INTERNATIONAL TROPICAL TIMBER ORGANIZATION

I T T O

PROJECT DOCUMENT

TITRE:	IMPLEMENTATION AND OPERATIONALIZATION OF A NATIONAL INFORMATION SYSTEM FOR THE SUSTAINABLE MANAGEMENT OF FOREST RESOURCES
SERIAL NUMBER:	PD 692/13 Rev.1 (M)
COMMITTEE:	ECONOMIC INFORMATION AND MARKET INTELLIGENCE
SUBMITTED BY:	GOVERNMENT OF COTE D'IVOIRE
ORIGINAL LANGUAGE:	FRENCH

SUMMARY:

In 2003, Côte d'Ivoire conducted the implementation of an ITTO pre-project [PPD 61/02 Rev.2 (M)] to provide a diagnostic on the current status of forest statistics in Côte d'Ivoire and to develop a strategy and a project to establish a national forest statistics management system. Since then, the implementation of this strategy has been initiated. An Integrated Forestry Activities Management System (SIGAF) was designed within the Ministry of Water Forest Resources (SIGAF). Several computerized forest statistics management systems have been developed, however the system is still not operational.

This project represents a new stage in the implementation of the national strategy for improving the forestry statistics management system contained in the strategy document resulting from the pre-project. This stage consists in effectively implementing this system. Specifically, this project is to enable the following:

- Testing and improving the information system to better address the expectations of users and better adapt to the requirements of the FLEGT mechanism currently under formulation in Côte d'Ivoire.
- Building the capacities of the personnel in those structures mandated to collect and process forest statistics, both within MINEF and economic stakeholders of the timber industry.

The implementation of this project will achieve the full computerization of the forest statistics data collection and processing system and thereby contribute to improving the decision-making process within the forest sector.

EXECUTING AGENCY:	DEPARTMENT OF INFORMATION TECHNOLOGIES, STATISTICS AND ARCHIVES OF THE MINISTRY OF THE ENVIRONMENT, WATER AND FORESTS (DISA)
COLLABORATING AGENCIES:	1. FOREST PRODUCTIONS AND INDUSTRIES DEPARTMENT; 2. REFORESTATION AND FOREST LAND REGISTRY DEPARTMENT; 3. SODEFOR; 4. CUSTOMS DEPARTMENT; 5. INLAND REVENUE DEPARTMENT; 6. ABIDJAN AUTONOMOUS PORT AUTHORITY (PAA) AND SAN PEDRO AUTONOMOUS PORT AUTHORITY (PASP)
DURATION:	24 MOIS

PROPOSED BUDGET AND OTHER SOURCES OF FUNDING:

SOURCE	Contribution in US$.
ITTO	290,541
Côte d'Ivoire	380,457
TOTAL	**670,998**

LIST OF ACRONYMS

AFD	:	*Agence Française de Développement* (French Overseas Development Agency)
BAD	:	African Development Bank
CDC	:	Commonwealth Development Corporation
CICC	:	Computerized connection of data collection centres
CIDA	:	Canadian International Development Agency
CNRA		*Centre National de Recherche Agronomique* (National Research Centre in Agronomics)
CPF	:	*Commission Paysans – Forêt* (Farmers-Forest Commission)
CPFN:		*Commission Paysans – Forêt* (National Farmers-Forest Commission)
CTF	:	*Coopérative de Travailleurs Forestiers* (Forest Workers Cooperative)
DB	:	Data base Department)
DGBF	:	*Direction Générale du Budget des Finances* (General Budget and Finance
DGD	:	*Direction Générale des Douanes* (Customs Department)
DGI	:	*Direction Générale des Impôts* (Inland Revenue Department)
DGTCP	:	National Treasury and Government Budget Department
DPFC:		*Direction de la Police Forestière et du Contentieux* (Forest Law Enforcement Department)
DPIF	:	Direction de la Production et des Industries Forestières (Department of
EFD/FED	:	European Fund for Development
ESA	:	*Ecole Supérieure d'Agronomie* (College of Agronomics)
FAC	:	*Fonds d'Aide à la Coopération* (Cooperation Aid Fund)
FAO	:	United Nations Food and Agriculture Organization
FLEGT	:	Forest Law Enforcement, Governance and Trade Forest Products and Industries)
GIS	:	Geographic Information System
GTZ	:	*Deutsche Gesellschaft für Technische Zusammenarbeit*
INS	:	National Institute of Statistics
ITTA	:	International Tropical Timber Agreement
ITTA	:	International Tropical Timber Agreement
ITTO	:	International Tropical Timber Organization
KFW	:	*Kreditanstalt Für Wiederaufbau*
NGO	:	Non-Governmental Organization
OIC	:	*Office Ivoirien des Chargeurs* (Bureau of Côte d'Ivoire Freight Forwarders) Operations Coporation)
PAA	:	*Port Autonome d'Abidjan* (Abidjan Autonomous Port Authority)
PASP	:	*Port Autonome de San Pedro* (San Pedro Autonomous Port Authority)
PDF	:	*Plan Directeur Forestier* (Forest Master Plan)
PSF	:	*Projet Sectoriel Forestier* (Forest Sector Project)
SEPBA	:	*Société d'Exploitation du Parc à Bois d'Abidjan* (Abidjan Log Yard
SIESIA	:	Information, Education, Outreach, IT and Archives Department
SIGAF:		*Système Intégré de Gestion des Activités forestières* (Integrated Forestry Activities Management System)
SODEFOR	:	*Société de développement des forêts* (Forest Development Corporation)
SPIB:		*Syndicat des producteurs industriels de bois* (Industrial Timber Producers Association)
VPA/APV	:	Voluntary Partnership Agreement
WFP	:	World Food Programme

