INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

TITLE:	ESTABLISHING A SYSTEM FOR THE COLLECTION, STORAGE, PROCESSING AND DISSEMINATION OF FOREST AND WILDLIFE STATISTICS IN CAMEROON
SERIAL NUMBER:	PD 796/15 **Rev.2** (M)
COMMITTEE:	ECONOMICS, STATISTICS AND MARKETS
SUBMITTED BY:	GOVERNMENT OF CAMEROON
ORIGINAL LANGUAGE:	FRENCH

SUMMARY:

Cameroon has no effective national collection, processing, storage and dissemination system for forest statistics. In 2012, MINFOF submitted a proposal for a new organizational structure to the Presidence of the Republic of Cameroon. The document provided for the creation of one Statistics Management Unit under the Directorate of Cooperation and Projects (DCP).

- **The Development Objective of this Project** is to contribute to the sustainable management of forest resources of Cameroon through the development of a national information system on forest resources.
- **The Specific Objective of this Project** is to make the national information system for the sustainable management of forest resources operational.

This project is a new national strategy for improving the forest statistics management system. This strategy consists in the effective implementation of this system. In particular, this project is to develop the capacities required for:

- ❖ Improving the information system to best meet the expectations of users and to adapt to the demands of the OFAC and FLEGT mechanisms implemented in Cameroon.
- ❖ Building the capacity of human resource structures for the collection and processing of forest statistics in MINFOF and with the economic agents of the timber sector.

The implementation of this project will provide the full computerization of the forest statistics collection and processing system and therefore contribute to better decision-making in the forestry sector.

EXECUTING AGENCY: DIVISION OF COOPERATION AND PROGRAMMING, MINISTRY OF FORESTS AND WILDLIFE

DURATION: 24 MONTHS

PROPOSED BUDGET AND FUNDING SOURCES:

SOURCE	CONTRIBUTION IN US$
ITTO	**567,627.00**
GOV'T OF CAMEROON	**126,792.00**
TOTAL	**694,419.00**

Table of Contents

PROJECT BRIEF

1. Context and problem to address

The production of statistics in Cameroon is governed by Statistics Law No. 91/023 of 16 December 1991. Decrees and regulations organize the production of statistics through the establishment of the National Institute of Statistics (INS) and the setting up of the framework for coordination of statistical activities and the definition of the responsibilities of Ministerial directorates in the development and release of statistical data.

The current national forestry statistics collecting, processing, storage and dissemination system is still in infancy or even non-existent. Statistical information data are handled piecemeal, sporadically and are made available in different publications and dissemination formats by the various development actors in the forestry sector, and they are very unreliable. The statistical information when available, is scattered in several management structures, which generally do not share data. The time lapse between production and availability of statistics is very long (two to three months in general), which does not make for good reactivity. Within the rural sector, the Forest and Wildlife sub-sector shows significant potential in terms of wealth creation, it's also one sub-sector whose development opportunities are the most promising (CIFOR, 2013). Several unexplored niches for growth and jobs creation do exist: the further-processing of forest products, the wood-based energy sector, NTFPs, recreational hunting and ecotourism and environmental services (REDD, carbon economy, etc..).

Confronted with this situation, the Government commissioned one working group on 2nd October 2014 (Order N°0453/N/MINFOF/SG/CC/EM) whose responsibility was to conduct rounds of discussion towards the creation of a feasible and operational information management system.
The Working Group convened its first session from 27 to 28 November 2014 and a number of comments and recommendations were identified in its meeting report:

- To harmonize and establish basic statistical data and metadata standards and set up procedures for data traffic and sheduled statistics reporting;
- The existing need to demand stricter compliance with procedures from decentralized offices and branches (at both departmental and regional levels), programme managers and internal auditors/inspectors;
- To involve decentralized technical services, Regional Statistics Units and further empower the division in charge of statistics (DCP) within MINFOF ;
- To involve the INS responsible for the national statistical system.

2. Objectives and implementation indicators

The development objective of the project is to contribute to the sustainable management of forest resources and GDP through the provision of reliable information to users in real time. The project aims at one specific goal: To develop a national collection, storage and dissemination system for statistical data on the forest and wildlife sub-sector for the management of projects and/or programmes and the publication of information to the public. It hinges on **03 Outputs** described as follows: **Output 1:** The mechanism for coordinating the activities of structures that collect and manage forest statistics is established and operational **; Output 2:** Reliable information collection methodologies are developed and implemented **; Output 3:** The forest data management unit is established and operational.

Over the short-, medium- and long-run the goal is to significantly improve the collection, storage, processing, analysis and dissemination of forest statistical data in Cameroon, so as to provide the country and the international community the information they need to formulate investment policies, plans and programmes in this sector. **The issue at stake in this project is for MINFOF to raise to the challenge of generating efficient forest statistics through the work of DCP,** thereby ensuring that the forest sector can provide its full contribution to both the protection of our natural heritage and the improvement of our economy. To achieve this goal, an improved control of our forest programmes

has become an imperative now more than ever as far as planning, implementation, monitoring and evaluation are concerned.

3. Beneficiaries, expected outcomes and outputs

The key beneficiary of this project is the Cameroonian State through the Ministry of Forestry and Wildlife (MINFOF) which will be responsible for implementing the project. The other beneficiaries are the ministerial departments, universities and economic operators, the private sector, international NGOs, the International Community, etc.

Outcome expected are as follows:

- One statistics operational management unit within MINFOF to :
  i. Adequately complete forestry statistics questionnaires and forms (ITTO, FAO);
  ii. To prepare the national annual report based on the format of the harmonized set of ATO-ITTO Principles, Criteria and Indicators.
- MINFOF executive staff trained in new procedures for collecting forest statistics.

4. Implementation strategy

This project aims to radically change the forest statistics management procedure. This will require first and foremost to secure the full support of all stakeholders. To achieve this, the participatory approach, through workshops for different types of stakeholders (economic operators, water and forestland management engineers), will be applied.

Operationally, the project will be implemented in the following four stages namely;

- Establishment of the statistics management unit ;
- Proactive involvement of stakeholders in the management of forest and wildlife statistics ;
- Harmonizing the different methodologies for collecting and analyzing statistics and developing a manual ;
- Development of a computer module for the centralization, analysis and dissemination of statistical data.

5. Sustainability of project achievements

At the close of the project, the ministry shall operate the established statistics management unit through its programmed budget, as it has always done in the context of other jointly-funded projects. Additionally, the new MINFOF organizational chart to be submitted in 2013 (*sic*) to the higher tiers of Government for signature provides for the creation of a Statistics Unit within the DCP. Consequently the management unit will continue the work after project completion until the Statistics Unit has become operational.

Furthermore, maintenance services on its IT applications will be provided by the IT Unit of MINFOF.

6. Key assumptions and risks

Under the development objective, the following assumptions have been identified : The the institutional framework for the implementation of the project is stable and secure. The proposed solution to address this risk is for the Minister to issue two administrative orders : **1.** One Order that would establish the management and project monitoring structures; and 2**.** Another Order that would appoint the key personnel of these structures (Coordinator and Steering Committee Manager). **Under the Specific Objective**, the key assumption is the adhesion of users to the access code allocation policy for this system. The proposed solution is to conduct a nationwide awareness campaign targeting the economic operators of the forestry sector to expound the new approach in matters related to forest statistics information processing.

Under Ouput 2 : « Collection methodologies are adapted to and managed by collection centre » ; the identified assumption is as follows: Accessibility to and availability of internet services providers' networks. At that level, the Telecommunication Agency of Cameroon, which is the organization responsible for regulating and monitoring internet service providers, is currently conducting a

campaign to encourage them to spare no efforts to improve the accessibility to their networks. The objective assigned to them is to reach accessibility rates of 90 to 100% of their networks during working hours.

Under Output 3 : "The forest statistics management unit is operational and improved", key assumptions are as follows :

- Facilities for optical fibers communication cover every city where stakeholders of the system are business based. This key assumption can be addressed through extending the coverage of mobile telephone network facilities that mobile telephone operators offer their users, and to have internet connection facilities made available wherever networks are accessible. Through this alternative arrangement, stakeholders may access the newly-established information system even in cities where optical fiber facilities have not yet been installed.
- A personnel committed and available to perform the various tasks; high staff turnover would be detrimental to the effective and efficient management of the project;
- Selected external consultants and outsourced subcontractors will possess the highest professional competency standards in their respective trades.

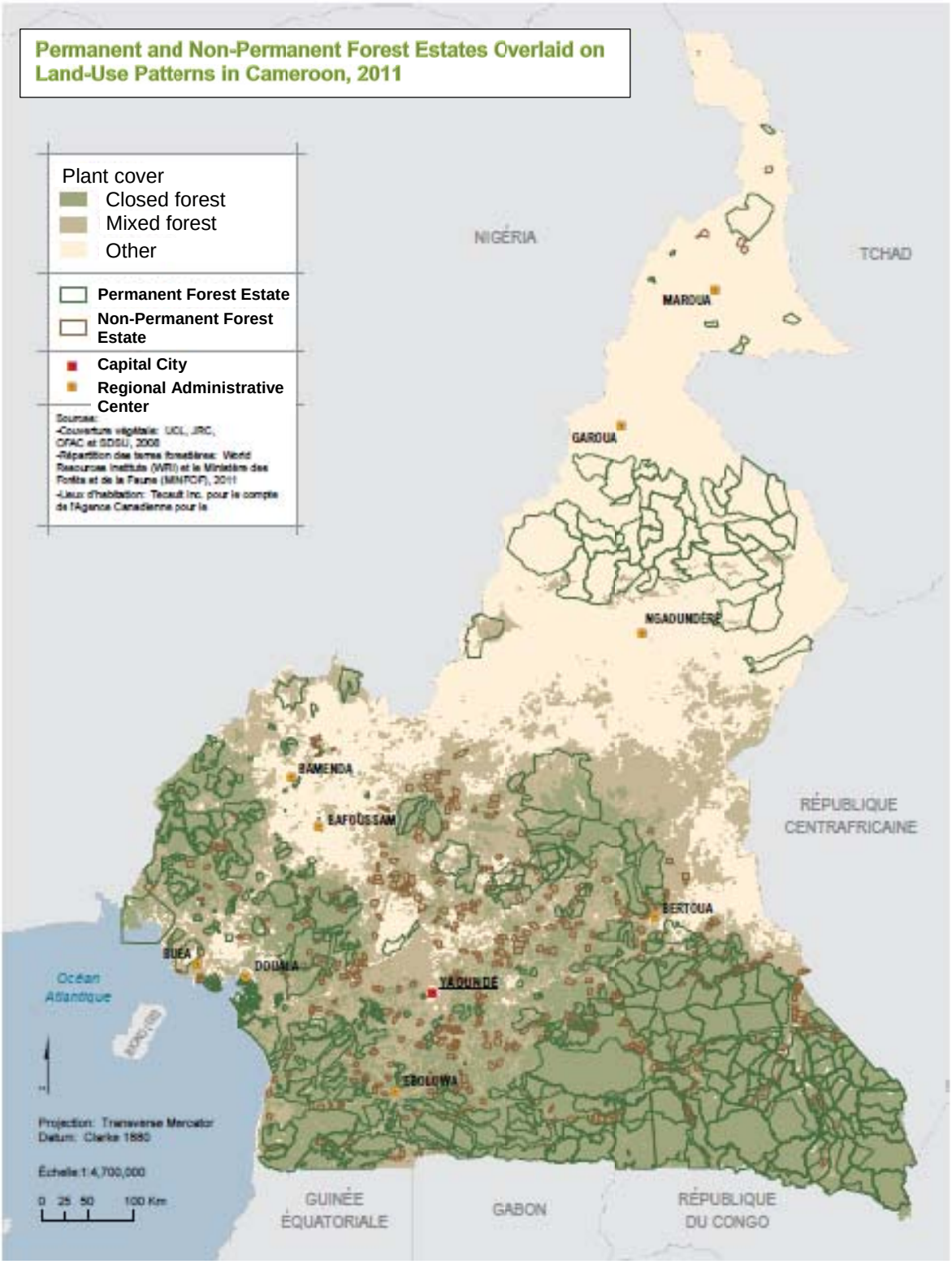
7. Budget Contributions

Source	**Contribution in US$**
ITTO	**567,627.00**
Government of Cameroon	**126,792.00**
TOTAL	**694,419.00**

LIST OF ACRONYMS

AFD : French Development Agency
ANAFOR : *Agence Nationale d'Appui au Développement Forestier* (The National Forest Development Support Agency)
CDMT : Medium-term Expenditure Framework
CIFOR : Centre for International Forestry Research
C2D : *Contrat désendettement et développement* (Debt clearing and Development Contract)
COMCAM: *Commercialisation des bois Camerounaise* (Cameroonian Marketing of Timber)
COMIFAC: Central African Forestry Commission
DCP: *Division de la Coopération et de la Programmation* **(Division of Cooperation and Programming)**
DFAP: *Direction des Faunes et des Aires Protégées* (Directorate of Wildlife and Protected Areas)
DF: *Direction des Forêts* **(Forestry Directorate)**
DPT: Direction de la Promotion et de la transformation des Produits Forestiers **(Directorate for the Promotion and Processing of Forest Products)**
FAO: United Nations Organization for Food and Agriculture
INS: National Institute of Statistics
MINFI: Ministry of Finance
MNEPAT: *Ministère de l'Economie, de la Planification et de l'Aménagement Territoriale* (Ministry of the Economy, Planning and Land Development)
MINFOF: Ministry of Forestry and Wildlife
OFAC: *Observatoire des Forêts d'Afrique Centrale* (Monitoring Centre for Central African Forests)
ONACC : *Observatoire National sur les Changements Climatiques* (National Climate Change Monitoring Centre)
ITTO: International Tropical Timber Organization
PAP : Priority Action Plan
NTFP: Non-Timber Forest Product
PSFE: *Programme Sectoriel Forêt et environnement* (Sectoral Programme for Forests and the Environment)
PSRF: *Programme de Sécurisation des Recettes Forestières* (Forest Revenue Securing Programme)
SIGIF: *Système Informatique de Gestion des Informations Forestières* (Computerized Forest Information Management System)
IUCN : International Union for the Conservation of Nature

MAP OF THE PROJECT AREA



PART 1. PROJECT CONTEXT

1.1 Origin

The Ministerial Road Map, the PAP, the CDMT, the Government Administration Performance Project (PPP), commitments made with partners (ITTO, FAO, etc.) are all planning, programming, budgeting and monitoring tools available to MINFOF to implement its sub-sectoral strategy. Field-level collection, processing and storage of data on a regular and systematic basis have thus become vital processes for improving data monitoring and permanent reporting and facilitating the decision-making process. Yet the collection and management of statistical information is a real challenge within MINFOF.

The Forest and Wildlife subsector has been the focus of national and international agendas for sustainable management of forest and wildlife resources and it should achieve those objectives and performance targets as defined under its planning and budgeting tools (Strategy, PAP, CDMT, PPA, etc.). This necessarily involves generating reliable statistics that can become optimal input material under the performance indicators used in the programmes currently underway.

Furthermore, the needs for reliable statistical data on forest ecosystems, [and those of] the trade in timber and non-timber forest products (NTFPs) have been felt for more than a decade in the following terms :

- ❖ for the Government Forestry Services, to improve upon the vague estimates used in the past and to have more reliable statistics available so as to be able to objectively appraise existing forest investment options and level of needs;

- ❖ For policy makers and decision makers, to have relevant indicators available to select the appropriate development policies and strategies for the forest sector as well as in matters related to the sustainable management of natural and environmental resources; and

- ❖ To fill out more accurately and return more dilligently the forest statistics questionnaires to be submitted to international organizations such as FAO, ITTO, *Observatoire des Forêts d'Afrique Centrale*, the World Bank, the AfDB, the EU, etc.

The current national forestry statistics collecting, processing, storage and dissemination system is still in infancy or even non-existent. Statistical information data are handled piecemeal, sporadically and are made available in different publications and dissemination formats by the various development actors in the forestry sector, and they are very unreliable. The statistical information, when available, is scattered in several management structures, which generally do not share data. The time lapse between production and availability is very long (two to three months in general), which does not make for good reactivity. In the rural sector, the Forest and Wildlife sub-sector can have a significant potential in terms of wealth creation, and its development opportunities are most promising (CIFOR, 2013). Several unexplored niches for growth and jobs creation do exist: the further-processing of forest products, the wood-based energy sector, NTFPs, recreational hunting and ecotourism and environmental services (REDD, carbon, etc.).

The Monitoring Unit of MINFOF also deplored the poor quality standard of information provided by DRFOF. In addition, statistics divisions that exist in regional offices do not operate systematically and efficiently or do not have standardized tools for collecting, processing and disseminating data generated in the sub-sector. Confronting the situation, the Government commissioned one working group on 2nd October 2014 (Order N°0453/N/MINFOF/SG/CC/EM) whose responsibility was to conduct discussions towards the creation of a feasible and operational information management system.
The Working Group convened its first session from 27 to 28 November 2014 and a number of comments and recommendations were identified:

- To harmonize and establish basic statistical data and metadata standards and set up procedures for data traffic and sheduled reporting;
- Need to induce stricter compliance with procedure from Delegates (at both departmental and regional levels), programme managers and internal auditors;

- To involve decentralized technical services, Regional Statistics Units and further empower the service in charge of statistics (DCP) within MINFOF ;
- To involve the INS responsible for the national statistical system.

From the foregoing, it becomes appropriate to have a statistics management **system** that would enable automation of information, statistics production in real time and therefore the preparation and publishing of MINFOF statistical yearbooks. The system should be developed, together with related tools, with the support of a consultant / facilitator. However to-date MINFOF hs not been able to raise the funds required for the implementation of said management unit. As a result and in the light of the above considerations, this project proposal which aims to develop a statistics management unit processing data on the use, production and marketing of forest products in Cameroon, is submitted to ITTO for funding.

1.2 Relevance

1.2.1 Conformity with ITTO objectives and priorities

Compliance with ITTA, 2006

The project will assist governments, foresters and other stakeholders to have reliable forest and wildlife statistics data available in real time in Cameroon. This will contribute to achieving the overall objective of the ITTA (2006) which is *"to promote the expansion and diversification of the international trade in tropical timber from forests under sustainable management and forest harvesting in compliance with national regulations, and to promote Sustainable Forest Management in tropical timber producing forests".*

The project will specifically contribute to achieve items h and l of this general objective, phrased as follows:

h) "Improving market intelligence and encouraging information sharing on the international timber market with a view to ensuring greater transparency and better information on markets and market trends, including the gathering, compilation and dissemination of trade related data, including data related to species being traded" : The project addresses these objectives either directly, aiming to improve market information in order to ensure greater transparency, or indirectly by providing basic information essential to the development of policies, laws, regulations and strategies for better utilization, marketing and management of the forest resource base..

l) "Strengthening the capacity of members for the collection, processing and dissemination of statistics on their trade in timber and information on the sustainable management of their tropical forests". This project shall contribute to building human resources, material and financial capacities.

