



together possible.



Terms of reference for a study of the sectoral footprint on Biodiversity in Cameroon

Title of the mission	Analysis of sectoral drivers of biodiversity loss and pre-identification of key economic sectors impacting biodiversity in Cameroon
Project	BIODEV2030 - Facilitation of commitments for biodiversity, Cameroon
Duty station	Yaoundé, Cameroon
Duration of the mission	60 days spread over three months
Start date of the mission	As soon as possible

I. CONCEPT NOTE

DEFINITION

The concept of biodiversity was enshrined at the Rio Conference in 1992 with the adoption of the Convention on Biological Diversity (CBD), in which biodiversity is defined in Article 2 as "*the plurality of living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species and between species as well as of ecosystems*".

Biodiversity in all its forms is considered as a natural capital that ensures the maintenance and well-being of human societies and its various systems of social organization. The conservation of biodiversity is therefore of general interest, since any loss of biodiversity will result in a reduction in the capacity of ecosystems to perform their ecological functions, and thus a reduction in the ecosystem services provided to society. The increased use of ecosystems and natural resources allows us to benefit from more food, more comfortable housing, better hygiene and sanitation, and better medical care. However, this increased use is synonymous with environmental degradation.

BIODIVERSITY LOSS

In 1992, at the Rio Earth Summit, world leaders collectively committed to preserving the Earth's biological resources by declaring the Convention on Biological Diversity (CBD). Since then, most policies have failed to protect nature; the world, with the exception of a few positive examples, is witnessing a continuous and considerable loss of its biodiversity. (Normander, 2012). Indeed, in 2005, the United Nations published the Millennium Ecosystem Assessment (MEA), a report bringing together the work of 1,360 scientists from 95 countries. The objective was to assess the state of ecosystems and the consequences of their degradation on human well-being. The scientists' conclusion is alarming: of the 24 ecosystem services analysed, 15 have been degraded by human activity over the last 50 years. This is the case for air and water quality, access to traditional medicines and wild fish stocks, pollination or soil erosion, regional climate regulation and the aesthetic values of natural environments.

The International Union for Conservation of Nature (IUCN), clearly shows the alarming trends in biodiversity loss, measuring seven categories of extinction risk. Almost a fifth of the approximately 35,000 species of vertebrates are classified as "endangered", ranging from 13% for birds to 41% for amphibians. Between 1980 and 2008, an average of 52 species moved up to the next category each year, bringing them closer to extinction (Normander, 2012).

In 2020, the WWF's Living Planet Index, which tracks the evolution of 21,000 populations of mammals, birds, fish, reptiles and amphibians around the world, gives the same trends: a 68% overall decrease in populations between 1970 and 2016 (all species combined). The Ecological Footprint, which highlights the extent and type of pressure that mankind exerts on the planet, tells us that mankind's demand for the planet's living resources exceeds the planet's regenerative capacity by around 50%.

One million animal and plant species (out of an estimated eight) could disappear from the Earth in the coming decades if no action is taken to curb this trend. This figure is the first finding of a report produced in 2019 by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).

Over the last 200 years, the rate of extinction of species is estimated to be between 10 and 100 times higher than the natural rate of extinction. This rate could be 100 to 1,000 times higher in 2050. A consensus has therefore gradually emerged within the scientific community to speak of a

6th biodiversity extinction crisis due to human activities (Kolbert, 2014; Leakey et al., 1995; Barnosky et al., 2011; Wit et al., 2003) in order to qualify this loss and the risks that accompany it.

Finally, recently the emergence of COVID-19 has highlighted the fact that when we destroy biodiversity, we destroy the system that sustains human life. The richer the biodiversity of an ecosystem, the more difficult it is for a pathogen to spread rapidly or to dominate. The loss of biodiversity provides the opportunity for pathogens to pass from animals to humans.