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PART 1: PROJECT BACKGROUND

1.1 Origin

This project is a follow-up to PPD 61/02 Rév.1 (M) “Review of the Present Situation and Development of a Strategy and Project for Enhancing the National Forestry Statistics Management System” implemented between 2006 and July 2007. The pre- project led to the development of three documents that are (i) the diagnostic study of the current state of forestry statistics, (ii) the strategy developed for improving the national forest statistics system, (iii) the project proposal for the establishment of a national forest statistics system. The pre-project identified an array of problems or inadequacies in the national forestry statistics.

An early proposal arising from the strategy presented in 2008 and revised based on feedback from an expert panel in 2010 proposed implementing an information system to improve the national forest management system. One of the bases used in the preparation of this project proposal was the IT Master Plan developed in 2004 by the Department of Informatics, Statistics and Archives (DISA), through a national funding of $ 63.5 million CFA, or about USD 120,245.80. Finally, statistical documents that SIESIA (ex-DISA), the executing agency, developed taking into account forestry activities from 2004 to 2008 were also used in the preparation of this project proposal.

A revised version of that proposal was adopted by ITTO at the time after incorporating comments and suggestions made by the panel of experts.

Unfortunately, due to extremely unfavourable circumstances, this project did not receive funding at that time despite the promise of Japan. These circumstances were

- An earthquake that rocked Japan followed by a tsunami, producing major impacts on a power plant and the nuclear industry of that country;
- Elections in Côte d'Ivoire and the civil crisis that ensued.

Nevertheless, this did not prevent the Government of Côte d'Ivoire, which attaches particular importance to forestry statistics, to develop an Integrated Forestry Activities Management System named SIGAF, budgeted through government funding, and for this purpose, to equip the System with IT applications and a database under an Oracle platform, and to install relevant equipment and facilities. This system, which has not been tested with users, and which should be subject to an appropriate systematic training of potential users, is not yet operational.

In addition, the Government of Côte d'Ivoire has been engaged for several months in negotiations with the European Union for the implementation of the FLEGT device control from exports of timber and timber products. This requires the collection and processing of further statistical data which are not included in current SIGAF applications.

Therefore the PD 578/10 Rev.1 (M) proposed project on the "Establishment of a national information system for the sustainable management of forest resources" was reformulated to reflect recent developments.

1.2 Relevance

1.2.1 - Compliance with the objectives and priorities of the ITTO

This project is consistent with stated objectives d, h and l of the International Tropical Timber Agreement, adopted in 2006, namely:

Objective d: "Enhancing the capacity of members to implement a strategy for achieving exports of tropical timber and timber products from sustainably managed sources";

Objective 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”;

Objective 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”.

In this respect, the proposed project is fully in line with the Action Plan of the ITTO, and in particular the priorities set by the Committee on Economics, Statistics and Markets. It also contributes to certain objectives of the Committee of Reforestation and Forest Management by providing data needed to assess the forestry strategy and economic and financial costs and benefits of forest logging at national level.