It will also contribute to ITTO cross-cutting objectives related to « Communication and Outreach » and international cooperation.

Conformity with ITTO Action Plan

This project proposal is consistent with the ITTO Strategic Action Plan (2013–2018) including Strategic Priority 5. « Improve the Quality and Availability of Information on Tropical Forests, Forest Product Markets and Trade » including specific measures designed to address this strategic priority by the Biennial Work Programme and projects such as stated in the ITTO Action Plan 2013-2018, namely:

- To conduct studies, disseminate information and provide regular reports on conditions in tropical forests and markets for tropical forest products. This project is for the establishment of a statistics management unit on forest production and trade of timber, to use existing data, collect additional data, better compile and process all the data collected, synthesize the data, and disseminate information on the forestry and timber sector.
- To assist members in improving quality of timber and non timber information collected and reported. At least two tasks have been planned, consisting in collecting data and verifying data compliance, and carried out annually over the entire national territory.

- To build capacity of member countries for data analysis and policy formulation. le présent projet à envisagé le renforcement des capacités humaines en technique de collecte et d'analyse des données statistiques du bois et des PFNL.
- To develop partnerships with other organizations to collect forest and trade data and further harmonize information. INS will represented in the Project Steering Committee together with MINFI and MINEPAT, which are the institutions responsible for collecting, analyzing and disseminating forest statistics in Cameroon.

1.2.2 Relevance to the policies of the submitting country

This project, aiming to operationalize the national information system for sustainable management of forest resources, will contribute to providing our country with updated information on the development, production and marketing of all of Cameroon's forest resources. To serve this end, the project will address the concerns of the Cameroon Government as underpined in the following policies and programmes:

- According to policy paper Vision 2035 for Cameroon, one instrument is to be established that should enable to "capture the capitals" required to meet the domestic market and raise the levels of exports for those manufactured goods having higher growth potential.
- According to the 2010-2020 Strategy Paper for Growth and Employment (DSCE) prepared in 2009, there is a need for implementing development and regeneration programmes for the production forests of the permanent forest estate, add value and develop forest and wildlife resources and to develop forest industries.
- Under the Forest and Wildlife Sector Strategy, 2012-2020 developed in 2012, to produce forest and wildlife statistics almost continually so that policy makers and their services can be continuously supplied with useful information on the evolution of the sub-sector in general and the implementation of the strategy in particular.
- Under the Detailed Program for the Development of Agriculture in Africa (CAADP) and the National Agricultural Investment Plan 2014-2020 Cameroon, developed in 2014, the statistics management system is to be improved through the establishment of information management system.

1.3 Target area

1.3.1 Geographical location

The national territory of Cameroon covers 466,326 sq.km, of which 6 000 sq.km are water bodies. Cameroon has 22.5 million ha of forest, including 17.5 million ha open to the timber industry and 14 million ha of permanent forests. The latter constitute the permanent forest estate, which consists of 8 million ha of production forest (60%) and 4 million ha of conservation forest and wildlife reserves (40%).

Cameroon's population is estimated at nearly 20 million. The rate of population growth is 2.7% and increasing urbanization, estimated at 54% of the population, is increasing pressure on land which has doubled since 1975 (UNDP, 2008).

The proposed small project is based and operated at central government level with representation in the ten regional offices of MINFOF for: :

- Improvement of the economic benefits of the forestry sector due to planning and scheduling based on reliable data
- Sustainable forest management more secure

Stakeholders who generate information on forestry activities are distributed over a large portion of the national territory, including in the administrative centres of ten regions of Cameroon.

In addition, timber processing plants are located in areas where major towns have been encircled on the same map. Logging areas have been identified and marked around (a number of) towns having forest department local offices and facilities..

Furthermore, all central and decentralized services (ten regional offices, 58 departmental quarters and 360 forest stations) covering the entire national territory have an interest in forest statistical information. Finally, Cameroonian civil society organizations (100) and international NGOs (20).

However the information collected are relevant to stakeholders who are located throughout the entire national territory (including training centres). In other words, the project has national coverage.

Therefore, all decentralized services (regional and departmental quarters, and forest stations) covering the whole country, do have an interest in the information generated by operators of the timber trade.

The technical option selected and implemented under this project (focusing on Internet-based application) is likely to provide accessibility to information from outside the country.

1.3.2 Social, cultural, economic and environmental aspects

Tropical forests provide a significant set of and economic, social and environmental functions. The Central African forests are a major source of revenue for the countries of the subregion in both the formal sector and the informal sector. In most countries of the Congo Basin, logging remains the main provider of private wage employment, especially in remote rural areas (CIFOR, 2013). In addition, forests have more attributes and functions that can be summarized in the following table:

Table: Functions and services rendered by the forests of Cameroon

Climate and water regulation, greenhouse effect mitigation, recycling of organic and human waste materials ; maintain biodiversity and control soil erosion.	Production of commodities such as industrial timber, construction material (wood, vines, etc.) fuel wood, foodstuff and medicinal and genetic resources (NTFPs)
Land and soil necessary for habitat/housing, agriculture, recreation and protection areas.	Vehicule for art, cultural, historical, spiritual, scientific and educational values.
Conservation of genetic, species and ecosystem diversities.	

We will present in more thorough details the economic, social, cultural and environmental roles of forests in Cameroon.

Economic aspect

A 2013 study by CIFOR has shown that, at the macroeconomic level, the added value of the forestry sector consistently accounted for 2.7% of the overall added value (GDP) between 2008 and 2010. Cette contribution est supérieure à la contribution du secteur minier hors pétrole (0,18% du PIB en 2010). This GDP contribution exceeds that of the non-oil, mining sector (0.18% of GDP in 2010). However it is still much lower than that of the agricultural sector at large which grew from 15% to 17.5% between 2008 and 2010. It also remains in the same order of magnitude as that of the agro-industry which is about 2%.

As for jobs, the latest figures available at the National Institute of Statistics (2008) list 55 companies with 7,766 permanent and 404 temporary jobs in the forest and wildlife sector. The total number of informal jobs is estimated at 20,681. In the same year, formal employment in the agricultural sector and the mining sector excluding oil were estimated at 27,424 and [?]246 respectively.

According to the same study by CIFOR (2013), taking the 2010 data as baseline, the contributions to public revenues including non-deductible VAT, taxes on products, taxes on imports and taxes on

exports amounted to CFA F 18,176 billion for forest-wildlife sector, 16.086 billion for the mining sector and about 3 billion for the agricultural sector. The value of export revenue generated by the forest sector in 2008-2009 averaged 218.5 billion CFA francs per year.

However when 2008 is used as baseline year (just before the most severe effects of the crisis in Cameroon), the sector generated 270.67 billion CFA francs of export earnings of which 401 million CFA francs for the value of NTFP exports and 270,266 billion CFA francs as value of of timber products exports.

The forestry sub-sector revenue amounts to 69.20% of the wages paid to agricultural workers. Also this sub-sector contributes 49% to the revenues paid by the agriculture, forestry and mining. These include the non-deductible VAT, taxes on imports, taxes on exports and taxes on products. It contributes slightly more than the the mining sector and considerably more than the agricultural sector. The forest wildlife sub-sector's contribution is 4% of non-oil GDP of Cameroon.

Table : Contribution of the Forest-and-Wildlife Sub-sector to Cameroon GDP

Industry	**Added value (billion F CFA)**	**Contribution to non-oil GDP (%)**
Industrial Timber	177.06	1.53
Fuel wood	152.00	1.31
NTFPs	61.06	0.52
Artisanal wood sawing	44.87	0.39
Community Game-hunting	16.51	0.14
Sports/Recreational Game-Hunting	3.71	0.06
Ecotourism	1.66	0.01
Total	**456.9**	**3.95**

Source : CIFOR, 2013

Social and cultural aspects

As far as welfare is concerned, the forest sub-sector has a non-negligeable impact on communities. These impacts are visible on the health, education sector and the construction of development infrastructure.

- *Impact on health*
  - Construction, rehabilitation and equipment of many hospitals, clinics and health care centers.
  - Recruitment or nurses and subsidizing of their wages.
  - Provision of ambulances for hospitals to benefit local communities
  - Support to health care services for a number of diseases: HIV / AIDS, Tuberculosis and Malaria.
- *Impact on education*
  - Construction, equipment and renovation of schools for the benefit of Bantu and Pygmy populations (indigenous communities)..
  - Provision of educational material to schools;
  - Subsidizing of school teachers' salaries;
  - The construction of housing infrastructure for teachers;
  - Support for employees' children schooling.

Impact on development infrastructure:

While the logging industry contributes to the construction of road and bridges in the areas where it conducts its activities, it is worth noting that the village community tracks and dirt roads used to transport the logs are degraded by the passage of log trucks which only makes the life of the communities more difficult. These impacts have been mitigated through the

implementation of support measures, including the Contribution to Rural Development and the Annual Forest Royalty (RFA)

Culturally. some communities regard the forests surrounding their local areas as part of places of worship they devote to their divinities. These forests are declared sacred. Consequently. any logging activity within these sacred woodlots and forests is prohibited.

Environmental Aspect

Forests provide several types of environmental benefits. Among the environmental services provided by forests in Cameroon, there are carbon sink functions, watershed protection and soil fertilization.

The Cameroonian forest is estimated to cover about 22 million hectares for all forest categories, or 46.27% of the national territory. During the past few years, these forest areas have undergone a dramatic degradation process. This is due to agriculture, the overexploitation of forest areas for timber and fuelwood, bush fires, uncontrolled mining and illegal logging activities.

- **Agriculture**: Logging activities do impact the lives of vicinal communities, in that in the medium- to long-term they modify local climates. The crop calendar of the communities is altered, which poses new challenges. Three types of farming practices in Cameroon are dominant: the extensive food crops (subsistence farming), cash crops and agro-industry. One of the main causes of deforestation, and the most cited, is the practice of slash and burn agriculture as subsistence farming (nearly 80% of rural households in Cameroon engage in this practice (RPP, 2012)).

- **Non respect of the management plans in forest concessions and uncontrolled logging:** Of the 3 million cc.m of timber harvested annually, 25 to 30% are taken illegally to supply the domestic market (RPP, 2012). The loss of forest cover caused by logging is mostly caused by the opening of skid trails (development of road infrastructure), the development of log yards, life bases and even migration.

- **The low energy efficiency and the problem of fuel wood:** Fire wood remains one of the most used forms of energy in Cameroon. The use of firewood as an energy source for households is widespread, not only in rural but also in urban areas. More than 7.4 million people living in rural areas have no access to modern energy services and only 3% of rural households have access to cooking burner gas. Approximately 9.8 million m3 of firewood are harvested annually in Cameroon, as estimated by FAO (2009) and over 76% of these are harvested in forest areas. But MINFOF estimates the harvested quantity to stand at 12 million cc.m. per year. However, reliable data are actually not available now for firewood because it is difficult to monitor the trends of firewood consumption in the country.

- **Bush fires and forest fires:** Wildfires are important causes of deforestation and forest degradation. They may be started without restrictions in response of the needs of agriculture, livestock and hunting activities. These fires are destructive in mountain areas where fire is used for regenerating pastures. Indeed, they have a negative impact on the stability of watershed slopes with land slides occurring together with the degradation of soil quality, and therefore impacts on the condition of vegetation and biodiversity that develop there.

- **Uncontrolled mining:** Cameroon has significant mining (iron, bauxite, etc.) and oil resources. These resources are not fully utilized although many deposits have been identified. However, the current operations, mostly conducted at a small scale, are already causing serious damage in terms of deforestation and forest and soil degradation. The impact of mining on the forest is twofold: locally, open pit mining is a source of deforestation; more broadly, the development of these mines is associated with the

construction of access roads (road, railway) to export production has enabled the migration of labour to mining sites and areas.

1.4 Outcomes expected at project completion

- One statistics operational management unit within MINFOF to :
  i. Adequately complete the forestry statistics questionnaires / forms (ITTO /FAO);
  ii. Prepare the annual national report based on the format of the harmonized set of ATO-ITTO Principles, Criteria and Indicators, and providing such basic information as input to
    - The Global Forest Resources Assessment by FAO every five years ; and
    - The 5-year report on the Status of Tropical Forest and Tropical Forest Management by the ITTO.

- MINFOF executive staff trained in new procedures for collecting forest statistical data.

PART 2. PROJECT OBJECTIVES AND RATIONALE

2.1 RATIONALE

2.1.1 Institutional set-up and organizational issues

The Government has entrusted the management of the forest sector to MINFOF, through its various branches including the central divisions and decentralized structures.

In 2004, the Ministry of Forestry and Wildlife established for the first time in its organizational structure one Division responsible for Cooperation and Programming, a.k.a DCP. In pursuance of its mandate DCP is to undertake the development and implementation of a *Schéma directeur de Statistiques forestières* (SDSF) or "Forest Statistics Master Plan". As blueprint for the establishment of a Forest Statistics System, in terms of establishing a Forest Statistics Information System is a prerequisite in that it provides the entire architecture of the system and identifies key steps, while indicating its costs.

As part of the implementation of this Master Plan for Forest Statistis, a Ministerial Order was issued in 2012 by the Minister responsible for Forestry, which includes all structures that produce, manage or use forest data. This Order creates a Steering Committee (*comité de pilotage*) which brings together policy makers, one technical committee comprising representatives of decision-makers, specializing in information systems and a user group that includes users within the department as well as external partners.

Consequently, it will be ensured that the Minister of Forestry take two orders, one which will create the management and monitoring structures of the project, i.e. the Executing Agency and the Steering Committee, and one to appoint persons who will compose the staff of these two structures.

The structures which are to provide their collaboration to the Executing Agency will be clearly identified, together with the nature of their involvement in the implementation of the project.

This arrangement allows the project activities to continue regardless of the changes that might occur in the organization of the Ministry.

2.1.2 Stakeholders analysis

Based on Memorandum N°*0453/N/MINFOF/SG/CC/EM* of 02 October 2014, a meeting was held from 27 to 28 November 2014 in the Meeting Hall of the Le Relais Saint-André Hotel in Mbalmayo, Cameroon -- a workshop to review the planned system of statistical data production, updating and centralization system for the Forest and Wildlife Sub-sector. This workshop was organized by the Ministry of Forest and Wildlife with the support of GIZ/ProPSFE, as part of the first full session of the Working Group created under Memomandum N°0453/N/MINFOF/SG/CC/EM of 02 October 2014. Working Group membership included executive staff from the Ministerial cabinet (Technical Advisor and Internal Auditor of the Service), the General Secretariat (Manager of the Division of Cooperation and Programming, Manager of the Communication Unit, Manager of the Programming and Projects Unit et representatives of the Technical Directorates), representatives of INS and MINFI ; the Working Group has identified and characterized the main stakeholders involved in the management of information on the forest resources of Cameroon. Stakeholder groups can be split into two categories : generators of information and users of information. Information generators include Governmental structures responsible for the management of forest resources, and timber users (logging interests, industrialists and traders). As to the users of information, their category comprises the sectoral ministries concerned, partner NGOs and civil society organizations, a number of intergovernmental organizations (CEMAC, ECCAS) and a range of technical and financial partners (ITTO, FAO, etc.).

Under the project, three stakeholders groups have been identified. They are as follows :

1. Primary Stakeholders :
    a. Decentralized MINFOF services (Regional and Departmental Offices, Conservation Services and Forestry Inspection Stations)
    b. L'*Institut National des Statistiques* (INS) (National Institute of Statistics)
    c. Utilizers of forest products (planters, logging businesses, timber industrialists, traders).

2. Secondary Stakeholders include the following:

    a. The Central Services of MINFOF (Division of Cooperation and Programming; The Directorate of Forets, The Directorate for the Promotion and Processing of Forest Products, the Directorate of Wildlife and Protected Areas) ;
    b. The National Forest Development Support Agency (ANAFOR)
    c. The National Centre for Remote-sensing and Mapping (CELTECAF), the academia, civil society organizations (NGOs and other partner associations) and local authorities and CTD.

3. Tertiary stakeholders include the line ministries concerned : the Ministry of the Economy, Planning and Land Management (MINEPAT), the Ministry of Finance (MINFI), the Ministry of Agriculture and Rural Development (MINADER), *Société de Surveillance Générale* and *Société d'exploitation du parc à Bois Camerounais* (Cameroonian Log Yard Operations Company, SEPBC).

