportion of its total forest area.



Figure 2. Deforestation rate by surface area in Cameroon from 2000 to 2014, across agroecological zones

By area, AEZ 4 and AEZ 5 therefore account for nearly 75 per cent of the total deforestation observed in Cameroon over the analysis period. There has been a striking acceleration in deforestation in these two AEZs: deforestation increased by 50 per cent between the periods 2006–2010 and 2010–2014 (Figure 2). Several studies have highlighted the agricultural sector as the main driver of deforestation in Cameroon (MINEPDED, 2016; Carodenuto *et al.*, 2015; Ndoye and Kaimowitz, 2017; Mosnier *et al.*, 2016).

Analysis results

Forestry sector

Analysis of the link between forest governance and the rate of deforestation in Cameroon, according to forest zoning, broadly confirms the data collected, as shown in Figure 3. A positive impact can be seen notably in the high plateau AEZ (AEZ 3) and the bimodal forest zone (AEZ 5), where the rates of deforestation within the PFE are only half the rates outside it. The positive impact of the PFE can also be seen, although less clearly, in the unimodal forest zone (AEZ 4).

Mining sector

In terms of legislation, there is no standardisation across the various legal frameworks regulating natural resource management and serious conflicts could occur, particularly in relation to the impact of mining on the forestry sector (Schwartz *et al.*, 2012). In 2012, WWF identified 30 mineral exploration permits encroaching on 12 PAs, and there are dozens more in the immediate vicinity of PAs.



Figure 3. Forest area and deforestation rates for different forest zoning categories, by agroecological zone

There are currently no operational industrial mines in Cameroon; this refers just to exploration. Three substantial exploration licences (10,000 to 300,000 hectares) are currently assigned in AEZ 4 and AEZ 5. These licences could have a considerable impact on the forest zones in the future. There is awareness of the major impacts of large mining projects on the environment, including forests, and of the socio-economic aspects of land use in the project areas.

The introduction of mining activity into forest zones entails clearing a certain area of forest to access the minerals, as well as increased pressure around the mining sites due to farming activity by the employees and their families. The mining potential is fairly low in the South-west, Littoral, West, North-west and Far North regions. Some areas, particularly to the east of the North and Adamaoua regions, present significant potential; artisanal gold mining is in evidence here. The two regions with the greatest potential for both industrial and artisanal mining are the East and the South. This is where the bulk of current mechanised and manual artisanal activity (gold, diamonds, rutile, etc.) is concentrated, and also the bulk of industrial projects in planning (iron, nickel/cobalt). To a lesser extent, some southern areas of the Central region may also be targeted for mineral exploration (PRECASEM 2016 project).

Agricultural sector

Several studies have highlighted the agricultural sector as the main driver of deforestation in Cameroon (MINEPDED 2016; Carodenuto *et al.*, 2015; Ndoye and Kaimowitz, 2017; Mosnier *et al.*, 2016).

Alongside small- and medium-scale farming, the development of Sud Hévéa and other agroindustries over recent years (sugar cane in Batouri, pineapples and bananas in central areas) suggests that new concessions may be granted without appropriate zoning. The outdated crop system contributes to the encroachment into new forest areas. In addition, rapid urbanisation is seeing the emergence of urban farmers settling in peri-urban areas. A tangible assessment of forest governance, in this case for Cameroon, involves comparing its elements to features of good governance, and recording the convergence or divergence in terms of the scale from 0 to 4. The outcome of this analysis can provide a starting point for devising corrective measures, and can subsequently act as a tool for monitoring and assessing the progress of forest governance in Cameroon (Figure 4). In addition to this technical aspect, the situational analysis can also encourage reflection on strengthening the NDCs.



Figure 4. Prospective analysis of forest governance in Cameroon

Transparency

Situation and conclusions

There is a lack of adequate transparency and standardisation in the process of granting exploration and exploitation permits in the forestry, agricultural and mining sectors, due to gaps in the legal framework and in the application of the law. It is essential that permits are granted before land or forest use is undertaken. The score achieved (2/4 – Figure 5) indicates a low level of transparency in the granting of permits for the agricultural, forestry and mining sectors. Moreover, very few potentially affected communities receive information on decision-making. The insufficient involvement of local communities potentially affected by the decision process could lead to frequent conflicts.