1.2.2 - Relevance to the Government policies of Côte d'Ivoire

This project aims at making the national information system for sustainable forest resources management operational and it will contribute to providing our country updated information on the use of all these resources.

This is fully consistent with the successive policies implemented in Cote d’Ivoire during the past forty-four years, including:

Laws No. ***65-255 of August 4, 1965 on the protection of wildlife and the practice of hunting and law No. 65-425 of 20 December 1965 providing the Forest Code*** which enshrines the protection of national parks and nature reserves and forest conservation areas, the exercise of customary rights and the issuance of logging concessions in the permanent forest estate on government land.

The ***Forestry Master Plan (PDF) for the 1988-2015 period*** providing the conservation and rehabilitation of forest resources along with the development of agriculture, which was adopted in 1988.

This plan included an emergency program to rehabilitate the sector over the medium term. The Forestry Sector Project (PSF1) made up the first phase of this program and ran from 1991 to 1996 with financial support from donors (World Bank, CIDA).

Finally, this project is consistent with the reform of forestry operations, initiated by Governmental Decree No. 94-368 of July 1st, 1994, which aims to:

- Improve the management of forestry and logging operations;
- Add value to the timber resource base through the further processing of timber;
- Rehabilitate the forest estate through reforestation activities and
- Clean up the logging sector and timber trade.

The implementation of the national information system addresses the need to sustainably manage forest resources. To do this, in its development phase, there is a need for deploying the system to reach the stakeholders of the sector and the forestry administration throughout the national territory. This will enable the phased improvement of the module through successive adjustements.

When Cote d’Ivoire will be acquiring such an information system, the country will be brought in line with other African timber producing countries and it will be able to supply the ITTO with relevant and updated data on national forestry activities.

The implementation of this system will at the same time overcome the constraints linked to the timber tracking process which happens to be one of the major requirements in the FLEGT process.

Finally, this will become possible to better understand the significance of forestry in the national economy, particularly the sector's contribution to Gross Domestic Product (GDP).

1.3 - Target area
1.3.1 - Geographic location

The stakeholders who submit information on forestry activities fall mainly below the 8th Parallel or below the green line marked on the map attached to the next page.

The timber processing plants are located in 39 towns, and the larger of these towns have been encircled on the same map. Logging areas are around in 43 towns that are home to local/district branches (*Cantonnements* des Eaux et Forêts) of the Forestry Department.

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

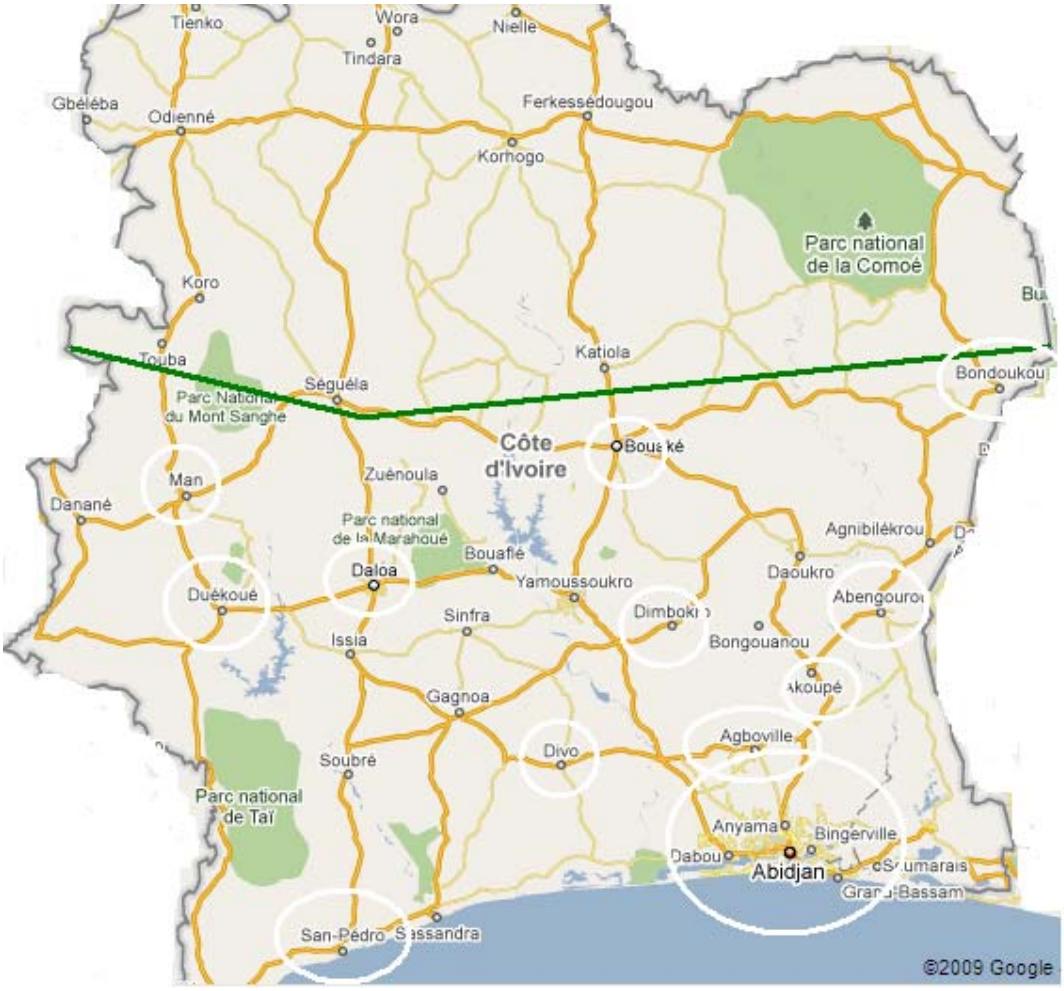
Thus, all decentralized services (regional and departmental quarters, district offices (cantonnements) and forest stations) covering the whole country, have an interest in the information generated by operators of the timber trade.