The following table provides and analysis of the features characterizing the various groups of stakeholders

Table of stakeholders analysis				
Stakeholder group	**Characteristics**	**Problems, needs, interests**	**Potentials**	**Involvement in the project**
Primary Stakeholders				
Regional Offices, Departmental Offices and Forestry and Hunting Inspection duty Stations	Decentralized MINFOF structures; in charge of collecting and centralizing statistical forest and wildlife data collected from operators.	- In need of adequate tools to collect statistical data; - Need of building capacities for collecting statistical data; - need for reliable data to develop action programmes for the regional and departmental offices ; - lack of control on statistical data for forest products at the regional level ; - lack of equipment and facilities to collect and compile statistics ; - some statistics departments non operational.	- Have Statistics Offices for data related to forest and wildlife and product processing operations ; - In direct contact with operators of the trade (first-line generators of statistical data).	**- Advocacy & awareness-raising at the department and regional level;** **- Data collection.** **- Transfer and storage of data sheets and questionnaire forms.** **- Data capture / input.**
Users **1- Producers of forest products;** **2- Forest Industries in Cameroon (logging interests and timber industrialists) ;** **3- Traders.**	1- loosely organized in timber producers' associations, private plantation owers' syndicates, and nursery operators' syndicates 2- Economic operators, comprising both national and expatriate owners-operators for timber and non-timber forest products. Hold Government-issued licences for logging and timber uses either through forest concessions, sale of standing timber contracts, logging rights on community/municipal forests, or generic logging licences. Some of these operators also have processing units depending on their logging and operating titles.	1- Only a basic knowledge of standard technical and operational procedures. - Inclined to fraud and data manipulation. - lack of motivation to report data ; - variances in contents and format of information supplied ; - Not always well informed about the rules of sustainable forest management and information to be supplied	1) Strong professional experience in the relevant aspects of their trade and sound motivations. Strong capacities to mobilize and organize themselves. Organized in trade associations and syndicates (« *fédérations* ») Are supporters of technological developments and innovations	To arrange the conditions to ensure high information collection standards. Their involvement is key to the success of the project, as they are bound to supply the information system with updated data

	3- Purchase and market forest products as holder of special business licences.			
National Institute of Statistics	Institute in charge of : Validating national statistics ; Managing certain information on exported forest products in transit, which are not adequately monitored by the Forest Administration.	- Inadequate collaboration and communication with the Forest Administration. **- Need information input to feed in Cameroon's National Statistical Yearbook.**	- Strong administrative authority ; - Strong professional experience in its area of specialism. - Holds some very useful information on the forest sector	Sub-contracting of activities and utilization of data.
Secondary Stakeholders				
Division of Cooperation and Programming (MINFOF)	Structure of MINFOF responsible for - Centralizing statistical data on forests and the processing and promotion/marketing of forest and wildlife products. - Monitoring the preparation of agreements and conventions as well as monitoring their performance ; - Monitoring relations with national and international partners ; - the coordination of the implementation of aid and cooperation programmes ; - identification and preparation of investment programmes and projects ;	- Lack of an information system for the centralization of statistics ; - need of reliable information for the production of statistical yearbooks to make MINFOF actions transparent to the public at large and international partners (FAO ; ITTO, etc.) ; - lack of technological capacities for the management of statistical data ; - inadequate coordination of the statistics management process in the forest and wildlife sub-sector.	- Cross-cutting mission for the centralization of statistics recognized by all stakeholders of the forest and wildlife sub-sector ; - raising counterpart funds ; - sustainability of the project as part of the statistics unit being established in the Division of Cooperation and Programming.	- Executing Agency and main beneficiaries of project deliverables.
Forestry Directorate of MINFOF	MINFOF structure in charge of the development and implementation of the governmental policy on forests, as well as generating statistics on logging.	- Need for reliable information on logging and forestry activities ; - inadequate handling of forest statistics over the national territory ; - need for capacity building of the framework for the management of forestry and logging data ; - need of biomass data for the REDD+.	Owns a « Computerized Forest Information Management System » (SIGIF). This data base was created in 1998 and is managed by MINFOF ; it is geared towards the sustainable management of forests included in the PFE and the monitoring of logging and timber utilization. - SIGIF will feed data into the dbase of the central system.	**- To be involved in the data collection and central compilation processes** **- Making metadata available.** - To benefit from specific training services on statistical data ; -member of the Steering Committee
Directorate for the Promotion and Processing of Timber and Non-Timber Forest Products, MINFOF	Structure of the Ministry of Forestry and Wildlife responsible for developing, implementing and monitoring government policy execution on the marketing, industrialization of timber and non-timber forest products, in coordination with relevant government departments	- Needs reliable information on timber and NTFP processing and marketing activities ; - Needs data on fuel wood ; - Inadequate handling and processing of statistics on forest product processing and marketing ; - need for building the capacities of executive staff for the management of statistical data on the processing and marketing of timber and NTFPs ; - lack of transparence on international markets (in Cameroon, we lack information on market trends, whether prices, timber species in demand, technical standards, etc.)	- Has a data base on the domestic timber market ; - A NTFP data base currently under development; - Has a Monitoring and Statistics service responsible for the centralization of statistics on timber production, processing and exports, in connection with the Forest Information Management Service - Has a window in the SIGIF to market timber that will feed data into the central system.	**- To be involved in the data collection and central compilation processes** - To benefit from specific training services on statistical data ; - Member of the Steering Committee
Directorate of Wildlife and Protected Areas, MINFOF	Structure responsible for - developing and implementing government wildlife policy ; - Management inventory and	- Need for reliable information for wildlife management, protected areas and wildlife migration corridors ;	Has a service responsible for wildlife management data collection, processing and dissemination.	- To benefit from appropriate statistics management tools

	the protection of wildlife species ;	- Lack of a specific data base on wildlife and protected areas ; - Need for capacity building in statistics management for executive staff		and training.
National Forestry Development Support Agency (ANAFOR)	A structure governed by MINFOF in charge of providing support to reforestation and forest plantation development programmes.	- inadequate level of information on reforestation in the sub-sector ; - Cameroon's reforestation data not consolidated.	- Direct connection with local NGOs, CSOs, CTD and traditional chieftaincies involved in reforestation in Cameroon (primary generators of statistical data on reforestation) ; - huge experience in the management of statistical data on reforestation and forest plantations.	To benefit from consolidated data on reforestation and forest plantation in the sub-sector.
Partner NGOs and civil society organizations	They are responsible for : - monitoring and providing guidance to users - To provide support to DCP in its missions	- Collaboration and communication weaknesses between the various structures - Do not have adequate resources	- Strong capacity to engage and outreach users ; - Sound knowledge of the intricacies of the sector.	Partners in outreach, engagement and organization of users.
Research centres and institutes (CIFOR, CIRAD, Universities, etc.)	-involved in the sustainable management of forest resources - To provide support to DCP in its missions	Do not have adequate resources and facilities to collect the information required.	- Extensive experience in forest product assessment methodologies and metrics	They generate some additional information
PTFs (FAO, ITTO, World Bank, AfDB, GIZ/ProPSFE, GEF, etc.)	Provide technical and financial support to Cameroon to place its forests under SFM.	Need for reliable and updated information on the forest and wildlife sub-sector.	Strong commitment and capacity for providing technical and financial assistance.	Project technical and financial assistance
Tertiary Stakeholders				
Ministère de l'Economie, de la Planification et de l'Aménagement du Territoire (Ministry of Economy, Planning and Land Management	- Strong political authority - Power to define development strategic guidelines at national level.	Need for reliable information to define national development policies and strategies.	To support the project in raising the national budget counterpart.	Has an interest in the outcomes of the project to improve and update national statistical data.
Ministry of Finance : **-National Institute of Statistics** **- Treasury Department**	They are responsible for : - Forest tax collection - Forest products export procedures - Monitoring of forest product transport - Monitoring of export product embarkment procedures	- Ensure the accuracy of statements providing the basis for the payment of forestry taxes - Understanding the nomenclature of timber products exported	- Have very efficient information systems - Have substantial financial resources	They generate information that will complement those to be generated by the project..
Ministry of Agriculture and Rural Development	Strong authority Structure in charge of coordinating the implementation of the National Agriculture Investment Plan in Cameroon.	Need for certain additional information on the forest sector	Strong experience in farming statistics management.	To collaborate with the project ; and generate certain additional information.

2.1.3 Problem analysis

The core problem identified after several discussions is as follows : <u>The production, updating, centralization and dissemination system for statistical data in the forest and wildlife sub-sector is inadequate.</u>
Through the extensive analysis of the identified problems, three key causes have been identified as follows:

1. Several structures are involved at various stages of forest and wildlife statistics collection at national level. However a lack of coordination has been noted between the various structures undertaking the collection and management of data, when centralizing, formating and, where applicable, complementing such data is required.

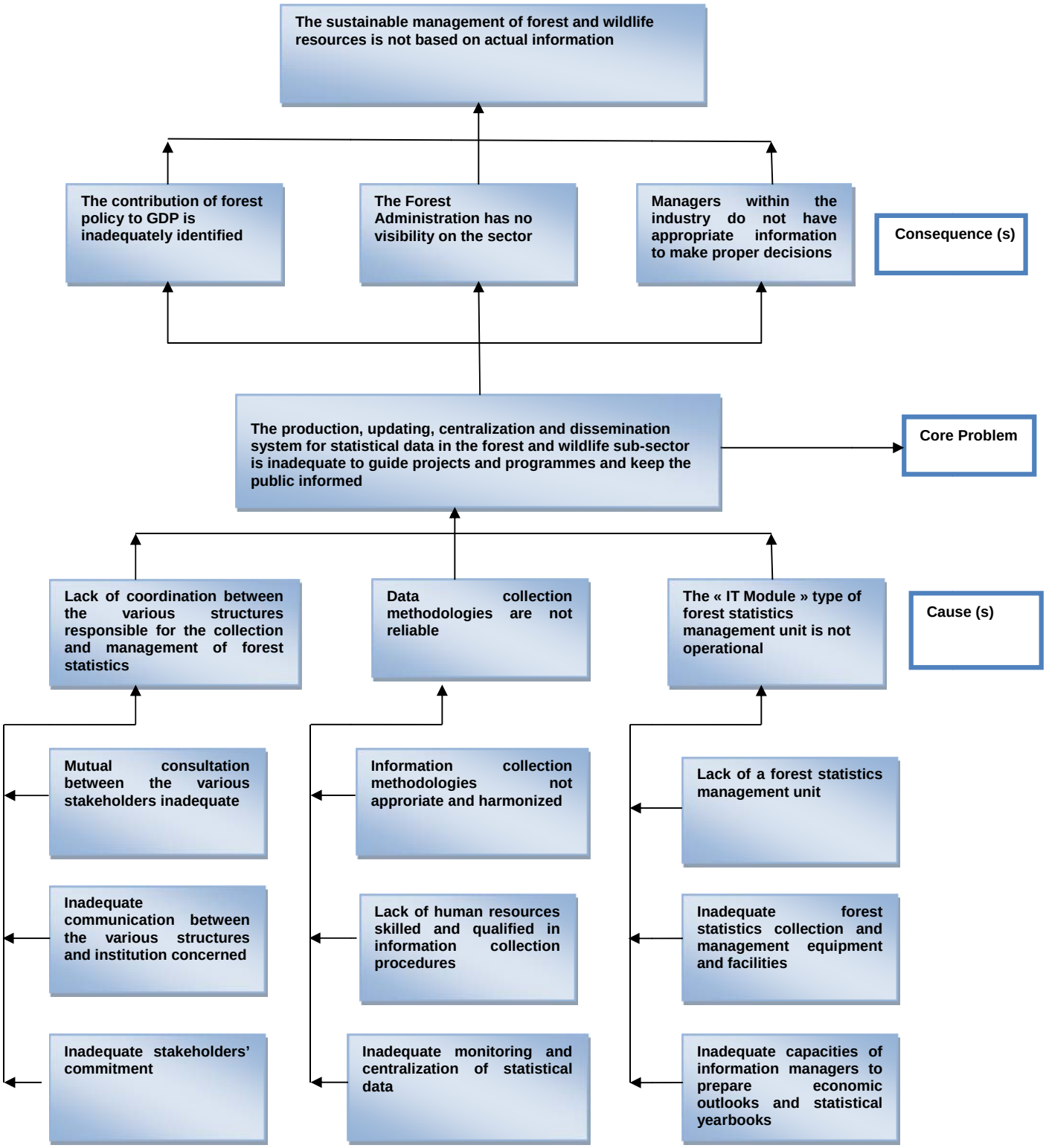
2. Centralizing, harmonizing (formating) and compile all these data into one Statistical Yearbook for the purpose of dissemination will require one Forest Statistics Management Unit of the « IT Module » type, which to-date is still to be created and made operational.
3. Data collection methodologies are hardly reliable as the formal data collection procedures in MINFOF, which should manage the data collection, analysis and dissemination is inappropriate. Statistical data on lumber produced by mills are not properly controlled by the Forest Administration which is contented with data entered on business reports by companies. Most forest and wildlife information is reported by economic operators who only forward the material they deem necessary.

Consequently:

- Managers within the industry do not have appropriate information to make proper decisions ;
- The Forest Administration has no visibility on the sector ;
- The allocation of the resource base and industrial process are not properly planned ;
- The utilization of resources and the recovery rates in companies are poorly assessed ;
- The contribution of forest policy to GDP is inadequately identified.

Addressing the causes identified will make it possible to address the needs of beneficiaries by making reliable information on the forest and wildlife sub-sector accessible in real time.

PROBLEM TREE

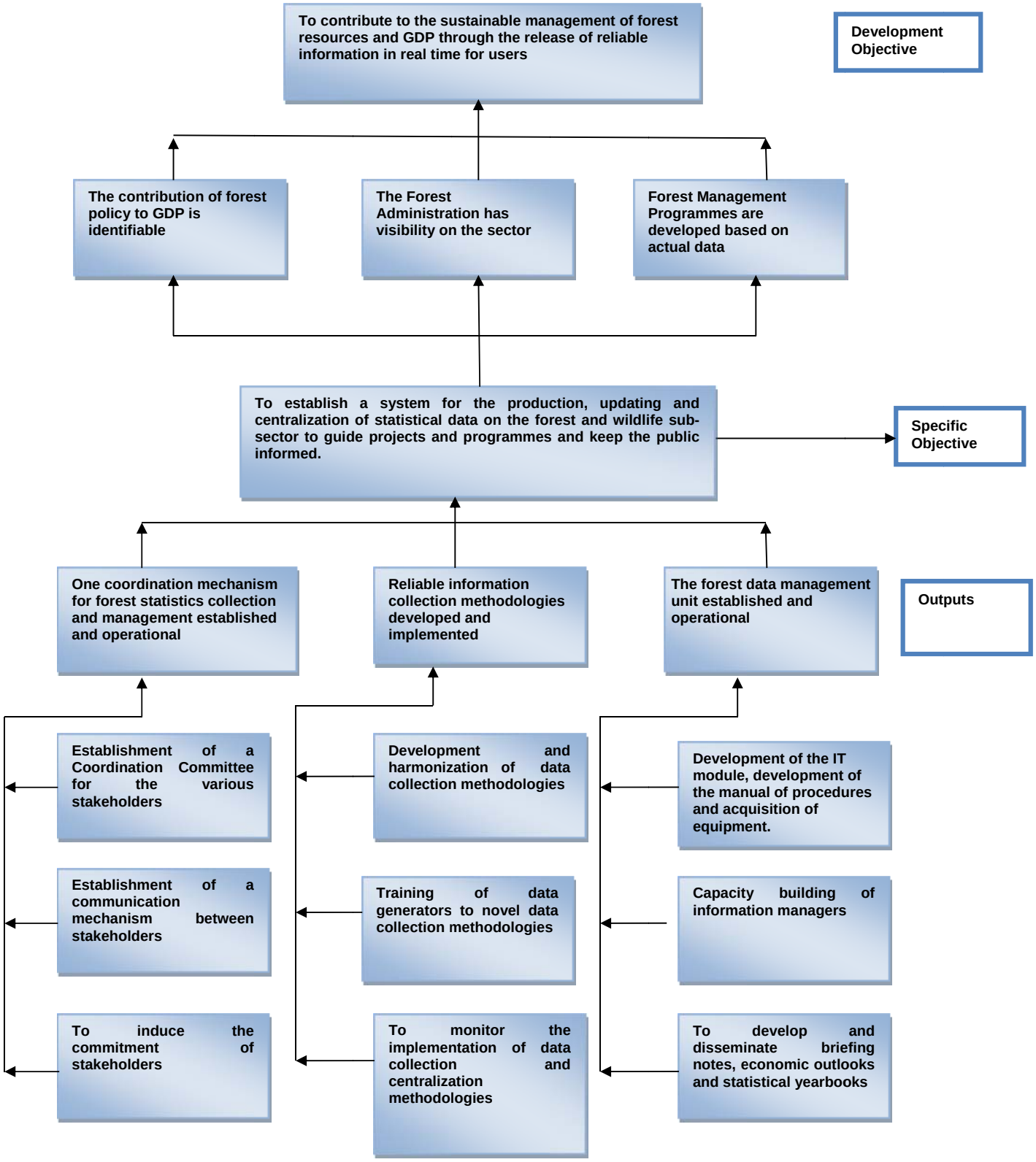


2.1.4 Logical Framework Matrix

PROGRAMME COMPONENTS	INDICATORS	MEANS OF VERIFICATION	KEY ASSUMPTIONS
Development objective: To contribute to the sustainable management of forest resources and GDP through the release of reliable information in real time for users	- The contribution of forest and wildlife products to GDP increase by 2% each year by 2018 - By project completion date, reliable information on the forest and wildlife secteur is made available in real time ; - The implementation of the projected national forest inventory is backed by statistical information**.**	- Publication of annual revenue by the Treasury (*Direction Générale des Impôts*) - Statistical yearbook and economic outlooks	Stability of the institutional framework to project implementation.
Specific objective: To establish a national system for the collection, storage and dissemination of statistical data in the forest and wildlife sub-sector to guide projects and programmes and keep the public informed.	By project completion date, the newly established system is used by 75% of stakeholders in the forest and wildlife sub-sector.	Project progress report - field-level survey; - mission report	The support and active involvement of the various stakeholders is secured
Output 1: One coordination mechanism for the structures in charge of collecting and managing forest statistics established and operational	The Committee to coordinate structures and stakeholders is established and operational by the end of the second quartier of Project Year 1 ; - 4 meetings of the committee convened	- Ministerial decision to establish the committee - Minutes of meetings	
Output 2: Reliable information collection methodologies developed and implemented	- One harmonized manual on the collection of statistical data developed and validated by the end of Project Year 1 - The Manual for monitoriing and evaluation of data collection procedure is available - At keast two data collection monitoring missions held during the second year.	- Report of the Validation Workshop for the guidebook (manual) ; - Mission report.	- Trainers are competent ; - Learners are available and willing to learn.
Output 3: The forest data management unit established and operational	- The IT tool of the statistics management unit is available by the end of the second quarter of Project Year 2 ; - Reliable data are made available in real time by project completion date.	- Ministerial decision to create the management unit and appointment of personnel - Project progress report - Statistical yearbook	- Personnel committed and available to carry out the various tasks. - Service providers selected are the best in their line of trade.

2.2 Objectives

TREES OF OBJECTIVES



2.2.1 Development Objective and impact indicators

To contribute to the sustainable management of forest resources and GDP through the release of reliable information in real time for users

Impact indicators :

- The contribution of forest and wildlife products to GDP increase by 2% each year by 2018
- By project completion date, reliable information on the forest and wildlife secteur is made available in real time ;
- The implementation of the projected national forest inventory is backed by statistical information

2.2.2 Specific objectives and outcome indicators

To establish a system for the production, updating and centralization of statistical data on the forest and wildlife sub-sector to guide projects and programmes and keep the public informed.

Outcome/deliverable indicator:

- By project completion date, the newly established system is used by 75% of stakeholders in the forest and wildlife sub-sector

PART 3. DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs and activities

3.1.1 Outputs

Output 1: The coordination mechanism for forest statistics collection and management established and operational

The Coordination Committee for statistics data collection and management structures is established and operational by the end of the second quarter of Project Year 1. Its specific role will be as follows :

- To provide the coordination and mutual consultation platform for the various project stakeholders ;
- To identify and list the concerns of the different stakeholders ;
- To organize and manage outreach work to address the issues related to the lack of mutual consultation and coordination of forest statistics collection and management activities and their impacts on the current and future development of the forest and wildlife sub-sector ;
- To issue recommendations on the measures and strategies to be adopted for an effective coordination.