Recommendations

 The government must increase transparency at the planning, management and monitoring stages for decisions relating to forest resource management.

- The government must ensure transparency in the process for granting forestry concessions, especially sales of standing volume and small permits, and for farming and mining concessions.
- The reform of the forest and land codes must make it obligatory to publish contracts and duties paid by companies.
- The government must build its own capacity, and that of the legal authorities, to monitor application of the law (increased sanctions in cases of illegal logging and illegal forest conversion).
- The government must take appropriate measures to effectively address corruption in the forestry sector, including the reasons it persists.

Participation

Situation and conclusions

Participation in this study was assessed on the basis of three main indicators:

- 1. The available capacity and level of public participation in overseeing the planning, management and monitoring of forest activities and the application of the law; public (and community) involvement from the initial stages through to decision-making.
- 2. Diversity of the participants, to gauge the diversity of stakeholders involved in decision-making and participation.
- 3. The support mechanisms, to assess the government's efforts to ensure legal protection through strong regulation to support participatory, stable and standardised management.

Figure 5 shows a score of 1.8/4, indicating insufficient participation by local communities as key stakeholders. This is despite developments such as the inclusion of local and indigenous community representatives in decision-making processes for the forestry sector. The low score for participation is due to: (1) limited public participation in decision-making regarding permits and (2) a lack of clear and decisive regulations governing public participation in local authority decisions on the use of forest areas, the development of forest areas and changes in the allocation of forest areas for farming and mining activities.

Recommendations

- Forestry authorities must make local communities, and especially women, a priority as they are the stakeholders most affected by the decisions made.
- The government must clarify the arrangements for participation by all stakeholders, to ensure that CSOs and local communities, especially women, understand how they can be involved effectively. This includes implementing the principle of free, prior and informed consent.



Coordination

Situation and conclusions

A feature of good governance is the effective and efficient use of frameworks and resources, through coordination of the various parties involved. Institutional coordination is essential, given that the complexity of governance means the challenges cannot be addressed by a single entity or organisation. In management terms, governance can be coordinated by creating specific institutions or through communication between management units or institutions.

Institutional coordination in land and forest governance in Cameroon is "poor", with an average score of 1.3/4 (Figure 5). However, the coordination mechanism as a minimum measure does not necessarily guarantee that coordination is effective. There are other important factors in achieving coordination, such as mandate, clarity about who has responsibility, capacity and so on. For example, it is noted that some inter-agency platforms or committees within the government may not be wholly fulfilling their remit.

Recommendations

- Governmental actors must show greater commitment to successful coordination, for example, by creating multi-stakeholder fora inspired by the framework for dialogue that exists in the VPA process.
- There must be better coordination of forestry and land issues at the highest level, through meetings and inter-departmental dialogue.

Accountability

Situation and conclusions

Government accountability is a very important component of good governance, in addition to transparency, participation and coordination. There must be appropriate institutional accountability at every stage, from the design of planning, finance and management activities to outcomes and impact evaluations.

It is clear that government actors do not always consult local communities to ensure their concerns are taken into account in development of the available forest cover. There is only limited consultation with and accountability towards women and indigenous peoples.



Figure 5. Index score for forest governance components in Cameroon

Overall, the findings of this study show there are already some positive elements in terms of good forest governance in Cameroon (Figure 5), capable of reducing deforestation and ensuring both sustainability and economic development. However, it is vital for governance to be adapted to the context, particularly economic, political and social changes, and to key development issues and perspectives. CSOs are currently showing renewed interest in forest communities, due to the opportunities presented by FLEGT VPAs or payments for environmental services related to REDD+ mechanisms. Unfortunately, there is still insufficient consideration of the interests of various stakeholders because civil society, in its function of civic monitoring and awareness-raising, does not have adequate influence to ensure forestry companies comply with social obligations, in content or in implementation (Wete Soh, 2016). There is still inadequate implementation of forestry sector policies, strategies and documents, and poor integration of perspectives from the mining and farming sectors.

Recommendations

- Develop strategies for communication among central and local administrations, CSOs and local communities, including women and indigenous peoples, to ensure multi-level and multistakeholder interaction.
- Provide capacity-building for stakeholders in statistical data collection, independent forest observation and supervision methods, to develop a culture of accountability in forest resource management.
- Support efforts to establish a reliable statistical database on illegal logging and use of forest resources.