The technical choice made by this project (application accessible from the Internet) will help provide accessibility of information outside of the country.

Table 1 : List of the 39 towns with the corresponding number of industrial units per town

Towns	Number of processing plants
Abengourou	3
Abidjan	18
Arrah	1
Adzopé	4
Agboville	3
Agnibilékro	3
Anyama	2
Akoupé	1
Biankouma	2
Bingerville	1
Bassam	1
Bondoukou	1
Bonoua	1
Bouaké	1
Dabou	1
Daloa	3
Danané	1
Diégonéfla	1
Dimbokro	2
Divo	3
Duékoué	3
Gadouan	1
Gagnoa	1
Guiglo	1
Issia	2
Lakota	2

Man	9
N'Douci	3
Oumé	1
San-pédro	13
Soubré	1
Tankéssé	1
Tiassalé	2
Toumodi	1
Touba	1
Vavoua	1
Yakasse Féyassi	1
Yamoussoukro	1
Zagné (Tai)	1



1.3.2 Social, cultural, economic and environmental aspects

Economic aspects

Forest logging, timber processing activities and the rehabilitation and renewal of the timber resource base play a major role in the economic fabric of our country. Indeed, Côte d'Ivoire has over one hundred and fifty professional foresters who manage three hundred seventy-one logging concessions distributed under the eighth Parallel. These activities are conducted under contracts

whose parties are government-approved logging companies and SODEFOR; they take place both in gazetted forests (permanent forest estate) and forests of the rural domain.

A sizeable industrial fabric comprising around a hundred industrial plants operating as timber processing mills, maintaining several thousand direct jobs and scores of thousands more indirect jobs over twenty odd cities.

Social and cultural aspects

Forestry activities impact the lives of local communities, since over the long term they tend to alter the climate. As a consequence, the crop calendar of the communities is also modified, and the communities run into new sets of problems.

In addition, the village trails and country roads used to evacuate forest products are degraded by the passage of heavy logging machinery, which contributes to making the lives of the communities more difficult.

These effects are mitigated by the introduction of supporting measures, including the Contribution to Rural Development and a *Taxe d'Intérêt Général* (Community Service Tax). The monitoring of forest activities through the system to be put in place will allow better control of these taxes on behalf of the communities living around areas where logging activities are taking place.

Finally, timber processing activities carried out in these areas contribute, by the creation of direct and indirect jobs, to emerging progress in the economic and social conditions of the communities concerned, through several thousand direct jobs and tens of thousands of indirect jobs created in more than twenty towns in the country.