Output 2: Reliable information collection methodologies developed and implemented

Which means :

- To define, harmonize, validate and implement data collection procedures. Initially for the identification of baseline data, data sources, collection tools and procedures and development of the design model, and subsequently
- To provide training to managers and staff on the effective implementation of the data collection methodology, including 20 managers and executive staff of the central departments, 10 managers of regional statistics services, 58 managers of statistics office at the departmental level, and 162 heads of forestry inspection station. These well-trained managers will be subsequently mandated to train operational staff within their respective departments. Through this procedure, all relevant staff will receive training.

Output 3: The forest and wildlife data management unit established and operational

By project completion date, the computer applications used by the forestry statistics managements unit will be operational. The following activities are required to achieve this output

- To conduct a study on the whole set of applications that can constitute the array of IT tools used by the statistics management unit. This study will identify and highlight the benefits, drawbacks, costs and complexity of incorporating the application in the array of statistics management applications. It will also highlight the security constraints while taking in consideration other constraints, including the administrative ones
- To develop the package that composes the computer modules including:
    - To develop the modules to be grafted to the application of the full set of IT tools ;
    - To develop the central system consisting of one « data warehouse » of statistics analysis tools including SAS, OLAP/OLTP, BI, Big data ;
    - To develop all the applications and tools operated for statistical analysis and the design/development of models
- To fit out the statistics management unit with required equipment ;
- To manage training programmes on the use of databases and statistical analysis.

To achieve the aforesaid outputs, the following activities will be carried out

3.1.2 Activities

Output 1: The coordination mechanism for forest statistics collection and management established and operational

A1.1: Advocacy towards all stakeholders involved
A1.2: To establish the coordination structures for forest and wildlife statistics collection and management
A1.3: Coordination meetings between the various structures

Output 2 : Reliable information collection methodologies developed and implemented

A2.1 : Identification and validation of baseline data to be collected to calcultate relevant indicators, data sources, tools for data collection and procedures
A2.2 : To develop and harmonize the data collection tools and methodologies
A2.3 : Testing (pilot survey) to validate data collection tools and methodologies
A2.4 : To train stakeholders in the use of data collection tools;
A2.5 : To develop a manual of monitoring and evaluation procedures for forest statistics

Output 3 : <u>The forest and wildlife data management system established and operational</u>

A3.1 : To develop the IT module
A3.2 : To design the data capture applications (using the CsPro software)
A3.3 : To train personnel to the use of data capture applications.
A3.4 : To collect data at field level.
A3.5 : Monitoring and implementation of data collection procedures.
A3.6: Data capture
A3.7 : To organize an advocacy workshop to promote the applications developed.
A3.8: To disseminate information.

3.2 Implementation approaches and methods

3.2.1– Methods

This project aims at radically change the forest statistics management procedure. And therefore full support from all stakeholders is needed. To secure such support, the participatory approach is required and will be applied through several workshops destined to the various types of stakeholders involved (economic operators, technical staff involved in forestry).

In operational terms, the project will be implemented in four stages as follows:

- Establishment of the project team and start of project implementation period;
- Raising the commitment and awareness levels of stakeholders involved in the management of forest and wildlife statistics;
- Identification, development and harmonization of data collection tools;
- Drafting manuals and training personnel on the use of data collection tools;
- Designing statistical data capture applications and providing training on their use;
- Field trips, tools validation tests, data collection and input/capture;
- Development of the IT module for the central data compilation process;
- Processing and analysis of data obtained from the collection process;
- Dissemination of statistical data.

<u>Appointment of the project team and initiation of project implementation</u>

The signing of the ministerial decision establishing the statistics collection and management system forms the basic approach confirming the commitment of the main beneficiary, and opening the way to the planned investments. The Minister may sign the decision quickly after the matter has been reviewed by the Legal Unit.

Subsequently, the ministerial decision appointing the officers of this management system is a prerequisite for the start of the project. It should occur quickly, preferably at the same time as the decision on the creation of the unit.

In the wake of the appointment of officers, the installation of the staff in the premises and facilities will become the priority. Three office spaces are required.

Regarding the hosting the system, the project will have to make some investments, particularly for computer units and office furniture.

The project has a strong statistical computing component and provides for on-site monitoring and evaluation visits. For this purpose, the project will also appoint focal points:

- An official (statistician) responsible for monitoring the terms of reference of the consultant in forestry statistics and take control of the Project statistics outcomes;
- A manager (IT) responsible for monitoring the terms of reference of the computer module consultant and take control of the Project IT outcomes;
- An analyst (statistician) responsible for the analysis of statistical data, calculation and interpretation of indicators;
- Responsible for monitoring and evaluation will be based on a manual to be developed for this purpose.

i. <u>Raising the commitment and awareness levels of stakeholders involved in the management of forest and wildlife statistics</u>

Awareness-raising will be achieved under this project throughout the whole country by radio and television releases, information notes to municipalities, NGOs, and logging interests and operators; banners, flyers. Workshops bringing together the various stakeholders will also be organized. The conduct of ten (10) awareness-raising workshops has been planned in ten (10) regions of the country as well as a national project launching workshop. These workshops will provide the opportunity to interact with these stakeholders, to introduce the project to them, the expected outcomes and the approach to be adopted, in order to collect their views and comments so as to address them to the largest extent possible. Following these workshops, a coordination and consultation mechanism for data collecting structures and management of forestry statistics will be defined and the coordination structure representative of all stakeholders established in a participatory manner.

ii. <u>Identification, development and harmonization of data collection tools :</u>

The implementation of this activity will be achieved in several successive phases: A phase where database, data sources, stakeholders involved, data collection tools and methods will be identified, and one phase for the development and harmonization of data collecting tools.

- First phase: identification of database, data sources, stakeholders involved, data collection tools and methods:

The project team will recruit one forestry statistics consultant with the task of identifying baseline data for the calculation of indicators, sources of reliable information available, metadata, tools used. He will be joined in this mission by a statistician and a forest engineer of the project team.

- Second phase: Development and harmonization of data collecting tools.

This activity will be carried out by the expert consultant in forest statistics in coordination with a restricted technical team which will monitor the implementation of the project. The work will be executed over a 05 day period. It will be based on the results from the First Phase; the objectives of this work session are

- to develop a list of relevant indicators for the sub-sector;
- to identify baseline data to calculate the values of the indicators selected;
- to identify data sources and the respective stakeholder groups involved;
- to draw down a list of appropriate data collection tools for the sub-sector (data collection sheets, questionnaires, etc.).

The preparation of data collection forms/sheets and harmonized questionnaires will be undertaken by the consultant. Three meetings to evaluate this activity will be organized by the project team.

iii. Drafting manuals and training personnel on the use of data collection tools

Following the development of data collection tools, the consultant will be responsible for drafting the manual of data collection procedures and the manual for project monitoring and evaluation. He will also be responsible for preparing a training of trainers module aimed at understanding and ownership of these data collection tools by the project team and the focal points. Next, the project team will aim to train 250 MINFOF personnel to be involved in the data collection process. In addition to the understanding and use of the data collection tools, several other components may be anticipated.

iv. Designing statistical data capture applications and providing training on their use;

The forest statistical consultant hired for that task will aim at, inter alia conducting a study on the overall set of applications that are apt to become part of the suite ("fleet") of the statistical system. This study will identify and highlight the benefits, drawbacks, costs and complexity of incorporating the application in the array of statistics management applications. It will also highlight the security constraints while taking in consideration other constraints, including the administrative ones. He will also be responsible for designing data capture applications in collaboration with the project team and to train staff in the use of the statistical applications developed. He will finally ensure that MINFOF statisticians have the effective command of the statistics module. Three meetings to evaluate this activity will be organized by the project team.

v. Field trips, tools validation tests, data collection and input/capture;

This stage includes tools testing and validation, data collection and data entry.

- Testing: A pilot survey will be conducted to compare the tools developed to field-level conditions; this means a field trip of at least 14 days in one or two regions of the country to test the tools at field level, complete the questionnaires and forms with the required information and check whether they are adequate and adjusted to field level conditions and findings.
- Validation: As part of a feedback and reporting meeting, the results of the previous phase will be presented, and tools will be amended and validated.
- Collection: it will be undertaken continuously during the last three quarters of the second year of the project. Data will be collected at grassroots level, at the forest and hunting inspection stations, among logging companies, NGOs, economic agents in the sector. Three monitoring missions (one mission per quarter) on the implementation of the collection process throughout the country are expected from the project team.
- Data entry/capture: Data collected at grassroots level will be forwarded to regional offices where they will be captured by the ten focal points trained for this purpose. Three missions (one mission per quarter) monitoring and evaluating of the data entry process will be carried out in the offices of the focal points in the ten regions.

vi. Development of the IT module for the central data compilation process

In the coming months MINFOF will have a data center infrastructure capable of supporting the data warehouse and all statistical processing tools available on the market. The said data center will be connected to MINFOF Central processing unit using a MPLS optical fiber access link which will enable them to undertake real-time processing from MINFOF headquarter offices and even regional offices. This highly virtualized architecture will allow all model simulations to be shared by users « delimitated by a pool » and only validated data may be published after their appropriate processing by the technical services to improve the decision-making process and the definition of the strategy. **Three evaluation meetings of this activity to be organized by the project team in two stages:**

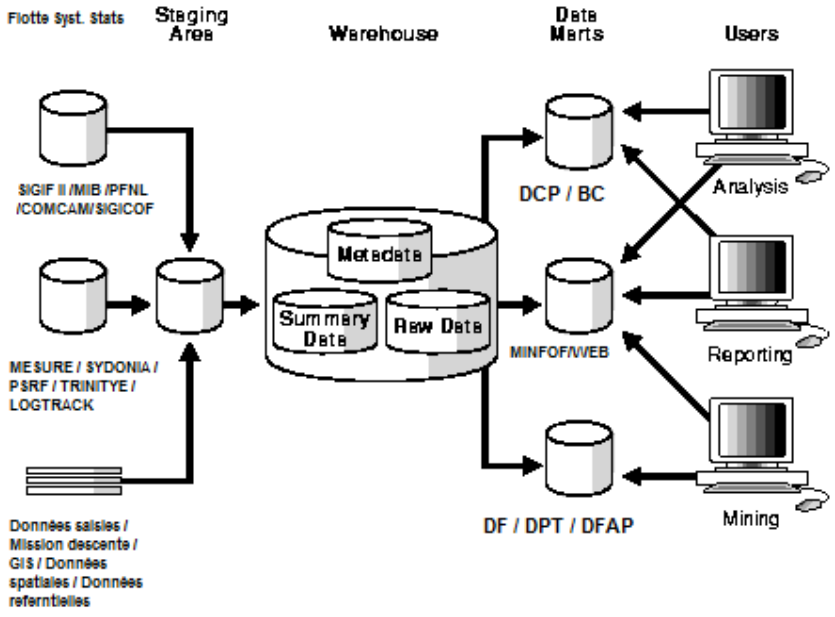
- Developing the modules to be grafted on / incorporated into applications of the suite ("fleet"):

This development will be undertaken by an IT consultant. The target architecture should be loosely coupled with strong guidance services. No strong coupling, remote calls, RMI (Remote Method Invocation), RPC (Remote Procedure Call) will be accepted. Data should be collected by the host system and integrated into the data warehouse in an almost fully transparent way for both host and target systems. For those systems not falling under MINFOF jurisdiction, such as MESURE, SYDONIA, PSRF, etc., web services will be developed at database level unless otherwise required except for already developed systems that integrate by default the information service and information-sharing features, such as SIGIF 2 and MIB, whose data will be accessible. For each

application composing the suite of Statistics System, the team of developers must produce: The graftable and fully operational module for each application identified; detailed, relevant documentation by module and application; source codes; a successful test run (report) imaged in a virtual or real environment as appropriate.

- Development of the Central System:

The central system will consist of a data warehouse for statistical analysis tools SAS OLAP / OLTP, BI, Big Data. Both types of tools being provided by industry standards, the focus will be on the selection of consultants, training and knowledge transfer to experts of the trade so that they can perform all possible processing operations in these data warehouses without assistance. Therefore the task of the consultant will consist in defining metadata, summary data to ensure a single version of truth. His other tasks will consist in defining the data marts so that different departments (DCP, BC, DPT, DF, DFAP, etc.) of MINFOF can undertake processing and/or simulations in their own views without altering the consistency of data and results as illustrated in the diagram below.



MESURE : MEilleur SUivi du REndement Fiscal
SYDONIA: SYstème DOuaNier Automatisé
SIGIF : Système Informatique de Gestion de l'Information Forestière
LOGTRACK: VVood Track (SGS)
PSRF: Programme de Sécurisation des Recettes Forestières

DF: Direction des Forêts
DPT: Direction de la Promotion et de la Transformation
DFAP: Direction de la Faune et des Aires Protégées
DCP: Direction de la Cooperation et de la Programmation
BC: Brigade Nationale de Contrôle

vii. Processing and analysis of data obtained from the collection process

The data entered in the two regional delegations will be forwarded to the central level. The databases from the ten regions will be merged, edited and validated. After this preliminary work, the analysis work will consist in calculating indicators and the interpretation thereof. This procedure will apply to all applications and tools operated for statistical analysis and the generation of indicators. The purpose of the acquisition of these tools is “to make the data speak”. There are plenty of statistical analysis software such as SAS, R, SPSS etc [which], in addition to other tools, can be coupled to this software range to push further the analysis and set up a center of predictive statistical analysis and decision-making tools. The consultant will produce a battery of models to accommodate data input and to simulate through models generic interpretations that can be subsequently refined. **Three working sessions of the project team with the consultant are planned for this activity.** Support services shall be provided by the service provider during a one (01) year period. It will begin after the formal acceptance of the works delivered.

viii. Dissemination of statistical data

Development of the IMIS module (Integrated Management of Information System) in MINFOF Website using the REDATAM + SP software, APACHE will enable users worldwide to calculate indicators from the MINFOF servers, in real time and remotely. An extension workshop for this tool will be organized.
On the other hand, a seminar with the aim of producing the statistical yearbook will be organized. During the seminar, the entire document will be reviewed focusing on the relevance of the tables produced and consistency of indicators.

3.2.2 – Project implementation Strategy

This Strategy will be based:

- At the institutional level, on structures that have been put in place (steering committee, coordinating committee and group of users and stakeholders) in ensuring that they fulfill their roles. The project will ensure that it will impart the Executing Agency technical capabilities that will allow it to ensure the sustainability of project achievements, including managing the maintenance of application to enable them to be always up to date and meet the expectations of users. Moreover, with the creation of the statistics management unit and its IT tool, a manual of procedures should be drafted. It's not about administrative and financial procedures, rather this is about summarizing the principles and procedures that have been proposed in this project to detail and formalize the functioning of the statistics management unit and its IT tools and provide it with a code of ethics. The document will summarize :

  - The terms of reference of the statistics management system and its IT tool ;
  - The operating mode for supplying data ;
  - The operating mode for analyzes and studies ;
  - The data validation procedure ;
  - The procedure for the dissemination of data and studies ;
  - The code of ethics ;
  - etc.

This technical procedure manual for the statistics management unit and its IT tool should be written by project staff – the initial ownership task for appointed staff – and be approved by the Steering Committee and subsequently the Minister. The purpose is therefore to establish a sustainable technical operation that can survive potential staff turnover and guide the work.

- In technological terms, operating the network of optical fibers and the development of cellular communication, which justifies the development of applications in a web-based environment, ensuring each user continual and secure access to data regarding both database input and browsing procedures.

This is to significantly reduce operating costs of economic operators – an important point that will be used during training sessions, so as to ensure adequate support and commitment from economic agents.

3.3 Work Plan

Outputs /Activities	Responsible Partner	Year 1 Quarters				Year 2 Quarters			
		1	2	1	2	1	2	1	2
Output 1 : The coordination mechanism for forest statistics collection and management established and operational									
A1.1 Advocacy towards all stakeholders involved	Executing Agency								
A1.2 : To establish an advisory committee for the coordination of forest and wildlife statistics collection and management structures	Executing Agency								
A1.3 : Coordination meetings between the various structures	Executing Agency / Focal points								
Output 2 : Reliable information collection methodologies developed and implemented									
A2.1 **Identification and validation of baseline data to be collected to calculate relevant indicators, data sources, data collection tools and procedures**	Consultant/ Project team								
A2.2 To develop and harmonize the data collection methodologies	Project team/ Consultant								
A2.3 Testing (pilot survey) to validate data collection tools and methodologies	Project team /Consultant								
A2.4 To train stakeholders in the use of data collection tools	Consultant/ Project team								
A2.5 To develop a manual of monitoring and evaluation procedures for forest statistics	Consultant/ Project team								
Output 3 : The forest data management system established and operational									
A3.1 To develop the IT module	Consultant/ Equipe du projet								
A3.2 To design the data capture applications (using the CsPro software)	Project team /Consultant								
A3.3 To train personnel in the use of data capture applications	Consultant/ Project team								
A3.4 To collect data at field level	Focal points /Consultant								
A3.5 Monitoring on the implementation of data collection procedures and project activities	Project team								
A3.6 Data capture	Project team								
A3.7 To organize one awareness-raising workshop for the promotion of the applications developed	Project team								
A3.8 To disseminate information	Project team								

3.4 Budget

3.4.1 Budget matrix

Outputs/ Activities	Description	Budget component	Quantity		Units	Unit costs USD	Total cost USD	ITTO		Executing Agency	
			Year 1	Year 2				Year 1	Year 2	Year 1	Year 2
Output 1	**The coordination mechanism for forest statistics collection and management established and operational**										
A1.1 :	Awareness-raising for all stakeholders involved										
	Awareness-raising workshop in all 5 agro-ecological areas in 10 regions of Cameroon	61.2	5		Lump sum	6 000	30 000	30 000			
	Radio broadcasts, invitations, leaflets, 10 banners (1 in each region)	54	2	1	Lump sum/ year	1 000	3 000	2 000	1 000		
	To organize the project launching workshop, 1 meeting, 1 day, 50 participants	61.1	1		workshop	14 000	14 000	14 000			
	Project coordinator	11.1	12	12	Monthly allowance	400	9 600			4 800	4 800
	01 Driver	12.2	12	12	Monthly allowance	100	2 400			1 200	1 200
	Fuel and lubricant	**51**	**1**	**1**	**year**	**4 000**	**8 000**	**2 000**	**2 000**	**2 000**	**2 000**
	Vehicle	**41**	**1**	-	**lump sum**	**40 000**	**40 000**	**40 000**	-	-	-
	Vehicle insurance	**56**	**1**	**1**	**year**	**400**	**800**	-	-	**400**	**400**
	Vehicle maintenance and spare parts	**53**	**1**	**1**	**year**	**4 000**	**8 000**	**4 000**	**4 000**	-	-
	Desktop computers (HP 500 B-PE 5800 3.2 GHZ)	**42.2**	**13**	-	**number**	**800**	**10 400**	**10 400**	-	-	-
	Photocopier with sorting function (Canon IR 2318)	**42.3**	**2**	-	**number**	**2 000**	**4 000**	**4 000**	-	-	-
	B&W Laser Jet printer (Monochrome Laser HP 1566)	**42.1**	**2**	-	**number**	**200**	**400**	**400**	-	-	-
	Colour Laser Jet Printer (HP color laser jet CP 2025)	**42.1**	**1**	-	**number**	**400**	**400**	**400**	-	-	-
	Laptop computers (HP or Samsung corei5)	**42.5**	**5**	-	**number**	**1 200**	**9 600**	**9 600**	-	-	-
	Scanners(HP scan jet 5590P)	**42.6**	**1**	-	**number**	**200**	**200**	**200**	-	-	-
	Power Surge Protector 1 250 VA (MGE NOVA)	**42.8**	**13**	-	**number**	**400**	**5 200**	**5 200**	-	-	-
	USB Flash Memory 2GB	**42.9**	**8**	-	**number**	**20**	**160**	**160**	-	-	-
	Internet Dongle	**42.9**	**8**		**Number**	**60**	**240**	**240**			
	Internet Connection Dongle/Access	**54**	**96**		**Monthly subscription**	**10**	**1920**	**960**	**960**		