IDENTIFIED CAUSES OF BIODIVERSITY LOSS

Biodiversity is essential for the long-term functioning of economic activities. The majority of economic sectors use and therefore depend, directly or indirectly, on natural resources and ecosystem services. As a result of this dependency, the current erosion of biodiversity poses a threat to economic development and the stability of our societies. In 2009, Pavan Sukhdev, in a report prepared for the European Commission, estimated that between 2000 and 2050 the cost of inaction would be equivalent to 50 billion euros, each year and for terrestrial ecosystems alone. These costs are likely to rise gradually. For WWF, the way we produce and consume food and energy, and the blatant disregard for the environment that is embedded in our current economic model, has pushed the natural world to its limits. COVID-19 is a clear manifestation of the breakdown in our relationship with nature, and highlights the profound interconnection between the health of people and the planet (Living Planet Report, 2020). The WWF in its Living Planet Report 2020 also revealed that the main drivers of biodiversity decline remain overexploitation and agriculture. Indeed, since the industrial revolution, human activities have increasingly increased the destruction and degradation of forests, grasslands, wetlands and other important ecosystems, threatening human well-being. Seventy-five percent of the ice-free land surface has already been significantly altered, most oceans are polluted and more than 85% of the wetlands have been lost. The most important direct driver of biodiversity loss in terrestrial areas in recent decades has been land-use change, mainly the conversion of pristine native habitats to agricultural habitats, while much of the oceans have been overexploited. Globally, climate change has not been the most important driver of biodiversity loss to date, but it is expected to become as important or more important than other drivers in the coming decades.

In addition to overexploitation and agriculture, invasive species are another frequent threat. Their spread is highly dependent on trade-related activities, such as maritime transport. Pollution and various disturbances, through agriculture, dams, fires and mining, are additional sources of pressure.

THE CONTEXT OF CAMEROON

In Cameroon, the importance of biodiversity for human well-being is reflected in the main production sectors of agriculture, forestry and fisheries. The value added of these three sectors represents 15% of GDP in 2017 (World Development Indicators) and employs more than 50% of the country's workforce. The livestock sector provides food for daily consumption and income for the population, with production levels constantly increasing. Artisanal fishing is the main activity of the communities living along the shores of the marine and aquatic ecosystems. The forestry sector in Cameroon provides more than 22,722 direct jobs and even more, in the informal activities of the sector engage hundreds of people with about 44,000 jobs in the artisanal sawmilling sector, 460,000 jobs in the traditional hunting sector, 90,000 jobs in part time equivalent jobs in logging and the supply of energy wood to towns (Cameroon, 6th CBD National Report, 2018).

On a specific level, there are nearly 7,850 vascular species, including 514 endemic and 815 threatened with extinction, fungi are known to have just over 1,150 species, including 125 ectomycorrhizal species and 32 to about 50 edible species, nearly 303 species of Mammals, including 18 to 19 endemic species; 968 birds flashed in Cameroon until 2013 including 7 endemic species and 30 endangered species; 285 species of reptiles of which 23 are endemic and 5 are endangered; 199 species of Amphibians of which at least 58 are endemic and 53 are endangered; 613 species of freshwater fish are known among which 146 species are endemic and 112 species are endangered. The trend is generally positive in terms of knowledge of taxonomic groups, but negative because of the proportion of species threatened with extinction on a global scale (Cameroon, 5th national CBD report, 2014). As for invasive flora species, there are more than 58 in Cameroon (Cameroon, 6th CBD national report, 2018).

According to the Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED), the degradation of ecosystems and unsustainable exploitation are the main dangers threatening biological diversity in Cameroon. The direct drivers identified concern unsustainable exploitation such as slash and burn agriculture or poaching, overexploitation of non-timber forest products, while the indirect drivers are linked to socio-economic conditions and the increasing demography of the population which increases pressure on resources (Cameroon, 5th CBD National Report, 2014).

From a regulatory and institutional point of view, the weakness of the institutional response, including insufficient funding for biodiversity research activities, is a serious handicap to knowledge of the indicators for sustainable biodiversity management and the means to mitigate or combat biodiversity loss (Cameroon, 5th CBD national report, 2014). Moreover, there is a very low level of information and knowledge on biodiversity and its value for human well-being. Given this low level of knowledge of the value, causes and consequences of biodiversity loss, the behavior of a wide range of stakeholders is unfavorable to biodiversity protection. This is particularly the case for private sector actors who focus on short-term profit and do not yet understand the link between investment to maintain ecosystem health and the sustainability of ecosystem services, and the resource base on which their profit depends (Cameroon, 6th CBD National Report, 2018).