The data below bear ample testimony of the economic significance of this sector and its social impact:

The social significance of this sector is suggested by some evidence:

- The industrial timber processing units have employed on average 16,209 workers during any given year during the past ten years including 13,314 nationals;
- The aggregated amount of salary paid to these workers stands at 24.702 billion CFA francs of which 16.603 billion are paid to Côte d'Ivoire nationals.
- Local communities receive a portion of the *Taxe d'intérêt général* (TIG), i.e. 472.69 million francs, i.e. U.S. $ 945,380 and this amount is distributed to local councils to pay for local development projects;
- The economic operators of forest industries who hold logging titles provide surrounding communities with many other services that improve their daily lives, such as the construction of classrooms, health centres, places of worships, market places, rehabilitation of village trails, etc.

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

Environmental Aspect

Forested areas cover the southern half of the country. Climate in this area is generally tropical with four seasons – two dry and two rain seasons. The plant cover is subdivided into two areas which are the evergreen closed moist forest and the semi-deciduous closed moist forest. The forested area covers a vast floral and wildlife diversity. Unfortunately, from 16 million hectares in the early XXth Century the closed moist forest had been reduced to 9 million hectares in 1965 and to 2.5 million hectares in 1991. Presently, it is estimated to cover some 2.5 million hectares. This situation is due to the extensive agricultural practices

based on shifting cultivation (slash-and-burn), overexploitation of forest for timber and fuel wood, bushfire, uncontrolled mining and illegal logging.

Forest resources have been subjected to various pressures that have intensified over the years. These pressures come from:

- **Agriculture**, which contributed greatly to economic development at the cost of rapid deforestation associated with the practice of slash-and-burn and shifting cultivation, coupled with high population pressure. Indeed, the total area under cultivation increased from 6% to 23% of the country between 1965 and 1989. This pressure on land has had a negative impact on all forest areas. Socioeconomic surveys conducted from 1992 to 1997 revealed encroachment rates by farmers of 26% for gazetted forests (permanent forest estate) and 6% for and parks and reserves respectively. Gazetted forests contained about 80,000 small-holder farmers whose activities accounted for almost 30% of the national coffee / cocoa production output[1].
- **Mining-type of logging activities**, driven by the pursuit of short-term profits with no sustainable management rules however minimal, has facilitated the infiltration of forests by farmers.
- **The use of charcoal and firewood**, whose volumes have shown a linear rise of 10 to 12% per annum due to increased needs of the urban population.
- **Bush fires and forest fires** devastated some 67,000 hectares of forest and 5,000 ha of reforested areas from 1983 to 2001.
- **Uncontrolled mining** (gold mining).
- **Illegal logging practices** allowed to proceed in the absence of the forestry administration at field level due to the socio-political crisis**.**

The factors listed above have been such that the forest no longer assumes its ecological role.

It should also be noted that to this day there is no National Inventory on the status of forest resources in Côte d'Ivoire that would provide detailed, recent figures. All the figures available to us are from estimates cross-checked with our own field experience data.

Nevertheless we have data available on the volume of timber harvested each year by the logging trade (see annexes).

Scientific and technical aspects

Computer applications developed under this project have been tested within the Department of Information, Assessment, Outreach, IT and Archives (SIESIA), formerly known as DISA.

As part of this project, an ORACLE-type Dbase management system, more advanced and more powerful, was used together with its development environment.

Furthermore, the development of optical fibre installation by the Cote d'Ivoire Telecom company throughout the national territory and the development of cellular phone companies that offer Internet access to their users now enable access to these applications by all industrialists and forestry services. With these investments, it is possible to have an Internet connection in all major cities and towns of Côte d'Ivoire. The multiple offers by service providers have helped cutting down connectivity costs ranging from USD 300.00 per year to over USD 3,000.00 for leased lines. The numbers of subscribers are as follows:

Fixed telephony network: more than 356,502 subscribers (2008)
Cellular network: more than 10.5 million subscribers across six licensed operators' networks.
All cellular operators now offer Internet access to their customers.

[1, 2] Bilan Energie, BNETD, 1992

1.4 Expected outcomes at project completion

Implementation of the Information System will enable the Ministry to have a reliable database on forestry activities in Côte d'Ivoire. The availability of data on forest resources will provide a sound basis for effective decision-making in the sector. All players, regardless of their location can consult the database in the system, which will be managed and maintained on a daily basis. This database will also provide information that will be used in operational planning studies for national forest resources, in the context of the implementation of measures for sustainable management of these resources.