Conclusions

This study has shown that land and forest governance by government actors in Cameroon is still a long way from adhering to the principles of good governance, which are key to achieving the NDC objectives. In fact, analysis of the correlation between land and forest governance and deforestation indicates that the main cause of deforestation is poor governance. Improving transparency, participation and coordination, and implementing robust legislation, should enable more sustainable and inclusive management of forest resources.

The governance participation index score underlines the lack of a forum for participation and minimal participation by the local communities affected. This situation is compounded by the low level of public participation, which is limited to consultation, whereas the public should be involved in the decision-making process right up to the final decision stage.

The findings of this study show a mediocre **accountability index** for land and forest governance. The standards, guidelines and criteria that should serve as benchmarks for forest governance are disregarded. This situation is also due to the minimal opportunity for the public to make complaints and objections about forest governance.

There is still no real coordination, either horizontal or vertical, between national and international bodies in land and forest governance processes and initiatives (VPA/FLEGT and REDD+), as laid out in the relevant documents. The score for the **coordination index** shows the lack of engagement by governmental actors in cross-sectoral coordination.

Planning activities were shown to be generally more transparent, participatory and accountable than management activities. This difference may be due to the fact that planning is, by nature, not yet tangible and its outcomes are not directly felt by local communities, whereas decisions on management activities can be felt in a very real and direct way by local communities.

The governance participation index score underlines the lack of a forum for participation and minimal participation by the local communities affected.

Unless there are significant improvements to governance, and stricter monitoring, initiatives to mitigate carbon emissions including from the forest and land sectors, such as those outlined in the NDCs, will continue to threaten the land rights and livelihoods of local communities.

In order to reduce the deforestation rate, effective participation is required, not only by the government, but also by CSOs, local communities and indigenous peoples, in decision-making and monitoring of land and forest governance. Lastly, better horizontal and vertical coordination among the various actors, along with improved strategic planning and alignment of activities, will be key to strengthening, implementing and monitoring the NDC objectives.

Bibliography

AGTER, 2012. Online Knowledge Base – Natural Resource Governance around the World: Forest governance in Cameroon. http://www.agter.org/bdf/fr/thesaurus_dossiers/motcle-dossiers-24.html

Checklist, Preparatory mission for PADAC project (Support for developing commercial agriculture), 18–29 July 2016.

Assembe-Mvondo, S., Cerutti, P. O., Putzel, L. and Atyi, E. A., 2016. What Happens When Corporate Ownership Shifts to China? A Case Study on Rubber Production in Cameroon (CIFOR Infobrief no. 147; 8 pp.). Center for International Forestry Research (CIFOR), Bogor, Indonesia.

Atangana Ntsama, J., Tchindjang, M., Moulende-Fouda, T. and Bene Bene, C.L., 2010. *Evaluation environnementale de la problématique du bois de feu dans la ville de Garoua au nord Cameroun* (Environmental assessment of the use of fuelwood in the town of Garoua in north Cameroon).

Association Technique Internationale des Bois Tropicaux (International Tropical Timber Technical Association – ATIBT), 2005. Étude sur le plan pratique d'aménagement des forêts naturelles de production tropicales africaines (Practical study into the management of natural African tropical production forests). Case study for Central Africa. Section 2. Social Aspects. Paris, France, ATIBT: 76 and annexes.

Atlas (MINFOF): http://cmr.forest-atlas.org/map/?x=12.61&y=2.88&z=11&l=fr.

Atyi, R. E. A., Assembe-Mvondo, S., Lescuyer, G. and Cerutti, P., 2013. Impacts of international timber procurement policies on Central Africa's forestry sector: The case of Cameroon. Forest policy and economics, 32, 40-48.

Aubréville, André, 1948. Étude sur les forêts de l'Afrique Equatoriale française et du Cameroun (Study into the forests of French Equatorial Africa and Cameroon). Nogent-sur-Marne: IRAT, 131.

Baltzer, K. and Hansen, H., 2011. Evaluation Study: Agricultural input subsidies in Sub-Saharan Africa. Copenhagen, Denmark.

World Bank, 2012. Readiness Preparation Proposal (R-PP).

Belt, J., Kleijn, W., Chibvuma, P.A., Mudyazvivi, E., Gomo, M., Mfula, C., Mkojera, E., Opio, M., Zakaria, I. and Boafo, K., 2015. Market-based solutions for input supply: making inputs accessible for smallholder farmers in Africa.