	(12 months)										
	Anti virus for central office (Norton internet security 2015)	**52**	**12**	**-**	**Number/ unit**	**20**	**240**	**240**	**-**	**-**	**-**
	CD ROM (Imation)	**42.11**	**1**	**-**	**package of 50CD**	**50**	**50**	**50**	**-**	**-**	**-**
	DVD ROM(Imation)	**42.11**	**1**	**-**	**package of 20DVD**	**40**	**40**	**40**	**-**	**-**	**-**
	Communication	**54**	**12**	**12**	**month**	**80**	**1 920**	**960**	**960**	**-**	**-**
	Office supplies	**55**	**12**	**12**	**month**	**300**	**7 200**	**3 600**	**3 600**	**-**	**-**
	Technical documentation	**57**	**10**	**-**	**Unit**	**80**	**800**	**800**	**-**	**-**	**-**
	Secretary and accountant	**12.1**	**12**	**12**	**Monthly allowance**	**150**	**3 600**			**1 800**	**1 800**
A1.2 :	To establish the coordination mechanism for the forest and wildlife statistics collection and management structures										
	Supporting 2 PSC meetings	61.3	1	1	meetings	6 000	12 000			6 000	6 000
A1.3 :	Coordination meetings between the various structures										
	4 Knowledge/experience-sharing meetings between the various structures	61.4	2	2	meetings	4 000	16 000			8 000	8 000
Output 2 :	**Reliable information collection methodologies developed and implemented**										
A2.1	Identification and validation of baseline data to be collected to calcultate indicators relevant to the forest and wildlife sub-sector										
	2 six-day missions to identify existing conditions and data, 2 pers. (consultant and 1 project team member)	31.1	24		Personne/jour	80	1 920	1 920			
	Transport for 2 participants	32.1	4		Lump sum/participant	50	200	200			
	5-day Restricted Group Meeting : identification of baseline data, sources of reliable data and harmonization of tools for data collection and procedures (room rentals and DSA for membres of the team)	61,5	1		Lump sum /réunion	4 000	4 000	4 000			
	Expert consultant in forest statistics	21	1		Lump sum	4 000	4 000	4 000			
	Statistician in charge of monitoring the ToR of the Expert consultant in forest statistics and to control the statistical outcomes of the project	11.3	3		Monthly allowance	200	600			600	
	04 focal points for 3 months (Technical directorate)	12.3	12		Monthly allowance	150	1 800			1 800	
	10 Regional Services Focal Points for 3 months	12.4	30		Monthly allowance	100	3 000			3 000	
A2.2	To develop and harmonize the data collection methodologies										
	Expert consultant in forest statistics	21	1		Lump sum	2 000	2 000	2 000			
	04 Technical Directorate Focal Points for 3 months	12.3	12		Monthly allowance	150	1 800			1 800	

	10 Regional Services Focal Points for 3 months	12.4	30		Monthly allowance	100	3 000			3 000	
	Statistician in charge of monitoring the ToR of the Expert consultant in forest statistics and to control the statistical outcomes of the project	11.3	3		Monthly allowance	200	600			600	
	03 Meetings to monitor tools and procedures development and harmonization activities ;10 participants	61.6	3		Meetings	2 000	6 000	6 000			
A2.3	Testing to validate data collection tools and methodologies										
	One 5-day mission in 2 regions, 4 pers (2 in each region)	31.2	40		Pers. day	80	3 200	3 200			
	Transport of participants	32.2	4		Lump sum	80	320	320			
	1 validation workshop ; 50 participants (2 consultants, 20 Headquarters executives, 10 managers of regional statistics services)	61.7	1		Lump sum/workshop	1	8 000	8 000			
	04 focal points for 3 months (Technical directorate)	12.3	12		Monthly allowance	150	1 800			1 800	
	10 Regional Services Focal Points for 3 months	12.4	30		Monthly allowance	100	3 000			3 000	
	Statistician in charge of monitoring the ToR of the Expert consultant in forest statistics and to control the statistical outcomes of the project	11.3	3		Monthly allowance	200	600			600	
	Analyst	11.2	3		Monthly allowance	200	600			600	
	Document reproduction and participants' kits	68	50		copies	20	1 000	1 000			
A2.4	To train forest duty station managers and 10 focal points in the use of data collection tools (cost of mission, coffe-break, refreshments)										
	Workshop to train 25 personnel on the new procedures (14 days)	13.2		1	Lump sum	10 000	10 000		10 000		
	One 20-day mission for 2 participants to train focal points and MINFOF officers in the data collection methodologies in 10 regions	31.3		40	Man.day	80	3 200		3 200		
	Air Transport of 2 participants in the Far North region of Cameroon (Maroua)	32.3		2	Airline Ticket	400	800		800		
	04 focal points for 3 months (Technical directorate)	12.3	12		Monthly allowance	150	1 800			1 800	
	10 Regional Services Focal Points for 3 months	12.4	30		Monthly allowance	100	3 000			3 000	
	Training workshop for 250 focal points	13.1	5		workshop	9 000	45 000	45 000			

	and MINFOF staff on new data collection methodologies (DSA, transport, room rental, meals and refreshments, facilities)										
A2.5	To develop a manual of monitoring and evaluation procedures for forest statistics										
	1 validation workshop ; 50 participants	62.8	1		Lump sum	8 000	8 000	8 000			
	Forest statistics consultant	21	1		Lump sum /services	5 000	5 000	5 000			
Output 3 :	**The forest data management system established and operational**										
A3.1	To develop the IT module										
	To conduct a study on the entire set of applications capable of composing « the fleet » of the statistics management system (one 10-day data collection mission for 2 participants)										
	Daily subsistence allowance for one consultant in system architecture and design	22	10		Professional fee / Consultant	500	5 000	5 000			
	03 Monitoring meetings on computer module designing	61.9		03	Meeting	1 000		3 000			
	Cost of mission for IT expert and consultant (10 days)	31.4	20		Man / day	80	1600	1600			
	Transport costs	32.4	2		Lump sum	1	400	400			
	Hiring of one consultant for the development of the central module and statistical tools	22		90	Man / day	500	45 000		45 000		
	IT Manager in charge of monitoring the terms of reference of the expert consultant for the IT module and the control/command of the IT outcomes of the project	11.4	12	12	Monthly allowance	200	4 800			2400	2400
	Acquisition of statistical and IT software (SPSS, Stata, CsPro, BI,OLAP,……)	**42.7**	**1**		**Lump sum/package**	**5 000**	**5 000**	**5 000**			
	Acquisition of application development software (Acquisition SGBDR Oracle + ETL)	**42.7**	**1**	**-**	**Lump sum**	**60 000**	**60 000**	**-**	**60 000**	**-**	**-**
	Refurbishing as required, installation and testing	63		1	Lump sum	10 000	10 000		10 000		
A3.2	To design the statistics data capture applications										
	Expert consultants in forest statistics	21		1	Consultant's fees	10 000	10 000		10 000		
	03 Meetings to monitor the development and design of data capture applications. 10 persons of the project team	61.10		03	Lump sum	1 000	3 000				3 000

	Statistician in charge of monitoring the ToR of the Expert consultant in forest statistics and to control the statistical outcomes of the project	11.3		3	Monthly allowance	200	600				600
	Validation workshop and extension services to promote the applications developed. 50 participants	61.11		1	workshop	10 000	10 000		10 000		
A3.3	To train personnel in the use of data capture applications										
	Training workshop for project personnel to use data capture applications (5 days)	13.5		1	workshop	14 000	14 000		14 000		
	Training in statistics	13.3		5	persons	2 000	10 000		10 000		
	Traineeship in forest economy (1 participant for 20 days)	13.4		1	person	20 000	20 000		20 000		
A3.4	To collect data at field level										
	10 focal points (regional services) to control data collection operations for six months	12.4		60	Monthly allowance	100	6 000				6 000
A3.5	Monitoring on the implementation of data collection procedures and project activities										
	Monitoring and evaluation Officer	11.5	12	12	Monthly allowance	200	4 800			2 400	2 400
	Three 7-day missions for 2 participants to monitor the data collection process	31.5		42	Man / day	80	6720		6720		
	Transport for 2 participants to monitor the data collection process	32.5		06	Lump sum	50	300		300		
	Air Transport of 2 participants in the Far North region of Cameroon (Maroua)	32.6		2	Airline ticket	400	800		800		
	Analyst for nine months	11.2		9	Monthly allowance	200	1 800				1 800
	04 Focal Points from the Technical Directorate for 9 months	12.3		36	Person/ month	150	5 400				5 400
	Statistician in charge of monitoring the ToR of the Expert consultant in forest statistics and to control the statistical outcomes of the project			12	Person/ month	200	2 400				2 400
A3.6	Data capture										
	10 Focal Points for 6 months	12.4		60	Monthly allowance	100	6 000				6 000
	Nine 4-day missions to supervise the data capture and central compilation processes, members of the project team, 1 pers. per mission.	31.6		36	Person/ day	80	2 880		2 880		
	03 pers @ flight to the Far North	32.6		3	Airline tickets	400	1 200		1200		
	Transport of participants	32.7		7	Lump sum/	40	280		280		

					participant						
A3.7	To organize one awareness-raising workshop for the promotion of the applications developed										
	01 meeting for 50 participants	61.11		1	Workshop	8 000	8 000		8 000		
A3.8	To disseminate information										
	5-day mission by 8 executives to prepare the statistical yearbook	31.7		40	Man/ day	80	3 200		3 200		
	Transport	32.9		8	Lump sum/ participants	40	320		320		
	1-day validation workshop for the statistical yearbook (50 participants)	61.13		1	Lump sum workshop	6 000	6 000		6 000		
	04 Technical Directorate Focal Points for 3 months	12.3		12	Monthly allowance	150	1 800				1 800
	Analyst for 12 months	11.2		12	Monthly allowance	200	2 400				2 400
	Document duplication and publication of the Statistical Yearbook	59		1	Lump sum	4 000	4 000		4 000		
	Financial audit		**1**	**1**	**Lump sum/ year**	**6 000**	**12 000**			**6 000**	**6 000**

3.4.2 Consolidated Project Budget By Components

Yearly Project Budget - Consolidated

(with contributions and unit costs)

Budget components		Input	Unit Costs	TOTAL
10	**Project personnel**			
	11. National experts (long term)	0.0	$ -	$ -
	11.1. Project Coordinator	24.0	$ 400.00	$ 9 600.00
	11.2. 01 analyst	24.0	$ 200.00	$ 4 800.00
	11.3. 01 Statistics Officer in charge of monitoring the Expert Consultant in Statistics	21.0	$ 200.00	$ 4 200.00
	11.4. 01 IT Manager	24.0	$ 200.00	$ 4 800.00
	11.5. 01 monitoring and evaluation officer	24.0	$ 200.00	$ 4 800.00
	12. Other staff	0.0	$ -	$ -
	12.1. 01 Secretary and bookeeper	24.0	$ 150.00	$ 3 600.00
	12.2. 01 Driver	24.0	$ 100.00	$ 2 400.00
	12.3. 04 Focal points of technical directorates (Central/Headquarters Services)	156.0	$ 130.77	$ 20 400.00
	12.4. 10 Focal points in decentralized services (10 regions)	180.0	$ 100.00	$ 18 000.00
	13. Fellowship and training	0.0	$ -	$ -
	13.1. Workshop to train 250 MINFOF personnel on the new statistics collection methodologies	5.0	$ 9 000.00	$ 45 000.00
	13.2. Workshop to train 25 project staff in new data collection procedures	1.0	$10 000.00	$ 10 000.00
	13.3. Training in statistics	5.0	$ 2 000.00	$ 10 000.00
	13.4. Traineeship in forest economy	1.0	$20 000.00	$ 20 000.00
	13.5. Personnel workshop training in the use of data capture application	1.0	$14 000.00	$ 14 000.00
	19. Component total	**514.0**	**$56 680.77**	**$ 171 600.00**
20	**Sub-contracting**			
	21. Hiring of one expert in forest statistics	4.0	$ 5 250.00	$ 21 000.00
	22. Hiring of one consultant for the development of the IT module	100.0	$ 500.00	$ 50 000.00
	29. Component total	**104.0**	**$ 5 750.00**	**$ 71 000.00**

Budget components			Input	Unit Costs	TOTAL
30	**Duty travels**				
	31.	Daily Subsistence Allowance	0.0	$ -	$ -
	31.1.	Two 6-day missions to identify baseline conditions	24.0	$ 80.00	$ 1 920.00
	31.2.	One 5-day mission to conduct the validation test for data collection tools	40.0	$ 80.00	$ 3 200.00
	31.3.	20-day mission for 2 participants to train MINFOF staff	40.0	$ 80.00	$ 3 200.00
	31.4.	One 10-day mission for 02 participants to conduct a study on the set of applications	20.0	$ 80.00	$ 1 600.00
	31.5.	Three 7-day missions for 2 participants to monitor the data collection procedures	42.0	$ 80.00	$ 3 360.00
	31.6.	Nine 4-day supervision missions on data capture and central compilation	36.0	$ 80.00	$ 2 880.00
	31.7.	One 5-day mission to develop the Statistics Yearbook	40.0	$ 80.00	$ 3 200.00
	32.	Local transport costs	0.0	$ -	$ -
	32.1.	Transport for 2 participants to assess baseline conditions	4.0	$ 50.00	$ 200.00
	32.2.	Transport of participants to test data collection tools	4.0	$ 80.00	$ 320.00
	32.3.	Air transport for 2 participants to Cameroonian Far-North for the training workshop	2.0	$ 400.00	$ 800.00
	32.4.	Transport for 2 participants to conduct a study on the set of applications	2.0	$ 400.00	$ 800.00
	32.5.	Transport of participants to monitor data collection	6.0	$ 50.00	$ 300.00
	32.6.	Air transport for 2 participants to the North to monitor data collection	5.0	$ 400.00	$ 2 000.00
	32.7.	Transport of participants to supervise data capture and central compilation	7.0	$ 40.00	$ 280.00
	32.8.	3 persons per flight in the three northern regions to supervise Data capture	0.0	$ -	$ -
	32.9.	Transport of participants for the Yearbook development mission	8.0	$ 40.00	$ 320.00
	39.	Component total	**280.0**	**$ 2 020.00**	**$ 24 380.00**

Budget components			Input	Unit Costs	TOTAL
40	**Capital Goods**				
	41.	Vehicles	1.0	$40 000.00	$ 40 000.00
	42.	Other capital goods	0.0	$ -	$ -
	42.1.	Blank and white laserjet printer	2.0	$ 200.00	$ 400.00
	42.2.	Desktop computer	13.0	$ 800.00	$ 10 400.00
	42.3.	Photocopy machine with paper sorting system	2.0	$ 2 000.00	$ 4 000.00
	42.4.	Laser jet Colour printer	1.0	$ 400.00	$ 400.00
	42.5.	Laptop computer	5.0	$ 1 200.00	$ 6 000.00
	42.6.	Scanner	1.0	$ 200.00	$ 200.00
	42.7.	Software	2.0	$32 500.00	$ 65 000.00
	42.8.	Power surge protectors	21.0	$ 247.67	$ 5 200.00
	42.9.	Internet dongle + USB flash memory	32.0	$ 20.00	$ 640.00
	42.10.	CD Rom and DVD Rom	2.0	$ 45.00	$ 90.00
	49.	Component total	**59.0**	**$70 935.48**	**$ 132 330.00**
50	**Consumables**				
	51.	Fuel and lubricant	4.0	$ 2 000.00	$ 8 000.00
	52.	Antivirus protection for desktop unit	13.0	$ 20.00	$ 260.00
	53.	Vehicle maintenance and spare parts	2.0	$ 4 000.00	$ 8 000.00
	54.	Communication (telephone, internet, media etc..)	219.0	$ 31.23	$ 6 840.00
	55.	Office supplies (punching machine, chrono, stapler, calculator, printing paper, writing pads)	24.0	$ 300.00	$ 7 200.00
	56.	Vehicle insurance	2.0	$ 400.00	$ 800.00
	57.	Technical documents	10.0	$ 80.00	$ 800.00
	58.	Document reproduction and workshop participants' kits	50.0	$ 20.00	$ 1 000.00
	59.	Statistical Yearbook reproduction and publishing costs	1.0	$ 4 000.00	$ 4 000.00
	59.	Component total	**325.0**	**$10 851.23**	**$ 36 900.00**