THE CHALLENGE

Cameroon, as a member of the CBD and the IPBES platform, recognizes the lack of scientific information on biodiversity and ecosystem services. Addressing this key concern is a national priority for Cameroon and is aligned with the strategic approach defined by the CBD Strategic Plan 2011-2020 and its Aichi Targets for 2020. As a response measure, Cameroon's revised and updated National Biodiversity Strategy and Action Plan (NBSAP II) aimed to ensure that by 2020 there is a significant increase in the contribution of scientific information in biodiversity management and decision-making processes to address the drivers of biodiversity loss. (Objective 2 NBSAPs).

To address this concern, Cameroon has set up an initiative in 2017 to conduct an assessment of national biodiversity and ecosystem services (BES-A) based on the IPBES assessment model. This ongoing activity is supported by the World Conservation and Monitoring Centre - United Nations Environment Programme (WCMC-UNEP) with IKI Climate funds, and is helping several pilot countries, including Cameroon, to carry out national

assessments of Biodiversity and Ecosystem Services as part of the global project entitled "Supporting Decision-Making and Capacity Building through National Ecosystem Assessments" ("*Global Support*").

Although this initiative is part of the missions assigned to the sciences for the conservation of biodiversity and Ecosystem Services, i.e. "Assessing biological diversity", the identification of the threats weighing on this biodiversity and the main drivers of its erosion by economic sectors is one of the keys to the preservation of biological diversity. The direct drivers of biodiversity degradation identified by the 5th National Report for the CBD in 2014 concern unsustainable exploitation such as slash-and-burn agriculture or poaching, and the over-exploitation of non-timber forest products; but these results are not underpinned by quantified scientific data capable of convincing the players in the economic sectors concerned. As recently as 2018, the 6th National Report for the CBD published by the Ministry of the Environment recognized that the current weakness of scientific data on biodiversity and the weak link between scientists and decision-making processes on biodiversity has led to development intervention options that are not informed about the threats they pose to biodiversity and the extent to which biodiversity underpins and can contribute to the development of Cameroon's key economic sectors. The involvement of private and public actors from the economic sectors that are mainly responsible for the erosion of biodiversity therefore appears to be a major necessity in order to tilt the curve of biodiversity decline in Cameroon.

Hence the need for a scientific study to assess the sectoral footprint on biodiversity, i.e. a quantified evaluation of the main economic sectors driving biodiversity loss in Cameroon.

This initiative will pay particular attention to the key economic sectors expected to lead to the achievement of the structural transformation and growth objective for the next decade, as defined in the currently adopted National Development Strategy (NDS) (2020-2030). **Viable scientific data will be essential to engage private sector actors and inform the sector reform process planned for the implementation of the NDS and for effective advocacy by Cameroon for the adoption of a post-2020 CBD global biodiversity framework** with ambitious and achievable targets.

THE BIODEV 2030 PROJECT

The BIODEV 2030 project is an initiative financed by AFD, coordinated by Expertise France and implemented by WWF and IUCN. It is a pilot approach tested and deployed in 16 pilot countries with multiple socio-economic, environmental and geographical contexts.

In Cameroon, the main objective of the project is to better take into account biodiversity in strategic economic sectors in order to reduce pressures on nature in the next post-2020 decade. The project is being carried out in 4 stages :

1. **Diagnosis:** On the basis of scientific studies and diagnoses returned to stakeholders, initial scenarios will be discussed and co-constructed during workshops and consultations that will bring together public and private stakeholders and civil society in order to identify two priority sectors responsible for the decline in biodiversity;
2. **Multi-stakeholder dialogues and negotiations:** During workshops and consultations that will bring together different stakeholders from each of the two identified sectors, voluntary sectoral commitments will be proposed and discussed in the run-up to the 15th Conference of the Parties of the CBD, CoP15-CBD ;
3. **The integration of commitments:** this will involve the drafting of official commitment documents that will formalize the agreement of the various public, private and civil society actors in the country;
4. **Ownership of commitments:** once the commitments have been formalized, the project will support the key players in taking ownership of the commitment documents and in their implementation.