Benhin, J. K. A. and Barbier, E. B., 1999. A case study analysis of the effects of structural adjustment on agriculture and on forest cover in Cameroon, Central African regional program for the environment. York, UK.

Bikié, H., Ndoye, O. and Sunderlin, W. D., 2000. Economic crisis, farming systems, and forest cover change in the humid forest zone of Cameroon.

Breman, H., Gaborel, C., Vaissayre, M. and Vogelsperger, R., 2004. Sustainable cotton: Integrated Pest and Soil Fertility Management; Case study for West and Central Africa.

Burren, C., Sene, O., Rose, R., Okeke, F. and Arpels, M., 2011. REDD Feasibility Assessment in the Takamanda-Mone Landscape Cameroon, WCS Technical Report.

Byerlee, D., Stevenson, J. and Villoria, N., 2014. Does intensification slow crop land expansion or encourage deforestation? Global Food Security 3 (2014) 92-98 <u>http://www.sciencedirect.com/science/article/pii/</u>S221191241400011X.

Carodenuto, S., Merger, E., Essomba, E., Panev, M., Pistorius, T. and Amougou, J., 2015. A Methodological Framework for Assessing Agents, Proximate Drivers and Underlying Causes of Deforestation: Field Test Results from Southern Cameroon. Forests 6, 203-224.

CED, RACOPY, FPP, 2010. *Les droits des peuples autochtones au Cameroun* (The rights of indigenous peoples in Cameroon). Supplementary report submitted further to Cameroon's second periodic report to the United Nations Committee on the Elimination of Racial Discrimination. Centre for the Environment and Development (CED); *Réseau Recherche Actions Concertées Pygmées* (Pygmy Action Cooperation Research Network – RACOPY); Forest Peoples Programme (FPP).

ECOWAS, 2013. Convergence Plan for the Sustainable Management and Utilization of Forest Ecosystems in West Africa.

Cerutti, P. O. and Lescuyer, G., 2011. The domestic market for small-scale chainsaw milling in Cameroon: Present situation, opportunities and challenges, CIFOR.

Cerutti, P. O., Mbongo, M. and Vandenhaute, M., 2016. State of the timber sector in Cameroon, FAO and CIFOR.

COMIFAC, 2016. Convergence Plan 2015. http://www.comifac.org/fr/content/plan-de-convergence-2015-2025.

Daly, H., 2016. Assessment of the socio-economic value of the goods and services provided by Mediterranean forest ecosystems: Critical and comparative analysis of studies conducted in Algeria, Lebanon, Morocco, Tunisia and Turkey.

Dkamela, G. P., 2011. The context of REDD+ in Cameroon, CIFOR.

Eba'a Atyi, R., Lescuyer, G. and Ngouhouo, J. P., 2013. What is the economic and social value of the forestry and wildlife sector in Central African States? A case study of Cameroon.

FAO, 2014. State of the World's Forests: Enhancing the socioeconomic benefits from forests. Rome, Italy.

FAO, 2015. State of the timber sector in Cameroon. Rome, Italy.

FAO, 2016. Living in and from the forests of Central Africa. Rome, Italy.

Fern, 2016. Seeing the Forests Through the Trees: VPA-led Transparency in Five African Countries.

Fraticelli, M., Perdriault, M., Pinsart, C. and Rafert, J., 2013. *La gouvernance des forêts au Cameroun* (Forest governance in Cameroon).

INS, 2017, 08 01. OpenData for the National Institute of Statistics of Cameroon. Collected by the National Institute of Statistics of Cameroon: http://nso.cameroon.opendataforafrica.org/xtrxfjf/pib-par-branche-d-activite-prix-constants-2005-cvs-et-par-categories-de-depenses?lang=en.

Ministry of Foreign Affairs (MAE), 2014. Presentation on the banana and plantain production development programme.

MAE, 2014. Presentation on the national programme for sustainable intensification of cassava production, 2014-2016, 14.