Budget components		Input	Unit Costs	TOTAL
60	**Miscellaneous**			
	61. Various meetings and workshops	0.0	$ -	$ -
	61.1. Project launching workshop	1.0	$14 000.00	$ 14 000.00
	61.2. Advocacy workshop in 10 regions	5.0	$ 6 000.00	$ 30 000.00
	61.3. Two project steering committee meetings	2.0	$ 6 000.00	$ 12 000.00
	61.4. 4 stakeholders knowledge sharing meetings	4.0	$ 4 000.00	$ 16 000.00
	61.5. 5-day restricted meeting to validate indicators	1.0	$ 4 000.00	$ 4 000.00
	61.6. 03 meetings to monitor development and harmonization activities	3.0	$ 2 000.00	$ 6 000.00
	61.7. Validation workshop for data collection tools	1.0	$ 8 000.00	$ 8 000.00
	61.8. Validation workshop for the monitoring & evaluation manual	1.0	$ 8 000.00	$ 8 000.00
	61.9. 03 Monitoring meeting on computer module designing	3.0	$ 1 000.00	$ 3 000.00
	61.10. 03 meetings to monitor the development of datat capture concept	3.0	$ 1 000.00	$ 3 000.00
	61.11. Validation workshop for tools developed	2.0	$ 9 000.00	$ 18 000.00
	61.12. Validation workshop for the statistical yearbook	1.0	$ 6 000.00	$ 6 000.00
	62. Financial audit	2.0	$ 6 000.00	$ 12 000.00
	63. Ad-hoc refurbishing. deployment and testing	1.0	$10 000.00	$ 10 000.00
	69. Component total	**30.0**	**$ 85 000.00**	**$ 150 000.00**
70	**Local management costs**			
	71. EA's management costs			$ 9 392.00
	72. Monitoring by focal point			$ -
	79. Component total			$ 9 392.00
	Sub-total			**$ 595 602.00**

Budget components			TOTAL
80	**Project monitoring and administration**		
	81. ITTO monitoring and review		$ 20 000.00
	82. ITTO evaluation costs, mid-term, final and ex-post		$ 18 000.00
	83. ITTO Programme Support Costs (12% on items 10 to 82 above)		$ 60 817.00
	84. Donors' monitoring costs		$ -
	89. Component total		**$ 98 817.00**
90	**Pre-project cost refund (Pre-project budget)**		
100	**OVERALL TOTAL**		**$ 694 419.00**

3.4.3 ITTO budget by components

	Budget components	Input	Unit Costs	TOTAL	Year 1	Year 2
10	**Project Personnel**					
	13. Fellowship and training	0.0	$ -	$ -	$ -	$ -
	13.1. Workshop to train 250 MINFOF personnel on the new statistics collection methodologies	5.0	$ 9 000.00	$ 45 000.00	$ -	$ 45 000.00
	13.2. Workshop to train 25 project staff in new data collection procedures	1.0	$10 000.00	$ 10 000.00	$ -	$ 10 000.00
	13.3. Training in statistics	5.0	$ 2 000.00	$ 10 000.00	$ -	$ 10 000.00
	13.4. Traineeship in forest economy	1.0	$20 000.00	$ 20 000.00	$ -	$ 20 000.00
	13.5. Personnel workshop training in the use of data capture application	1.0	$14 000.00	$ 14 000.00	$ -	$ 14 000.00
	19. Component total	**514.0**	**$56 680.77**	**$ 99 000.00**	**$ -**	**$ 99 000.00**
20	**Sub-contracting**					
	21. Hiring of one expert in forest statistics	4.0	$ 5 250.00	$ 21 000.00	$ 11 000.00	$ 10 000.00
	22. Hiring of one consultant for the development of the IT module	100.0	$ 500.00	$ 50 000.00	$ 5 000.00	$ 45 000.00
	29. Component total	**104.0**	**$ 5 750.00**	**$ 71 000.00**	**$ 16 000.00**	**$ 55 000.00**
30	**Duty travels**					
	31. Daily Subsistence Allowance	0.0	$ -	$ -	$ -	$ -
	31.1. Two 6-day missions to identify baseline conditions	24.0	$ 80.00	$ 1 920.00	$ 1 920.00	$ -
	31.2. One 5-day mission to conduct the validation test for data collection tools	40.0	$ 80.00	$ 3 200.00	$ 3 200.00	$ -
	31.3. 20-day mission for 2 participants to train MINFOF staff	40.0	$ 80.00	$ 3 200.00	$ -	$ 3 200.00
	31.4. One 10-day mission for 02 participants to conduct a study on the set of applications	20.0	$ 80.00	$ 1 600.00	$ 1 600.00	$ -
	31.5. Three 7-day missions for 2 participants to monitor the data collection procedures	42.0	$ 80.00	$ 3 360.00	$ -	$ 3 360.00
	31.6. Nine 4-day supervision missions on data capture and central compilation	36.0	$ 80.00	$ 2 880.00	$ -	$ 2 880.00
	31.7. One 5-day mission to develop the Statistics Yearbook	40.0	$ 80.00	$ 3 200.00	$ -	$ 3 200.00
	32. Local transport costs	0.0	$ -	$ -	$ -	$ -
	32.1. Transport for 2 participants to assess baseline conditions	4.0	$ 50.00	$ 200.00	$ 200.00	$ -
	32.2. Transport of participants to test data collection tools	4.0	$ 80.00	$ 320.00	$ 320.00	$ -
	32.3. Air transport for 2 participants to Cameroonian Far-North for the training workshop	2.0	$ 400.00	$ 800.00	$ -	$ 800.00
	32.4. Transport for 2 participants to conduct a study on the set of applications	2.0	$ 400.00	$ 800.00	$ -	$ 800.00
	32.5. Transport of participants to monitor data collection	6.0	$ 50.00	$ 300.00	$ -	$ 300.00

	32.6. Air transport for 2 participants to the North to monitor data collection	5.0	$ 400.00	$ 2 000.00	$ -	$ 2 000.00
	32.7. Transport of participants to supervise data capture and central compilation	7.0	$ 40.00	$ 280.00	$ -	$ 280.00
	32.8. Transport of participants for the Yearbook development mission	8.0	$ 40.00	$ 320.00	$ -	$ 320.00
	39. Component total	**280.0**	**$ 2 020.00**	**$ 24 380.00**	**$ 7 240.00**	**$ 17 140.00**
40	**Capital Goods**					
	41. Vehicles	1.0	$40 000.00	$ 40 000.00	$ 40 000.00	$ -
	42. Other capital goods	0.0	$ -	$ -	$ -	$ -
	42.1. Blank and white laserjet printer	2.0	$ 200.00	$ 400.00	$ 400.00	$ -
	42.2. Desktop computer	13.0	$ 800.00	$ 10 400.00	$ 10 400.00	$ -
	42.3. Photocopy machine with paper sorting system	2.0	$ 2 000.00	$ 4 000.00	$ 4 000.00	$ -
	42.4. Laser jet Colour printer	1.0	$ 400.00	$ 400.00	$ 400.00	$ -
	42.5. Laptop computer	5.0	$ 1 200.00	$ 6 000.00	$ 6 000.00	$ -
	42.6. Scanner	1.0	$ 200.00	$ 200.00	$ 200.00	$ -
	42.7. Software	2.0	$32 500.00	$ 65 000.00	$ 65 000.00	$ -
	42.8. Power surge protectors	21.0	$247,62	$5 200,00	$5 200,00	$ -
	42.9. Internet dongle + USB flash memory	8.0	$ 20.00	$640,00	$640,00	$ -
	42.10. CD & DVD	2.0	$ 45.00	$ 90.00	$ 90.00	$ -
	49. Component total	**59.0**	**$70 935.48**	**$ 132 330.00**	**$ 132 330.00**	**$ -**
50	**Consumables**					
	51. Fuel and lubricant	2.0	$ 2 000.00	$ 4 000.00	$ 2 000.00	$ 2 000.00
	52. Antivirus protection for desktop unit	13.0	$ 20.00	$ 260.00	$ 260.00	$ -
	53. Vehicle maintenance and spare parts	2.0	$ 4 000.00	$ 8 000.00	$ 4 000.00	$ 4 000.00
	54. Communication (telephone, internet, media etc..)	219.0	$ 31.23	$ 6 840.00	$ 3 920.00	$ 2 920.00
	55. Office supplies (punching machine, chrono, stapler, calculator, printing paper, writing pads)	24.0	$ 300.00	$ 7 200.00	$ 3 600.00	$ 3 600.00
	57. Technical documents	10.0	$ 80.00	$ 800.00	$ 800.00	$ -
	58. Document reproduction and workshop participants' kits	50.0	$ 20.00	$ 1 000.00	$ 1 000.00	$ -
	59. Statistical Yearbook reproduction and publishing costs	1.0	$ 4 000.00	$ 4 000.00	$ -	$ 4 000.00
	59. Component total	**325.0**	**$10 851.23**	**$ 32 100.00**	**$15 580,00**	**$16 520,00**
60	**Miscellaneous**					
	61. Various meetings and workshops	0.0	$ -	$ -	$ -	$ -
	61.1. Project launching workshop	1.0	$14 000.00	$ 14 000.00	$ 14 000.00	$ -
	61.2. Advocacy workshop in 10 regions	5.0	$ 6 000.00	$ 30 000.00	$ 30 000.00	$ -
	61.5. 5-day restricted meeting to validate indicators	1.0	$ 4 000.00	$ 4 000.00	$ 4 000.00	$ -
	61.6. 03 meetings to monitor development and harmonization activities	3.0	$ 2 000.00	$ 6 000.00	$ 6 000.00	$ -
	61.7. Validation workshop for data collection tools	1.0	$ 8 000.00	$ 8 000.00	$ 8 000.00	$ -

	62.8. Validation workshop for the monitoring & evaluation manual	1.0	$ 8 000.00	$ 8 000.00	$ 8 000.00	$ -
	61.9. 03 Monitoring meeting on computer module designing	3.0	$ 1 000.00	$ 3 000.00	$ -	$ 3 000.00
	61.10. 03 meetings to monitor the development of datat capture concept	3.0	$ 1 000.00	$ 3 000.00	$ -	$ 3 000.00
	61.11. Validation workshop for tools developed	2.0	$ 9 000.00	$ 18 000.00	$ -	$ 18 000.00
	61.12. Validation workshop for the statistical yearbook	1.0	$ 6 000.00	$ 6 000.00	$ -	$ 6 000.00
	63. Ad-hoc refurbishing. deployment and testing	1.0	$10 000.00	$ 10 000.00	$ -	$ 10 000.00
	69. Component total	**30.0**	**$85 000.00**	**$ 110 000.00**	**$ 70 000.00**	**$ 40 000.00**
	Sub-total 1			**$ 468 810.00**	**$ 241 150.00**	**$ 227 660.00**
80	**Project monitoring and administration**					
	81. ITTO monitoring and review			$ 20 000.00	$ 10 000.00	$ 10 000.00
	82. ITTO evaluation costs, mid-term, final and ex-post			$ 18 000.00		$ 18 000.00
	83. ITTO Programme Support Costs (12% on items 10 to 82 above)			$ 60 817.00	$ 60 817.00	
	84. Donors' monitoring costs			$ -		
	Sub-total 2			**$ 98 817.00**	**$70 817.00**	**$28 000.00**
	ITTO TOTAL			**$ 567 627.00**	**$ 311 967.00**	**$ 255 660.00**

3.4.4 Yearly project budget by source – Exec. Ag. /Host government

	Budget components	Input	Unit Costs	TOTAL	Year 1	Year 2
10	**Project Personnel**					
	11. National expert (long term)	0.0	$ -	$ -	$ -	$ -
	11.1. Project Coordinator	24.0	$ 400.00	$ 9 600.00	$ 4 800.00	$ 4 800.00
	11.2. 01 Analyst	24.0	$ 200.00	$ 4 800.00	$ 600.00	$ 4 200.00
	11.3. 01 Statistics Officer in charge of monitoring the Expert Consultant in Statistics	21.0	$ 200.00	$ 4 200.00	$ 1 800.00	$ 2 400.00
	11.4. 01 IT Manager	24.0	$ 200.00	$ 4 800.00	$ 2 400.00	$ 2 400.00
	11.5. 01 monitoring and evaluation officer	24.0	$ 200.00	$ 4 800.00	$ 2 400.00	$ 2 400.00
	12. Other staff	0.0	$ -	$ -	$ -	$ -
	12.1. 01 Secretary and bookeeper	24.0	$ 150.00	$ 3 600.00	$ 1 800.00	$ 1 800.00
	12.2. 01 Driver	24.0	$ 100.00	$ 2 400.00	$ 1 200.00	$ 1 200.00
	12.3. 04 Focal points of technical directorates (Central/Headquarters Services)	156.0	$ 130.77	$ 20 400.00	$ 7 200.00	$ 13 200.00
	12.4. 10 Focal points in decentralized services (10 regions)	180.0	$ 100.00	$ 18 000.00	$ 12 000.00	$ 6 000.00
	19. Component total	**514.0**	**$56 680.77**	**$ 72 600.00**	**$ 34 200.00**	**$ 38 400.00**
50	**Consumables**					
	51. Fuel and lubricants	2.0	$ 2 000.00	$ 4 000.00	$ 2 000.00	$ 2 000.00
	56. Vehicle Insurance	2.0	$ 400.00	$ 800.00	$ 400.00	$ 400.00
	59. Component total	**325.0**	**$10 851.23**	**$ 4 800.00**	**$ 2 400.00**	**$ 2 400.00**
60	**Miscellaneous**					
	61. Various meetings and workshops	0.0	$ -	$ -	$ -	$ -
	61.3. Two project steering committee meetings	2.0	$ 6 000.00	$ 12 000.00	$ 6 000.00	$ 6 000.00
	61.4. 4 stakeholders knowledge sharing meetings	4.0	$ 4 000.00	$ 16 000.00	$ 8 000.00	$ 8 000.00
	62. Financial audit	2.0	$ 6 000.00	$ 12 000.00	$ 6 000.00	$ 6 000.00
	69. Component total	**30.0**	**$85 000.00**	**$ 40 000.00**	**$ 20 000.00**	**$ 20 000.00**
70	**Local management costs**					
	71. EA's management costs (8% of total EA costs)			$ 9 392.00	$ 5 071.68	$ 4 320.32
	79. Component total			**$ 9 392.00**	**$ 5 071.68**	**$ 4 320.32**
	EA /Host Government Total Costs			**$ 126 792.00**	**$ 61 671.68**	**$ 65 120.32**

3.4.5 Activities and components

Overall project budget by activity and component (in US dollars)

OUTPUTS / ACTIVITIES + Expenses not linked to any one activity	Budget components												Year	OVERALL TOTAL
	10. Project personnel		20. Sub-contracting		30. Duty travels		40. Capital Goods		50. Consumables		60. Miscella-neous			
Output 1: The coordination mechanism for forest statistics collection and management established and operational														
Activity 1.1: Awareness-raising for all stakeholders involved	15 600.00	E	-		-		67 330.00		31 900.00	IE	44 000.00	I	Y1. Y2	158 830.00
Activity 1.2: To establish the coordination mechanism for the forest and wildlife statistics collection and management structures	-		-		-		-		-		12 000.00	E	Y1. Y2	12 000.00
Activity 1.3: Coordination meetings between the various structures	-		-		-		-		-		16 000.00	E	Y1. Y2	16 000.00
Sub-total 1	**15 600.00**	**E**	**-**		**-**		**67 330.00**		**31 900.00**	**IE**	**72 000.00**	**IE**		**186 830.00**
Output 2: Reliable information collection methodologies developed and implemented														
Activity 2.1: Identification and validation of baseline data to be collected to calcultate indicators relevant to the forest and wildlife sub-sector	5 400.00	E	4 000.00	I	2 120.00	I	-		-		4 000.00	I	Y1	15 520.00
Activity 2.2: To develop and harmonize the data collection methodologies	5 400.00	E	2 000.00	I	-		-		-		6 000.00	I	Y1	13 400.00
Activity 2.3: Testing to validate data collection tools and methodologies	6 000.00	E	-		3 520.00	I	-		1 000.00	I	8 000.00	I	Y1	18 520.00
Activity 2.4: To train forest duty station managers and 10 focal points in the use of data collection tools (cost of mission, coffe-break, refreshments)	59 800.00	IE	-		4 000.00	I	-		-		-		Y2. Y1	63 800.00
Activity 2.5: To develop a manual of monitoring and evaluation procedures for forest statistics	-		5 000.00	I	-		-		-		8 000.00	I	Y1	13 000.00
Sub-total 2	**76 600.00**	**IE**	**11 000.00**	**I**	**9 640.00**	**I**	**-**		**1 000.00**	**I**	**26 000.00**	**I**		**124 240.00**
Output 3: The forest data management unit established and operational														
Activity 3.1: To develop the computer module	4 800.00	E	50 000.00	I	2 400.00	I	65 000.00	I	-		13 000.00	I	Y1. Y2	135 200.00
Activity 3.2: To design the statistics data capture applications	600.00	E	10 000.00	I	-		-		-		13 000.00	I	Y2	23 600.00
Activity 3.3: To train personnel in the use of data capture applications	44 000.00	I	-		-		-		-		-		Y2	44 000.00
Activity 3.4: To collect data at field level	6 000.00	E	-		-		-		-		-		Y2	6 000.00

Activity 3.5: Monitoring on the implementation of data collection procedures and project activities	13 800.00	E	-		4 460.00	I	-		-		-		Y1. Y2	18 260.00
Activity 3.6: Data capture	6 000.00	E	-		4 360.00	I	-		-		-		Y2	10 360.00
Activity 3.7: To organize one awareness-raising workshop for the promotion of the applications developed	-		-		-		-		-		8 000.00	I	Y2	8 000.00
Activity 3.8: To disseminate information	4 200.00	E	-		3 520.00	I	-		4 000.00	I	18 000.00	IE	Y1. Y2	29 720.00
Sub-total 3	**79 400.00**	**IE**	**60 000.00**	**I**	**14 740.00**	**I**	**65 000.00**	**I**	**4 000.00**	**IE**	**52 000.00**	**IE**		**275 140.00**
Sub-total (ITTO)	**99 000.00**		**71 000.00**		**24 380.00**		**132 330.00**		**32 100.00**		**110 000.00**			**468 810.00**
Sub-total (Exec. Ag.)	**72 600.00**				**-**		**-**		**4 800.00**		**40 000.00**			**117 400.00**
Sub-total (Others)	**-**		**-**		**-**		**-**		**-**		**-**			**-**
TOTAL	**171 600.00**		**71 000.00**		**24 380.00**		**132 330.00**		**36 900.00**		**150 000.00**			**586 210.00**

(I) – ITTO Contribution

(E) – Executing Agency / Host Government contribution

(O) - Contribution from other sources

3.5 Assumptions, risks and sustainability

3.5.1 Assumptions and risks

The table below details the key risks and mitigation measures identified for the project. The magnitude of the risks identified is based on a subjective assessment using two variables: 1) the probability that a given risk will occur, and 2) if it occurs, the severity of its impact on the project's ability to achieve its specific objective. The mitigation measures have been identified for moderate and high risk only.