The capacity to better monitor the activities of operators will bolster the capacity to detect cases of fraud or illegal activities and to report them to the Forest Administration.

Finally, the determination of areas to be reforested in accordance with the specifications of the logging industries will be better managed and so will the monitoring of afforestation work by the Forest Administration.

For information managers:
The capacity of forest resource managers will be increased by providing by providing them, at the end of the project, with a web server hosting several applications that will provide faster (within three days), safer and consistent (secured functions of the Database Management System) data management service. These applications will cover the following:

- logging outputs in the logging areas;
- processing of timber products within the forest industries;
- marketing of timber products on both domestic and export markets;
- government approvals and authorizations to all stakeholders involved in forestry activities.
- timber tracking.

For traders who generate information
Each economic operator within the trade will receive a right of access renewable each year to operate the information system for reporting all activities it implements. They will no longer be required to travel to Abidjan from their base to make these statements, which means a considerable saving of time and significant cost reduction, and in addition they will be kept at arm's length from most bureaucratic hassles to which they are currently exposed. This new system will provide them the opportunity to wisely manage their stocks of logs and processed goods as it will enable them to more strictly monitor logging operations and industrial processing of logs (monitoring the rate of recovery for each timber species) as well as sales of processed products.

For users and other customers
Here we must distinguish other government bodies such as the Tax, Customs Departments and the Port Authorities of both Abidjan and San Pedro. They will have a tool that will enable them to better monitor the tax returns and declarations made by traders on their businesses and trade, on both the domestic and international markets. They will have the opportunity to increase their respective revenue.

For all other users, regardless of where they are located, once they have acquired a right of access to the information data generated, they will retain their access rights permanently, without having to comply with any additional bureaucratic procedures.

Part 2: PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

2.1.1 Institutional set-up and organizational issues

The Government has entrusted the management of forest industries to the Ministry of Waters and Forests, through its various branches including the central divisions and decentralized structures and companies under SODEFOR control.

In 2003, the Ministry of Waters and Forests established for the first time in its organizational structure one Department of Information Technologies, Statistics and Archives (DISA) now known by the acronym SIESIA. In accordance with its remit, SIESIA initiated the development and implementation of an IT blueprint for the forest sector called *Schéma directeur informatique* (SDI) or « IT Master Plan » for the forestry sector. As blueprint for the establishment of an information system, the IT Master Plan 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 IT Master Plan, an Order was issued in 2005 by the Minister responsible for Forestry, which includes all structures that produce, manage or use forest data. This Order creates a Steering Committee 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, the Minister of Forestry will ensure to issue 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 defined, 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 Stakeholder analysis

<table>
<tr><th>Stakeholder group</th><th>Characteristics</th><th>Problems, needs, interests</th><th>Potentials</th><th>Involvement in the project</th></tr>
<tr><td colspan="5">Primary Stakeholders</td></tr>
<tr><td rowspan="4">Information generators:
1. Logging companies
2. Industrialists
3. Exporters</td><td rowspan="3">1 – Economic operators, they are either as single corporation or in groups comprising several legal entities.</td><td>Are under the obligation to provide data on their activities from time to time</td><td>Strong professional experience in their respective branches</td><td rowspan="4">They are project beneficiaries, as the project will ease their burden by streamlining the way they manage information on their activities. Their involvement is instrumental to the success of the project, as they bound to supply the information system with updated data. Their involvement can be secure through awareness-raising campaigns and training.</td></tr>
<tr><td>Suffer bureaucratic delays to obtain required administrative papers</td><td>Have qualified and competent personnel</td></tr>
<tr><td>Under pressure to fill out a wide variety of documents to report information on their businesses</td><td rowspan="2">Are well equipped with working equipment and communication facilities</td></tr>
<tr><td>2 They hold one or several of the following titles:
1. Logging approvals
2. Annually renewed logging permits
3. Permissions to set up a timber processing plant
4. Approvals for timber product exports.</td><td>Are obligated:
• To have a staff in charge of filing in the statistical documents
• To have a staff in charge of bringing statistical documents on their businesses to the Forestry administration</td></tr>
</table>