Mbairamadji, J., 2009. *De la décentralisation de la gestion forestière à une gouvernance locale des forêts communautaires et des redevances forestières au Sud-est Cameroun* (From decentralisation of forest management to local governance of community forests and forestry taxes in South-east Cameroon), VertigO – electronic environmental science review (online), Volume 9, Number 1 | May 2009. <u>http://journals.openedition.org/vertigo/8614?lang=en</u>

Ministry of Environment and Forestry (MINEF), 1998. Manual of allocation procedures and management standards for community forests. Yaoundé: Éditions CLE.

MINFOF, 2009. Manual of allocation procedures and management standards for community forests. Yaoundé.

MINFOF, 2017, 07 28. Forest Atlas of Cameroon: Open Data Portal. Cameroon.

Ntiamoa-Baidu, Y., 1997. Wildlife and food security in Africa. FAO Conservation Guide 33. Rome, Italy.

Oumba, P., 2016. Planification forestière et équilibre climatique dans le bassin du Congo: les expériences du Cameroun et de la République du Congo (Forestry planning and climate balance in the Congo Basin: experience from Cameroon and the Republic of Congo).

Interim report on the in-depth analysis of drivers of deforestation and forest degradation in the five agroecological zones in Cameroon, August 2017.

Interim report on the Pests and Pesticides Management Plan (PPMP) under the Forest and Economic Diversification Project – Additional Financing, November 2016.

IUCN – Cameroon Programme, 2014. Drivers of deforestation and forest degradation: Findings of a participatory analysis of the TNS and TRIDOM landscapes: Cameroon, Congo, Gabon and the Central African Republic. Yaoundé, Cameroon.

Wete Soh, L. 2016. Forest Legality in Cameroon: To which extent social obligations have been complied with? https://foegh.files.wordpress.com/2015/02/social-obligations-in-forest-legality.pdf.

World Resource Institute, 2011. Interactive Forest Atlas of Cameroon.

Annexes

Annex 1: Individuals met with and interviewed

No.	Forenames and surname	Position/role
1	Joseph Nyongwen	Secretary-General of MINFOF
2	Martin Mbongo	Assistant Director of Forest Taxation and Authorisations
3	Prof Joseph Amougou	Director of the National Observatory on Climate Change
4	Réné Siwe	Senior technical expert, REDD+ TS
5	Rufine Djeutchou	Communications Manager, REDD+ TS
6	Achille Momo	Senior expert in Measurement, Reporting and Verification (MRV), REDD+ TS
7	Mohamed Bianra	Geographical Information Systems (GIS) and Remote Sensing Specialist, REDD+ TS
8	Teodyl Nkuintchua	Regional Technical Adviser, Citizen Voices for Change (CV4C)/Field Legality Advisory Group (FLAG)
9	Laurence Wete	Fern/FODER Consultant
10	Moise Kono Bidzo	Manager of Indigenous Peoples Programme, CED
11	Ranèce Jovial Ndjeudja Petkeu	Climate Change Programme, CED
12	Cécile Ndjebet	President, African Women's Network for Community Management of Forests (REFACOF), REDD+ platform in Cameroon
13	Tim Fomete	Director, Rainbow Environment Consult
14	Patrice Kamkuimo	Action for Sustainable Development NGO
15	Richard Sufo	CIFOR, Cameroon
16	Michel Takam	President, Ecosystem Based Adaptation for Food Security Assembly (EBAFOSA), Cameroon
17	Marguerite Patience Djengue Ekoule	Environment and Quality Officer, SOCAPALM
18	Sophia Carodenuto	Regional Manager Central and West Africa, UNIQUE Forestry and Land Use
19	Luther Ndjoya Fendjou	Environment Officer, Arab Contractors
20	Norbert Sonne	Forest Programme Coordinator, WWF

Annex 2: Questionnaire – forest governance components and indicators for Cameroon

Aim : Analyse de la corrélation entre la gouvernance forestière et la déforestation au Cameroun

Location:	<u>Date</u> : / 2017
Forenames and surname:	Organisation / Contact:

Pillar I: Policy, legal, institutional and regulatory frameworks

Component I.1: Policies and legal framework

1) Is there an official vision, policy or strategy adopted at a senior level, for example by the legislative authority or the head of government?

2) Does the law properly establish standards through an effective legal mechanism?

3) Are some regulatory laws and documents confusing or contradictory of each other?

4) Are there a lot of complex laws regulating forests, which might deter some people from carrying out forestry activities (public forests)?

Please give examples.

5) Are there laws regulating forests that might deter some people from carrying out forestry activities (private forests)?