Risks	Probability	Impacts	Magnitude of risk	Mitigating measures
Development objective				
The instability of the institutional framework for project implementation.	Low	High	Medium	To have the minister pass two decisions: **1.** One to establish the project management and monitoring structures ; and **2.** One to appoint the key personnel of these structures (Steering Committee Coordinator and Manager).
Specific objective				
Economic operators do not support the project	Low	High	Medium	To conduct an awareness campaign at the national level towards the economic operators of the forestry sector to explain the new approach in the processing of forest statistical information.
Outcome 2				
Persons selected for training not fully committed	Low	Medium	High	Appointment of persons on the basis of competence and commitment
Use of training tools and techniques by trainers inadequate or sub-standard.	Low	Medium	Medium	Achievement at the end of each training programme, the level of ownership of trainer's behaviour.
Outcome 3				
High turnover of project human resources	Low	Medium	Medium	To advocate posting stability for project personnel
Access to funding lags behind the work plan schedule of activities	Low	Medium	Medium	To establish simple fund release procedures.

3.5.2 Sustainability and permanency

Financial level :
By project completion date, the operation of the system will be placed under direct Governmental responsibility and therefore funding will be integrated into MINFOF programmme budget.

Institutional level :
In 2012, MINFOF submitted a draft chart for the Presidency of the Republic of Cameroon providing for the establishment of a Statistics Unit in the Directorate of Cooperation and Project (DCP). This unit will be responsible for ensuring the continuation of project outcomes and achievements.

The maintenance of the system and its software applications will be provided by the IT Service Unit of MINFOF.

Social level :

- conflict / dispute between MINFOF / MINFI and economic operators related to tax returns will be minimized ;
- Community and municipal forestry actions will be better planned.
- Gender-based strategies will benefit from more reliable data.

Technological and scientific level

- The implementation of the forestry statistical information system will enable MINFOF / DCP to have a reliable database on forestry activities in Cameroon. All stakeholders, whatever their location may access this database included in the system, and this dbase will be administered and kept up to date on a daily basis. This database will also provide information to be used for for programme and development project planning studies, as well as the planning of national forest resource utilization, with a view to implementing sustainable resources management measures;
- The capability to better monitor the activities of operators will increase Forest Administration's capacity to more efficiently detect fraud or illegal activities and other abuses on forest resources ;
- The system will be a database that will provide input to academic research, research and development for the sustainable management and renewal of forest resources.

Policy and managerial level:

- The implementation of the system is consistent with the concerns of the Cameroonian Government, which, through the Interministerial Committee for Program Review (CIEP) has set up a logical framework for harmonizing support programmes (Governance and support within the sub-sector) for the development of statistics in all ministries. MINFOF becomes the driver for the national coverage by the framework.

- The availability of such data makes for a more informed decision-making process for forest resources.

Economic level

Economic agents will not be obliged to move to Yaounde from their business base to file in their data reports, which is a considerable saving of time and significant cost savings, not to mention that they will be exempt from most hassles that they undergo. The forest statistics system offers them the opportunity to wisely manage their stock of logs and their stock of processed products, as it enables them to more closely and efficiently monitor their local operations, log processing operations (monitoring of recovery rates by tree species) as well as sales of processed products.

For utilizers and users

The case of other state administrations such as Taxes, Customs, Ports of Douala, Kribi and Limbe is also addressed. They will have a tool that will allow them to better monitor the reports of economic operators on their businesses, for goods marketed both domestically and on export markets. They will have the opportunity to improve their respective revenues. For all other users, regardless of where they are, once they have acquired a right of access to the information generate, they will be able to access it permanently, without having to undertake any additional administrative steps.

PART 4. IMPLEMENTATION ARRANGEMENTS

4.1 Organizational structure organique and stakeholders participation mechanisms

4.1.1. Executing Agency and partners

The Division of Cooperation and Programming (DCP) is a structure attached to the Secretariat General of MINFOF. It is the Executing Agency of the project. It will be responsible for:

- the preparation of agreements and conventions as well as monitoring their implementation in coordination with the Legal Affairs Unit;
- monitoring relations with national and international partners ;
- the coordination of the implementation of aid and cooperation programmes;
- the identification and preparation of investment programs and projects;
- monitoring, control and evaluation of the implementation of programmes and projects,
- the definition of areas of research and related monitoring work.

DCP includes two units, namely:

- the Cooperation Unit ;
- the Programming and Project Unit.

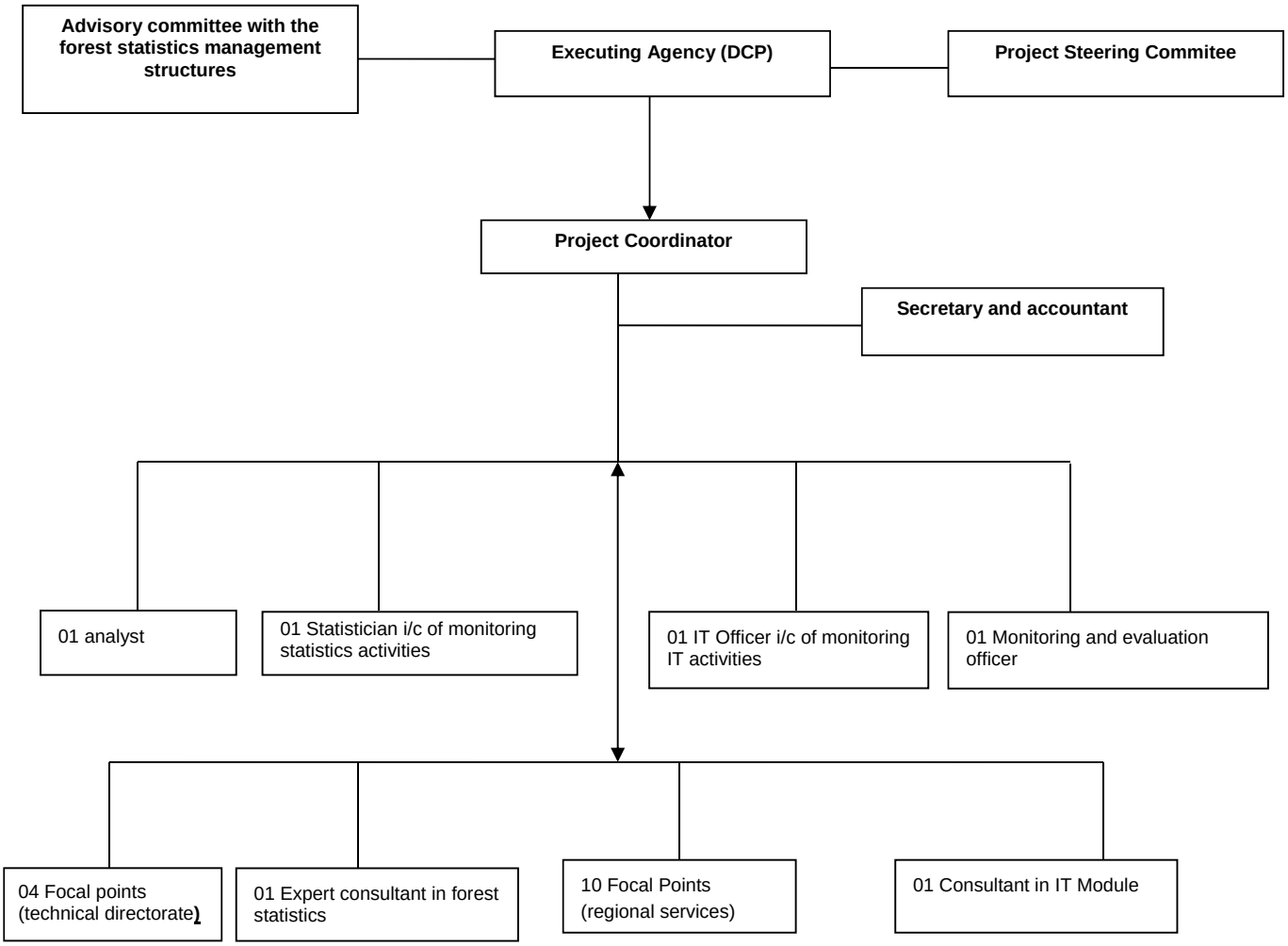
Its role will be to guide and support the work of the project. The executing agency will be responsible for appointing the coordinator and other project leaders, to recruit consultants also identified in the proposal. As far as possible, it will provide office facilities (building) to host the project headquarters.

4.1.2. Project management team

The project management team will be led by a national coordinator to be appointed to manage the project. He will be assisted by

- One analyst (statistician)
- One manager (statistician) responsible for monitoring the terms of reference of the consultant in forestry statistics and the control /command over the project statistics achievements
- A manager (IT) responsible for monitoring the terms of reference of the computer module consultant and the control /command over the project IT achievements
- One monitoring and evaluation officer
- Four (04) Focal Points (Technical Director)
- Two consultants
- Ten (10) focal points (Manager of the regional statistics services)
- One Secretary / Book keeper to manage expenditures
- 1 Driver

Project Staff Chart



4.1.3. Project Steering Committee

Its mission is to oversee the project, approving expenditures, ensuring compliance procedures, to review the activities carried out and study and propose changes in budgets. It will convene at least once a year to conduct the activites assigned to it to the best of its capacities.The establishment of this committee will be formalized by a decision of the Minister of Forestry and Wildlife.

- MINFOF (DCP,DF ;DPT ;DFAP)
- ITTO
- Two representatives of MINFI
- One representative of MINEPAT
- One representative of MINEPDED
- One representative of the National Institute of Statistics
- One representative of *Groupe de Filière Bois Camerounaise*
- One representative of the national forest industries association
- One representative of the national NTFP industries association
- One representative of OFAC

4.1.4. Stakeholders' participation mechanism

Communication and visibility are of utmost importance in this project to promote the establishment of a constructive dialogue between the stakeholders of the project. Awareness proves to be a highly important activity that will involve all stakeholders. To this end, it will be necessary to organize outreach workshops in all ten regions for municipalities, NGOs, economic agents in the forestry sector. Radio broadcasts, information leaflets and banners will also be produced.

The project launch will be a high-level event, to be held in the presence of senior officials from key ministries, relevant departments and agencies, economic operators of the Cameroon timber. The event will introduce the project and raise questions about data collection, analysis, consolidation and improving the coordination in the generation of forest and wildlife statistics in Cameroon.

In addition, stakeholder participation will be by means of a coordination and consultation mechanism for stakeholders. The executing agency will establish an Advisory Committee of forest and wildlife statistics management structures. This committee will be responsible firstly to ensure a flow of information to stakeholders and to provide a platform through which they will be able to provide input to the project and also to support the coordination of actions by statistics management structures.

The mechanism comprises :

- Three representatives of MINFOF (SIGIF, MIB, COMCAM,)
- One representative of PSRF
- One representative of the Customs Department
- One representative of the Cameroonian forest industries' traders association
- One representative of a conservation NGO ;
- One representative of the *Institut supérieur des recherches* ;
- One representative of the Cameroon Forest Community Association
- One representative of the Civil Society Platform in Cameroon
- One representative of the community forest associations of Cameroon.

It is chaired by a member from the committee elected at the end of the first meeting convened by the Coordinator, who provides its secretariat.

4.2 Reporting, review, monitoring and evaluation

MINFOF will submit progress reports in accordance with the ITTO Guidelines for projects Monitoring, Review and Evaluation. Progress reports will be produced twice a year during the project implementation period. The technical reports will also be prepared and submitted in compliance with the above guidelines. ITTO monitoring missions will be conducted twice a year. A final project report will be submitted by MINFOF to ITTO no later than three months after the end of the project. In addition to the ITTO monitoring missions, monitoring and evaluation will be conducted internally by an evaluation team of DCP / MINFOFI. The project management team in collaboration with the evaluation team will be responsible for the satisfactory implementation of project activities. It will submit project progress reports to the DCP Assessment Team prior to submitting them to ITTO. In addition to the daily monitoring of progress in the implementation of project activities, government authorities and members of the civil society will be involved in monitoring the project implementation progress. The results of monitoring and internal evaluation will be used to make adjustments in the proposed activities for the rest of the project cycle. The Project Steering Committee will meet once a year to discuss technical aspects of the project and administrative management issues for the improvement of the annual plan of activities.

Specific reports will be prepared as part of the Monitoring & Evaluation Programme (M & E) ; they are : (i) project launching or inception report; (Ii) semiannual reports on project progress; (Iii) audit reports (vi) technical reporting; (viii) final/completion report.

The table below presents a summary of key M & E Activities

Nature of the Monitoring and Evaluation Activity	Responsible Party	Timing & schedule
Project Reporting		
Project inception report	Executing Agency	Shortly after the holding of the project launching workshop and two months after project approval and funding
Annual Plan of Operations	Executing Agency, Project Steering Committee and ITTO Executive Director	Annually by the executing agency and especially at least two weeks before the launch of the following year of project work
Project progress report	Executing Agency	No later than February 28 and August 31 of each Year, including four weeks before the expected date of review mission
Technical report	The Consultant and Executing Agency	As appropriate
Financial audit report	The Consultant and Executing Agency	Annually within three months of the end of the fiscal year and within four months following the completion of the project
Completion report	Executing Agency and the Executive Director of the ITTO	During the three months following project completion
Project launching and project completion workshops and meetings of the Project Steering Committee (PSC)		
Project launching (start-up) Workshop	Executing Agency	From the first month of project implementation.
Project completion Workshop	Executing Agency in consultation with the PSC	On project completion
Meetings of Project Steering Committee	Executing Agency in consultation with the PSC	Once a year
Other monitoring and evaluation activities		
Feedback Workshop to report the results of the various contracted services	Project personnel and consultants, with a peer evaluation, as applicable.	As appropriate
Field level surveys and inspections	Project staff, consultants, ITTO and other project partners (as applicable).	At least once a year

4.3 Dissemination and mainstreaming of project learning

4.3.1 Dissemination of project results

The project will prepare and implement a communication and dissemination plan. It will be based on a thorough analysis of the audience for the knowledge generated by the project, the sources of information which stakeholders rely on, the most appropriate communication media, the structures and systems to ensure access and availability of knowledge both during and after the project.

Recognizing that the ultimate goal of any knowledge dissemination exercise is to put knowledge to use, the dissemination plan will also track the adoption of best practices.

The dissemination of project results will be done through:

- The drafting and editing of scientific articles in the ITTO Newsletter (TFU), the Green letter published by MINFOF and other newsletters;
- The production and distribution of CD ROMs, posters and flyers;
- The production of statistical yearbooks, and postings on the MINFOF website ;
- The holding conferences / debates in forestry training institutions in Cameroon.

4.3.2 Mainstreaming of project learning

The project proposes to maximise the contribution of information technology and communication in the management of statistical data on forest and wildlife.

ANNEX 1. PROFILES OF THE EXECUTING AGENCY AND COLLABORATING AGENCIES

1. Background

Name : *Division de la Coopération et de la Programmation (DCP)/ Ministère des Forêts et de la Faune*
Postal Address : BP : 34430 Yaoundé, Cameroun
Tel : (+237) 222 235 547

The Ministry of Forestry and Wildlife is responsible for developing and implementing government policy on forestry and wildlife. As such, it is responsible for:

- the development and management of protected areas;
- forest management and protection in the national domain;
- inventory and protection of fauna and flora;
- the development and monitoring of the implementation of regeneration, reforestation, inventory and forest management programmes
- control, compliance and regulation in the field of forestry and wildlife by the various stakeholders and application of administrative sanctions where appropriate;
- the development and management of botanical gardens
- the implementation of international conventions ratified by Cameroon on forest, wildlife and hunting, in conjunction with the Ministry of Foreign Affairs;
- liaison with trade bodies in the forest sector;
- monitoring of sub-regional organizations concerned with the conservation of the sub-regional ecosystem, in conjunction with the ministerial departments concerned.

MINFOF provides liaison between the Government and the International Tropical Timber Organization (ITTO) and the Forest Commission (COMIFAC), in conjunction with the Ministry of External Relations. To accomplish his mandate, the Minister of Forests and Wildlife is assisted by a Secretary of State, and has

- One Private Secretariat;
- Two (02) Technical Advisers;
- One General Inspectorate;
- One National Enforcement Brigade for Forest Control and Anti-Poaching Actions;
- One Central Administration;
- Decentralized Services
- Services Attached.

The Division of Cooperation and Programming (DCP) is a structure reporting to the General Secretariat of the Ministry of Forestry and Wildlife. Its responsibilities and mandate is described in Government Order N° 2005/099 of 06 April 2005 providing for the organization of the Ministry of Forestry and Wildlife and include the following :

- Preparing agreements and conventions as well as monitoring their performance in conjunction with the Legal Unit ;
- Monitoring relations with national and international partners ;
- The coordination of the implementation of aid and international cooperation programmes ;
- The identification, preparation and monitoring of investment programmes and projects ;
- The monitoring, control and evaluation of programme and project implementation ;
- Defining the areas and direction of research and monitoring related work.

It comprises two units, namely :

- The Cooperation Unit ; and the
- Programming and Project Unit.

In addition, MINFOF a developed a new organizational structure in 2012 and submitted it the higher hierarchial level. The document plans the creation of three units :

- The Cooperation Unit ;
- The Programming and Projects Unit ;
- The Studies and Statistics Unit.

Currently MINFOF is supported by seven projects and programmes on (*sic*) the general supervision of DCP. The following table shows a list of projects and programmes completed or under implementation This table bears testimony of DCP's capacity to implement this project.

Programmes and Projects	**Periods**	**Sources of funding**	**Total budget**
Sustainable Natural Resources Management Programme in the Southwestern Region (PGDRN-SO), Phase II	2011-2016	KfW, GIZ	Euros 10,000,000
CITES-ITTO-ANAFOR Programme	2013-2015	ITTO	US$410,878
Sustainable Forest Management, Participation of Communities and Sustainable Use of the Sikop Forest Region (Coastal Region, Cameoon – Phase II)	2009-2015	ITTO	US$375,249
Securing Community Livelihood for the Sustainable Development of the Waza National Park and its Buffer Zone	2012-2015	PPTE & IUCN	US$1,898,300
Project for the Conservation and Sustainable Use of Forest Resources in the Ngoyla-Mintom Hills	2012-2017	GEF & World Bank	US$3,500,000
Pilot Project for Fuel Wood Management and Reforestation in the Northern and Far-North Regions	2012-2015	CIDA	US$960,000
Project to Support the Forêts & Environment Programme (PSFE) on the C2D Resources	2012-2016	AFD	Euros 10,796,923

2. Infrastructure

MINFOF has in its headquarters office spaces that can host the project, as well as further infrastructure and facilities in the ten regional offices and fifty-eight departmental offices.

3. Budget

The overall DCP budget in USD for the three past years is as follows :

Budget allowance 2013	**Budget allowance 2014**	**Budget allowance 2015**	**Total in US$**
26 000	26 000	20 000	72 000

These budgets have been used in the following expenditures :

- Purchases of supplies and light office maintenance ;
- Fuels and lubricant for motor vehicles
- Maintenance and repair of current vehicles, procurement of spare parts and tyres;
- Allowances for missions upcountry and performance bonuses.