The benefits for the pilot countries are multiple: technical assistance; experimentation with a science-based approach to defining sectoral commitments; national dialogue; support for the implementation of national biodiversity strategies and action plans; and capacity building.

In Cameroon this project is implemented by the WWF Cameroon Country Program Office (CCPO) under agreement with WWF France, who will work in close collaboration with the Government of Cameroon, and in particular the Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED).

Within the framework of WWF's current priorities in the ongoing post-2020 preparatory process and in particular its advocacy initiative on the New Deal for Nature, Cameroon is a major partner. One of the main activities of the project is the conduct of a study on the drivers of biodiversity loss as a follow-up to the national BES assessment. This assessment will thus provide an opportunity for partnership in the generation of relevant data for priority sectors to align their priorities prior to CBD COP 15.

A COMPREHENSIVE AND PARTICIPATORY PROCESS FOR THE DEVELOPMENT OF THE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK:

By its decision 14/34, the Conference of the Parties at its fourteenth meeting from 17 to 29 November 2018 in Sharm el Sheikh adopts the preparatory process for the development of the post-2020 global biodiversity framework.

The Conference urges parties and invites all stakeholders to actively participate in and contribute to the process of developing a robust post-2020 Global Biodiversity Framework to foster strong ownership of the framework to be agreed and strong support for its immediate implementation.

The Fundamental Principles Guiding the Preparatory Process for the Post-2020 Global Biodiversity Framework are listed there. Among these principles: the process will be based on the best available scientific knowledge and data from relevant data systems, including natural and social sciences, local, traditional and indigenous knowledge, participatory science, as well as on good practices and lessons learned from the implementation of the Convention and its protocols to date.

In their Sharm El-Sheikh Ministerial Declaration, the States thus noted the need to contribute to a "New Deal for People and Nature" and called on the United Nations General Assembly to organize a Summit of Heads of State for Nature prior to COP15 of the CBD. For their part, the African Ministers adopted an African Ministerial Declaration for Biodiversity and reaffirmed African priorities for COP15, including the integration of biodiversity into economic sectors.

Within the framework of the BIODEV 2030 Project described above, WWF CCPO, will support the government and the different actors in this process which aims to accompany this movement towards ambitious multi-stakeholder commitments for the decade 2020-2030. This will be done by experimenting with scientific analysis, discussion and participatory construction of commitments and contributions at the national and sectoral levels with scientifically established objectives, which Cameroon will be able to propose for the CBD's post-2020 global framework for biodiversity, and beyond in the context of coalitions of private, public and civil society actors for biodiversity.

II. OBJECTIVES OF THE STUDY

The aim of the study will be to:

- Carry out a **scientific and sectoral assessment of the main drivers of biodiversity erosion in Cameroon.**
- Pre-identify, through a scientific and participatory approach, the two sectors that have the greatest impact on this biodiversity.
- To provide a preliminary assessment of the contribution of these different economic sectors to Cameroon's development/GDP and the financial impact due to biodiversity loss.
- Facilitate dialogue between the different stakeholders to identify two economic sectors with a strong impact on biodiversity decline on which to work in more detail

The results of the assessment will be used to conduct a discussion with the government and a multi-stakeholder dialogue, both public and private, with a view to defining two key economic sectors exerting pressure on biodiversity, for which a specific scientific diagnosis and dialogue will be conducted during the second stage of the project.

III. METHODOLOGICAL APPROACH

Using a methodology and robust scientific tool(s) (to be proposed in the technical offer) based on relevant indicators for measuring biodiversity and pressures on biodiversity, the consultant will have to assess the drivers of biodiversity erosion in Cameroon and identify and measure the respective level of pressure exerted by the different economic sectors. This analysis should be based on existing scientific data or data collection, should use impact analysis tools (e.g. mapping), and should include multi-stakeholder and cross-sectoral consultations.

The consultant will have to propose a robust methodology and scientific tool(s) (to be proposed in the technical offer) based on existing scientific data or on data collection, enabling modelling to be carried out.