- 6) Does the law clearly state the rights to certain resources?
- 7) Does the law recognise traditional rights in most cases?
- 8) Does the law provide effective means for resolving disputes?

Component I.2: Institutional framework

1) Does the strategy recognise the private sector and give it appropriate weighting?

2) Does the law explicitly allow the government to share authority with local communities, the private sector and other actors, or to transfer this authority to them?

- 3) Are forest activities properly covered in institutional plans and budgets (Agriculture and Mining)?
- 4) Do land-use policies often conflict with the objectives and priorities in forestry policy?

Component I.3: Financial incentives and economic instruments

1) Do the laws and strategies expressly permit and/or provide economic incentives to ensure added value and sustainable use of timber forest products?

2) Do the laws and strategies expressly permit and/or provide economic incentives to ensure added value and sustainable use of non-timber forest products?

Pillar II: Planning and decision-making process

Component II. 1: Stakeholder participation

1) Does the law ensure stakeholder participation in these activities (forestry policy, development plan)?

2) Can any change be made to the law, policies and regulations at any time, without review or consultation?

3) Does the government encourage stakeholder participation (civil society) in planning and decision-making regarding the forest?

4) Does the government encourage stakeholder participation (forest-dependent communities) in planning and decision-making regarding the forest?

Component II. 2: Transparency and accountability

1) Does the legal framework advise on public access to information about the forest?

2) Are concession and sale processes transparent?

3) Is there a legal framework to address the problem of government agents failing in their duties and compromising good forest resource management?

4) Does the government have a system for monitoring its income and expenditure in the forestry sector?

5) Do private companies, operators and CSOs (associations, NGOs, etc.) operate in an open and transparent manner and in compliance with the law?

6) Does the government actively support and encourage chain-of-custody certification and traceability?

Component II. 3: Stakeholder capacity and actions

1) Is there regular performance evaluation for all forestry officials?

- 2) Is there frequent political interference that could affect ministry decisions and activities, including technical issues?
- 3) Are there CSOs acting effectively as observers and monitoring bodies?
- 4) Are there current, approved development plans for the public forests?

Pillar III: Implementation, application and observance of regulations

Component III. 1: Forest resource management

1) Is there effective monitoring of forestry zones allocated to forestry operators (on-site conditions, necessary skills and resources)?

2) Are information on forest growth, and a forest inventory, complete, up-to-date and used in planning and decision-making?

3) Do the forestry authorities periodically assess the outcomes of management activities and learn from their mistakes?

- 4) Do government initiatives show commitment to sustainable forestry?
- 5) Do conflicts over the use and management of forest resources tend to continue indefinitely?
- 6) Is there stable forest tenure throughout the country (state-managed forests, community forests and private forests)?
- 7) Is there any research or advocacy on use of lesser-known species and better use of forest products?

Component III. 2: Application of forest legislation and prevention of corruption

1) Are the salaries and other benefits for government agents in forestry generally sufficient?

2) Are systems for the collection, sharing and redistribution of forest revenue effective, or do they need to be improved?

3) Are sanctions for forestry offences mostly appropriate?

4) Does the government strategy for implementing forestry law include preventive measures, in addition to conventional law enforcement activities?

5) Do the forest authorities have a code of conduct that explicitly addresses corruption and kickbacks?

Component III. 3: Cooperation and coordination

1) Are the strategy, objectives and mission statement of MINFOF widely disseminated to all its staff, at all levels?

- 2) Are most contracts with individuals or legal entities adhered to by the forest authorities?
- 3) Do officials both within and outside the forest authorities collaborate effectively to prevent forestry offences?
- 4) Are there any official mechanisms for cross-sectoral coordination?
- 5) Has the country committed to comply with most or all the key forest agreements, and to implement them?
- 6) Do donors and international NGOs have a strong influence on the drafting of forestry strategies?
- 7) Is there a regulatory framework for the land and forest sectors to safeguard the property of major investors?

Forested countries' NDCs, including Cameroon's, can no longer ignore the fact that forest governance plays a key role in mitigating climate change.



Fern office UK, 1C Fosseway Business Centre, Stratford Road, Moreton in Marsh, GL56 9NQ, UK UK Fern office Brussels, Rue d'Édimbourg, 26, 1050 Bruxelles, Belgium www.fern.org