This budget represents the amount allocated by the State to the DCP through MINFOF. The reduction of the budget allocated to the DCP is explained by the impact of the war that Cameroon is currently waging against the Islamic sect BOKO-HARAM. This annual budget reduction has no bearing on the implementation capacity of this project by the DCP. On the contrary, the reduction of financial resources allocated to DCP pushes the latter to seek additional funding until the national budget situation improves.

It should be noted that this amount does not include the salary costs of the staff nor the national counterpart budget provided to the various ongoing projects and programmes in the sector, nor certain « sovereignty expenditures » (*dépenses de la souveraineté*).

4. Personnel

The current staff establishment of the Division of Cooperation and Programming includes 100 executives and general staff distributed among Headquarters and in the projects and programmes supervised by MINFOF

ANNEX 2. TERMS OF REFERENCE OF THE KEY EXPERTS MADE AVAILABLE TO THE PROJECT BY THE EXECUTING AGENCY

PROFILE OF PROJECT COORDINATOR

CURRICULUM VITAE

IDENTIFICATION

SURNAME AND FORENAMES: **Ms EHETH née ONGMANONG VICTOIRE**

NATIONALITY: **Cameroonian**

Date and place of birth: 25.01.1969 in Ndikinimeki
FAMILY STATUS: **Married with 4 children**

Address: Ministry of Forestry and Wildlife, Yaoundé, Cameroon

TELEPHONE: **+237 99 81 97 45; FAX +237 22 23 22 44**

LANGUAGE SPOKEN: French, English

EDUCATIONAL AND ACADEMIC BACKGROUND

1986 to 1989:	Diplomas: Brevet d'Études, Baccalaurate in Administration Techniques.
1990 to 2010:	Diplomas: B.A. in Private Law, M.A. in Law, Diploma of Academic & Vocational Advisor, **Master II in Environment Sciences.**

PROFESSIONAL HISTORY

Current position since 2010:	**Head of the Division of Cooperation and Programming with the Ministry of Forestry and Wildlife**.
2006 – 2010:	Research officer /Research Assistant with the Division of Cooperation and Programming, Department of Forestry and Wildlife.
1997 – 2006:	Head Clerk at the Vocational and Academic Counselling Bureau

OTHER RESPONSIBILITIES

- **Focal point of the International Tropical Timber Organization;**
- **Contact point in charge of Statistics in Cameroon for the International Tropical Timber Organization (ITTO);**
- **National Coordination of the Central African Forest Commission (COMIFAC).**

Professional duties / areas

- Project management
- International Cooperation
- Environmental Impact Studies
- Forest management
- Project monitoring and evaluation
- Academic and vocational counselling

TRAINEESHIP IMPLEMENTED AND PARTICIPATION IN INTERNATIONAL CONFERENCES

- Development project management
- Incorporation of environmental aspects in development projects with the European Union

- Kyoto Protocol
- Participation in the work of the International Tropical Timber Council
- Submission of forest statistics to the ITTO
- Participation in COMIFAC annual sessions.

OJONG Marcel AYUK : Monitoring & Evaluation Officer

Personal Identification

Date of birth: 7th May 1976
Nationality: Cameroonian
Marital Status: Married and Father of a daughter
Tel: (+237) 79 15 55 45 / 99 24 89 13/33 84 38 66
Email: ojongmarcel@ymai.com

Certificate obtained

1997-2003: Forestry and Wildlife Engineering Certificate, Faculty of Agronomy and Agricultural Sciences (FASA)-University of Dschang, Cameroon

Other training

September-November 2011: Capacity building on National Forest Monitoring System to Promote Reducing Emissions from Deforestation and Degradation, including forest conservation, sustainable forest management and enhancement forest carbon stocks(REDD+), Japan International Forestry Promotion and Cooperation Centre (JIFPRO)- Tokyo, Japan

September-December 2012: The Japanese Government Technical Assistance for the Forest Preservation in the Republic of Cameroon – Analysis of satellite images. Training carried out by PASCO in the Cameroon Remote Sensing and Mapping Forestry Centre (CETELCAF), Yaoundé -.

Language skills: Excellent mastery of verbal, reading and written English and French languages.

Area of expertise and interest

- Forestry policies and Forest Sector planning;
- Formulation, Implementation, monitoring and evaluation of ITTO projects;
- Promotion of Reducing Emissions from Deforestation and Degradation including biodiversity conservation, sustainable forest management and enhancement of carbon stocks;
- Forest resource survey techniques and biomass estimation using destructive sampling in permanent plots;
- Mastery of remote sensing, GIS and photo interpretation technology.

Current experience in international cooperation's on climate change and the forest.

Professional Experience

Date		Name & Address of Employer	Position Held
From	To		
September 2012	Present	Central Service of the Ministry of Forestry and Wildlife (MINFOF), P.O Box 34430, Yaoundé	Assistant Research Officer N°1, Project and programming Unit-DCP
February 2009	September 2012	Central Service of MINFOF, P.O Box 34430, Yaoundé	Staff at the Division of Cooperation and Program (DCP)
July 2007	February 2009	Decentralized service of MINFOF: Lobeke National Park-Mambele, East Region	Head of the Anti-poaching Unit Lobeke National Park (Chief of Forestry and Wildlife Control Station- Kika)

Publication
Co-author of the Cameroon Readiness Preparation Proposal, Forest Carbon Partnership Facility (UNO-REDD), September 2012.

GODDYEPIENGENE, Manager i/c of monitoring the execution of the ToR of the expert consultant in IT Module and the control over the IT achievements of the project

M.SC | OCA | ITIL | ORACLE SOA | CLOUD | TOGAF
ORACLE 11G CERTIFIED SOA IMPLEMENTATION SPECIALIST
MASTER OF SCIENCE IN IT (UNIVERSITY OF MADRAS/INDIA)FIRST CLASS
COMPETITIVE STRATEGY (DISTINCTION)

Core competencies

- Over nine years hands-on technical experience – strong understanding of technologies such as specialized hardware, application integration, solution and enterprise architecture, software engineering

Experience

Research Assistant N°2/Solution Architect
Ministry of Forestry and Wildlife - Cameroon

-Requirements specification, Analysis, Design and follow-up of the Wood Tracking and Supply Chain Management System developed by Helveta Ltd (The world-wide leading IT and logistic company dealing with wood/timber traceability and complex assets management as they move through a supply chain) to deliver the first FLEGT (Forest Law Enforcement for Governance and Trade) Certificates in Cameroon.
-Project manager for the Wood Internal Market System Project. Using AGILE methodology in other to design a virtual market for wood/timber resources and its derivatives.

System and database Administrator

Ministry of Public Service and Administrative Reforms

-Meeting very constraining SLA needs, servicing all incidents, changes and requests for the SIGIPES central system (Cameroon Central Government Human Resource Management System. SIGIPES runs multiple Oracle databases, more than 200 stored procedures and Visual Basic for the clients.

Professional Trainings & Certifications

- 2014- ITIL V3 Certified
- 2013- CompTia Cloud Certified
- 2014- Oracle SOA Suite 11g CertifiedImplementationSpecialist
- 2013- Togaf Foundation Certified
- 2008-Oracle database certified Associate
- 2014- Big Data (Hadoop, Pig, Cassandra, Hive, Jaql)
- 2013- PMP (Course completed)
- 2013- EC-Council Disaster and Recovery Planning (Course completed)

Academic records

Ludwig-Maximilians-UniversitätMünchen (LMU)/Coursera online course
07/12-02/13 Competitive Strategy (with distinction)

University of Madras (Chennai, India)
Jun 2010 Master of Science in Information Technology- First Class Honour
Jun 2012 Research topic: Migrating to SOA through Web Services for Application Integration and Cross-platform Interoperability.

Fotso Victor Institute of Technology (Bandjoun, Cameroon)

2007 Bachelor of Science in Information Technology
2009 Research topic : Single Sign-On authentication infrastructure with Kerberos

Ndi Samba Institute of Technology
2001 Higher National Diploma in IT and Management
2003

Language proficiency

French	English	German
Fluent		Basic
Fluent		

DONGMO DJIOFACK MIGUEL LANDRY, Analyst

PERSONAL DETAILS

Names:		**DONGMO DJIOFACK**
First Name:		**Miguel Landry**
Date and place of birth:		**August 16, 1981 in Yaounde**
Marital status		**Single Children-01**
Occupation:		**Demographer**
Govn't Employer Nb. :		**620173-N**
E-mail	:	**dongmiguel@yahoo.fr**
GSM	:	**679 31 69 21 / 696 00 37 11**

SCHOOL CURRICULUM AND TRAINING

2013 **2013 Graduation : Vocational Master's in Demography**
Demographics Research and Training Institute (IFORD).
2005 **Teacher's Diploma for General Secondary Education, 2nd Grade**
Ecole Normale Supérieure in Yaoundé.
2002 **Bachelor of Mathematics**
University of Yaoundé I.
1999 **Baccalaureate « C-Series (Maths) »**
High School of Biyem-assi

COURSES AND SEMINARS/WORKSHOPS

2012 : Training in Advanced Statistics Analysis Methods by CARE-IFA / IFORD
2013 : Training seminar in IMIS (Integrated Management of Information Systems)
2013 : Training Seminar in Social Science Research Methodology

AREAS OF SPECIALISMS

- Collection of demographic and social data
- Use and analysis of data
- Analysis of socioeconomic and demographic surveys
- Analysis of censuses
- Analysis of demographic phenomena
- Monitoring and Evaluation of projects / programmes
- Design and Management of Statistics Information Systems
- Operational Research and Strategic Planning

PROFESSIONNAL CAREER

2006-2013	Ministry of Secondary Education *Teacher of Mathematics*
2014	Ministry of Economy, Planning and Regional Development (MINEPAT) *Directorate of General Affairs*, *Support Executive*
2015-	Ministry of Forest and Wildlife (MINFOF) *Division of Cooperation and Planning, Support Executive.*

LANGUAGES

- French : Reading, Writing, Speaking -- Good
- English : Reading, Writing, Speaking -- Average

MEMBER OF CIVIL SOCIETY ORGANIZATIONS / Community Life

2014- Chairman of the Association of Demographers for the 33rd Promotion of IFORD

Ekoto Alex sigfried, **Manager i/c of monitoring the execution of the Forest Statistics Expert's ToR and the control over statistics achievements of the project**

Statistician-Demographer, Expert in Monitoring & Evaluation
Born November 9, 1990 at Minkang II-Sangmélima
Cellular Ph.: 674258375/ 696270895
E-mail: sigfriedalex@yahoo.fr

Studies and Degrees

- **2013- Vocational Master's degree** in Demography and Population Sciences. Location: Yaoundé Cameroon-IFORD
- **2010**- **Bachelor's Degree in Physical Geography**, MAJOR : Environment. Location: University of Yaounde I
- **2007**-**Baccalaureat**, **« D-Series » (Maths and Life Sciences)**. Location : Bilingual Secondary School of Djoum

Additional training

- **Training in Geographic Information Systems (GIS)** by the University of Yaounde I;
- **Introduction to REDD+ mechanism**, by the University of Yaounde I;
- **Training in Integrated Management of Information Systems (IMIS)** by IFORD**;**
- **Training in Advanced Statistics Analysis Methodologies** by CARE-IFA/IFORD**;**
- **Training in Statistics Applied to Forestry ;**by *Consortium de Recherche* FOR@C / CERFO (online).

SPECIALISMS

- Monitoring and Evaluation of projects / programs;
- Design and management of information systems (Geographical and Statistical);;
- Social and Environmental Mapping ;
- Operational Research and Strategic Planning ;
- Collection and analysis of socioeconomic and environmental data

Specific abilities

- Outstanding abilities for document drafting and synthesis;
- Outstanding abilities for managing multidisciplinary and/or multicultural teams;

- Strong skills to develop and practice participatory research approaches
- Very good command of polling and sampling techniques;
- Experienced in surveys, census and inventories.

Professional experience

Periods	Activities	Institutions
12/2012-01/2013	**Field-level data checking and capture** for a survey on household work in Yaounde	**IFORD**
01/2014 - 09/2014	**Executive** with the Department of General Affairs	Ministry of Economy, Planning and Land Management (**MINEPAT**)
09/2014-10/2014	**Supervisor of Profiling and Evaluation** in the humanitarian response provided to refugees in the EAST and ADAMAOUA regions	**UNFPA, IFORD, HCR, Plan Cameroon**
10/2014-08/2015	**Executive** with the Department of General Affairs	Ministry of Forests and Wildlife(**MINFOF**)
Since 08/2015	**Executive** with the Programming and Project Unit	Ministry of Forests and Wildlife(**MINFOF**)

Language and IT skills

- **Working Languages :**
  - **French :** Excellent
  - **English :** Fair
- **Information Technologies :**
  - **Office automation** : Word, Excel, PowerPoint, etc.
  - **Data use and analysis** : SPSS, Stata, CSpro, SPAD, Epi-Info etc.
  - **Management of information systems:** REDATAM +SP, Arcgis.
  - **Mapping :** Phillcarto, Arcgis, Qgis, etc.

Mrs ESSOMBA Née NGONO Olive Solange (Secretary / Bookkeeper)

Date of birth : 18 october 1964
Contact : **99 95 60 04**
Email : **nolis100@yahoo.fr**

ACADEMIC HISTORY

YEARS	DIPLOMAS	SCHOOLS & INSTITUTES
2010	Vocational BA in Human Resources Management	Complexe Universitaire Siantou
1994	BTS in Executive Secretariat	Cours Universitaires du Soir
1990	Baccalauréat G1	Institut Siantou
1987	Probatoire G1	Institut Samba
1984	BEPC	Collège Sainte Thérèse de Mva'a
1977	CEPE	Ecole Saint Luc de Tala

AREAS OF EXPERTISE

- Human Resources Management
- All secretarial duties, including
- Typing / data input
- Telephone calls management
- Filing
- Information screening
- Management of boss's diary
- Information and guidance to users/visitors
- Word processing ;
  - Use of renovated tools
  - Training of junior secretaries ;
  - Verbal and written communication ;

PROFESSIONAL EXPERIENCE

- Manager's private secretary at the Division of Cooperation and Programme Development since 2007
- Temporary Executive Secretary at the Division of Cooperation and Projects, MINEF, 2006-2007 ;
- Temporary Manager's Secretary at the Cabinet of the Ministry of Environment and Forests, 15 March – 23 August 2002;
- Temporary Manager's Secretary at the Division of Cooperation, MINEF 2001-2002 ;
- Acting Manager's Secretary with TOTALFINAELF as replacement April 2 000 - September 2001
- Trainee Manager's Secretary with SODEPA Feb. 1999 - July 1999 ;
- Manager's Secretary with SOREF June 1998 – December 1998 ;
- Trainee Manager's Secretary with SOCINADA Jan. 1994 – May 1994

LANGUAGES

English : Fair
French : Excellent

I- HOBBIES : Reading, collective work, music.

II-

ANNEX 3. TERMS OF REFERENCE OF KEY STAFF AND CONSULTANTS FINANCED BY THE ITTO

Title/ Position	Profile of Consultant	Terms of reference
Consultants' firm or individual Consultant, expert in forest and wildlife statistics	• Holding a post-graduate degree (5 years of college education) in either forestry, agronomy, economics or other degree in statistics; • Having more than 10 years experience in statistics; • A good command of the use of statistics software; • Good command of both official languages of Cameroon (French and English)	• To implement a baseline study on statistics management software programmes, data collection tools, data collection procedures, stakeholders and metadata existing in the sub-sector. • To harmonize the software programmes, tools and data collection methodologies and develop a manual of procedure for collecting data using the results of the baseline study. • To develop a training module on the use of data collection tools and train MINFOF staff on how to use the tools. • To develop a manual of monitoring and evaluation procedures applying to forest statistics collection. • To design et develop data capture applications. • To undertake the early analyses and identify the first indicators. • To contribute to the development of the Statistical Yearbook
Consultants' firm or individual Consultant responsible for developing IT tools for the Statistical Management System.	• **To hold at least one postgratuate degree (5-year college education) in computer sciences/ information technologies ;** • A computer engineer specialist in information systems with at least 10 years of experience in development, deployment, maintenance and integration (Integrated Management of Information Systems), with a profile of Architect Solution, Corporate Architect or Integrator of Solutions. • He will also hold certifications for Oracle database, Oracle / IBM Websphere middleware, Java Architect, TOGAF, etc.. • Strong skills for data mining and administration of warehouse-type of data bases.	• To Conduct a study on all applications that could facilitate statistical data hosting, handling and Web posting/forwarding functions • To develop the IT modules enabling statistical data hosting, handling and Web posting/forwarding functions • To test and validate the system • to train users

	• **To have a good command of REDATAM+SP**	

ANNEX 4. RECOMMENDATIONS BY THE ITTO EXPERT PANEL

Assessment by the Fifty-first Panel

No	Recommendations of the 51st expert panel	Executing Agency Response to the Recommendation
1.	Following the previous Expert Panel recommendations, Activity 3.1 (*order and acquire new equipment*) is not an Activity and should be removed from Section 3.1 and from the Work Plan.	**Activity 3.1 has been deleted from section 3.1 and the work plan. However the different operations and expenses related to this activity have been sandwiched in a coherent manner within other activities, specifically; in Activity 1.1, A3.1 and A3.8 in section 3.4.1 of page 31 relating to the master budget.**
2.	The listing of the Activities titles in the Work Plan has to be consistent with the titles of the Activities listed in Section 3.1.	**This has been taken into account both in section 3.1.2 of page 25 and section 3.3 of page 30**
3.	Output 3 should be rearranged as it can be confusing and difficult to achieve.	**Output 3 has been logically reorganised. In this light, two activities have been deleted, bringing this output to eight activities instead of ten initially. More so we are very convince in the effective implementation of this output as logically highlighted in section 3.2 of this document.**
4.	New strategic activities have been added to the project leading to an increase of the ITTO budget share but to a decrease of the Executing Agency budget. The increase of the budget needed for the inclusion of new strategic activities has to be rebalanced between the ITTO budget and the Executive Agency budget.	**This has been taken into account in section 3.4 relating to the budget section (pp37-47). In effect ITTO budget has reduced to 3% of the initial budget, while the Executing agency budget has increased by 3% as per the initial budget.**
5.	The ITTO budget per components (Section 3.4.1) should be more detailed and consequently needs to be reformatted to include more detailed components and follow the ITTO manual formulation.	**This has been taken into account in section 3.4.3 page 41**
6.	Provide the funding share between ITTO and the Executing Agency by Activities.	**This has been taken into account in section 3.4.5 page 45**