Different methodologies exist (STAR, IBAT, LPI, Ecological Footprint, GLOBIO, DEPSIR, etc.) on which the consultant can base or be inspired to propose his own scientific methodology.

By mobilizing this corpus and/or his own methodology and robust scientific tool(s), the Consultant will propose his methodology to the project owner, WWF Cameroon.

A scientific committee will be set up for the technical supervision of this study and the analysis of all the deliverables. However, the final validation of the study will take place during a multisectoral workshop bringing together all biodiversity stakeholders in Cameroon, including the national platform for the science-policy interface on biodiversity and ecosystem services (SPBES).

Exchanges with this SPBES platform may also be organized during the course of the study for the framing and orientation of the Consultant(s).

Indeed, by a decision of the Minister of the Environment, a national platform for the science-policy interface on biodiversity and ecosystem services (SPBES) has been operationalized. The national platform for the SPBES, serves as an advisory body for all national assessments on biodiversity and ecosystem services and thus provides a supervisory and advisory function on research projects carried out on biodiversity and ecosystem services to ensure the use of information and communication tools developed by key biodiversity policy makers and **managers in the public and private sectors**. The national platform operates under the supervision of MINEPDED (and in particular the NBSAP committee). This innovative and inaugural platform has strengthened the collaboration of key government actors, researchers, universities and NGOs in conducting assessments on biodiversity and ecosystem services.

IV. DETAILS OF THE STAINS

Specifically, the consultant (group of consultants) is called upon to carry out the following tasks:

- Identify gaps in terms of scientific knowledge/data on biodiversity and the contribution of economic sectors to GDP based on a literature review;
- Draw up a scientific diagnosis based on a robust methodology and scientific tool(s) (to be proposed in the technical offer) by analysing the drivers of biodiversity erosion in Cameroon, and associate them with the different strategic economic sectors in the country;
- Inventory, analyse and represent the relative contributions of each sector to this loss of biodiversity based on the identified drivers of erosion;
- To inventory, analyse and represent the relative contributions of each sector to Cameroon's economic development and the costs related to the loss of biodiversity in this sector;
- Identify the strategic economic sectors with the greatest impact on biodiversity decline in Cameroon;
- Pre-identify and propose two key sectors that contribute to the erosion of biodiversity in Cameroon through multi-stakeholder discussions (and for which it is politically and economically possible to define development trajectories compatible with biodiversity conservation);
- Present the results and facilitate discussions at restitution/consultation meetings with the government and all relevant stakeholders organised by the WWF-Cameroon team. The conclusions of the study will be presented, including the sectors with the greatest impact, recommendations on how different sectors of society are addressing or can address biodiversity decline.

V. DELIVERIES

The expected products of the study are:

- **Deliverable 1: An inception report** following the scoping meeting with WWF-Cameroon and the scientific committee, with any adjustments agreed on the study's action plan, implementation schedule, applied methodology, or any other points (15 days after contract signature).

As the present ToRs are likely to evolve after consultation with the stakeholders, this inception report should take this evolution into account. It should also be emphasised that the methodology used here will be the one explicitly presented in the technical offer and which may have undergone changes following the refocusing meeting.

- **Deliverable 2: The structure of the study** in the Consultant's language for validation (20 days after signature of the contract) ;
- **Deliverable 3:** A report on the state of existing documentation on pressures on biodiversity, highlighting gaps in existing data and information (20 days after contract signature)
- **Deliverable 4: Draft 0 of the report in the** language of the Consultant analysing the drivers of biodiversity loss and identifying the sectors with the greatest impact. This report will specify the added value of this report compared to the already existing analyses (60 days after the signature of the contract) ;
- **Deliverable 5: The facilitation of a workshop to restate the results¹ to the** main stakeholders of the project in Cameroon. The workshop aims at presenting and discussing the findings of the evaluation with key stakeholders with a view to confirming the two strategic sectors that will be subject to an in-depth evaluation in a second phase (XX days after contract signature).
- **Deliverable 6: Final version of the report in** French and English of the analysis of the drivers of biodiversity loss written, edited and revised in French and English, including conclusions on the pre-identification of two sectors impacting biodiversity. This report will specify the added value of this report in relation to already existing analyses (20 days after the restitution workshop).
- **Deliverable 7: A summary of the study in** French and English. The document should not exceed 4 pages;

At least two meetings for reframing, support and monitoring-evaluation of the process by the scientific committee will be organised during the Consultant's work between deliverables 3 and 4.

Any delay in delivery on the schedule will result in a penalty of 1 per thousand of the total amount per day of delay.

VI. DURATION OF THE STUDY

The duration of the study is 60 days spread over three months.

VII. REPORT FORMAT

The final reports prepared by the consultant or design office will be produced in French and English. The documents to be submitted are in paper and electronic format. Paper versions will have to be provided in five copies for each language and electronic versions on USB key.

VIII. CONSULTANT'S PROFILE

National or international consultancy firm or group of consultants (can be a duo of national and international consultants) with the following profiles:

- University Degree in Environment, Biology, Natural Resource Management, Agriculture, Geography or any other similar discipline
- At least 10 years' experience in Biodiversity assessment and the elaboration of Strategy documents on Environment and Biodiversity (State reports/evaluation of the Environment, Forests, Biodiversity, etc.);
- Proven competence in the development of similar studies;
- Competence and strong experience in the field of Cameroonian environmental policy, the Cameroonian rural world, and biodiversity management.
- Sociologist with skills and strong experience in community management of natural resources;
- Economist with skills and strong experience in socio-economic development modelling and natural capital assessment.

Contract-related competences :

- Be able to conduct an independent evaluation with a clear understanding of the objectives and the process of carrying out the evaluation work required.
- Ability to establish contacts in the private and public sector for important data collection.
- Proven ability to apply good practice and provide analytical advice.
- Ability to apply a scientific methodology for analysing the impacts of economic sectors on biodiversity in Cameroon.
- Demonstrate very good written and oral communication skills, including the ability to prepare quality reports.
- Be free of any commitments during the consultation period.
- Be able to work under pressure and have a perfect knowledge of French and English (oral and written).

IX. COMPOSITION OF THE APPLICATION FILE

The application file must include a technical and a financial offer.

¹ The logistical organisation of the workshop and its financing will be provided by WWF Cameroon.

The technical offer must include:

- A letter of motivation addressed to the National Director of WWF Cameroon (2 pages maximum);
- A curriculum vitae highlighting the qualifications and professional experience of the person concerned or of the Consultant's team as well as the references of three (03) persons who can attest to the competence of the candidate(s);
- Evidence of the applicant's performance in the field of biodiversity assessment and similar studies
- Understanding the mandate
- A detailed description of the methodology envisaged for the study and its different articulations
- A proposed timetable.

The financial offer will be made specifying by major line of business (i) the number of days and daily fees of the consultants; (ii) disbursements and management fees; (iii) other costs (catering, accommodation and travel during mission days). The offer will also include details of the amounts exclusive of tax and all taxes. Special mention should be made of any exemptions.

X. EVALUATION OF APPLICATIONS

The examination of the applications submitted will be carried out on the basis of the evaluation of the technical and financial offer.

Only those applications that have obtained a score of at least 70 points out of the total of 100 points will be retained for an evaluation of their financial offer. The final choice will be based on the best value for money (combined score). Account will be taken of the skills and experience of the consultant(s) and the proposed methodology for carrying out the study. The financial offer must specify the daily rate of each consultant's fees.

An interview is scheduled for the final selection.

XI. TERMS OF PAYMENT OF THE CONSULTANT

The consultation will be financed by the "BIODEV 2030 project" budget. The terms of payment will be defined according to the following schedule:

- 20% at the start of the study;
- 30% upon approval of version 0 of the report;
- 30% to the validation of the final version of the report and its synthesis;
- 20% to be paid after the organization of the restitution workshop and as soon as the corrected report has been transmitted.

XII. CONDITIONS FOR SUBMITTING A FILE

Applications should be sent to recruit-cam@wwfcam.org (in 2 separate files for the technical and financial offers) with the subject "STUDY OF THE SECTORAL BUILDING ON BIODIVERSITY IN CAMEROON - technical/financial offer".

No later than December 24, 2020 at Midnight CAT.