<table>
<tr><th>Stakeholder group</th><th>Characteristics</th><th>Problems, needs, interests</th><th>Potentials</th><th>Involvement in the project</th></tr>
<tr><td rowspan="6"></td><td>Their activities include one or several of the following:
1. To produce logs to feed the plants;
2. To process the logs supplied and approved;
3. To sell engineered products locally or for export.</td><td>Are subject to frequent checks by the Forestry Administration on the conduct of their statistics</td><td>Are supporters of technological developments and innovations</td><td rowspan="6"></td></tr>
<tr><td rowspan="3">Have one or several of the following facilities:
Telephone Line
Data processing facilities
Means of transportation.</td><td>Have difficulties in verifying the information they provide to our services</td><td>Most of them affiliated to trade associations whose decisions they tend to adhere to</td></tr>
<tr><td rowspan="3">Unit sale price monitored

Not always well informed of SFM rules

Some do not always abide by the rules</td><td>Are in permanent contact with the Administration through a liaison agent</td></tr>
<tr><td>Have regular contact with timber traders</td></tr>
<tr><td>Duly affiliated to their respective trade organizations and associations</td><td>Some are equipped with advanced technological equipment</td></tr>
<tr><td>- Have access to substantial resources</td><td rowspan="2">Monitor price changes on international markets</td></tr>
<tr><td>- Are in contact with international markets</td><td>monitoring of reported volumes by types of products and timber species difficult</td></tr>
<tr><td>Project Executing Agency (SIESIA)</td><td>EA is responsible for:
1 managing forestry statistics;
2 the conduct of IT projects</td><td>Experiences difficulties in obtaining information on the activities of traders and économic operators
Do not have adequate resources to process the information it receives</td><td>Very good training in information and communication technologies
Expertise developed in the forestry data processing</td><td>Primary stakeholders in charge of implementing the project (SIESIA): Dependent on the project to accomplish its mission.</td></tr>
</table>

Stakeholder group	Characteristics	Problems, needs, interests	Potentials	Involvement in the project
2nd-rank stakeholder				
Other services of the Forestry Administration Central Services, decentralized services, trust structures	They are organized in central regional, and departmental, management units ("directorates"), and in cantonments and forest stations	Means of transportation to accomplish their field missions non-existent	Very good theoretical training in specialized schools	**Secondary stakeholders interested in the project results to improve their operations and effectiveness**
	They are responsible for: 1 monitoring the activities of traders 2 investigating forest crime and law enforcement actions 3 planning forestry activities	Jurisdictional disputes between some of its structures	Proven expertise in monitoring forest activities	
		Lack of collaboration between some of the structures		
		Communications problems between the various structures		
	They include technical water and forests personnel of other administrative staff	Staff has to travel to report information to each other	Sound knowledge of forestry legislation	
		Lack of adequate resources to handle forest sector statistics		
		Have no way to check the prices charged by traders on both the domestic and export markets		

Stakeholder group	Caractéristiques	Problèmes, needs, interests	Potentialités	Involvement in the project
Other general administration services	They are responsible for: - The collection of forestry taxes - The operations required for the export of forest products - Monitoring the transport of forest products - Monitoring the shipment of products exported	Ensure the accuracy of statements providing the basis for the payment of forestry taxes	Have very efficient information systems	They generate information that will complement those to be generated by the project.
		Understanding the nomenclature of timber products exported	Have substantial financial resources	
3rd rank stakeholders				
National Working Group for Côte d'Ivoire (CI GNT)	Associative structure responsible for establishing national SMF indicators	A need for reliable information to establish the SFM principles, criteria and indicators.	Includes a variety of industry experience	Includes all stakeholders in the industry, as well as researchers and academics

2.1.3 Problem Analysis

2.1.3.1 Problem statement

The national information system for the sustainable management of forest resources is not operational.

The problem identified above was selected by consensus and recognized as the core issue to solve, following a consultation between all stakeholders in the sector.

As mentioned above in the summary, Integrated Forestry Activities Management System (SIGAF) was designed and implemented within the Ministry of Water and Forests, with several modules for the management of forestry statistics, but the system is still not operational:

- **Applications that meet the requirements of the FLEGT mechanism are not yet integrated in the SIGAF**
- **System testing to users to design further improvements and better meet the expectations of all stakeholders in the sector have not yet been conducted;**
- **Capacity building for staff in charge of the collection and processing of forestry statistics within MINEF and among economic operators in the timber sector is not taking place.**

The detailed analysis of the problem identified has uncovered two main causes:

- **The forestry statistics management system is not operational and does not cover all applications**
- **Collection methods are neither appropriate nor formalized**

The first cause identified has pointed to the following malfunctions:

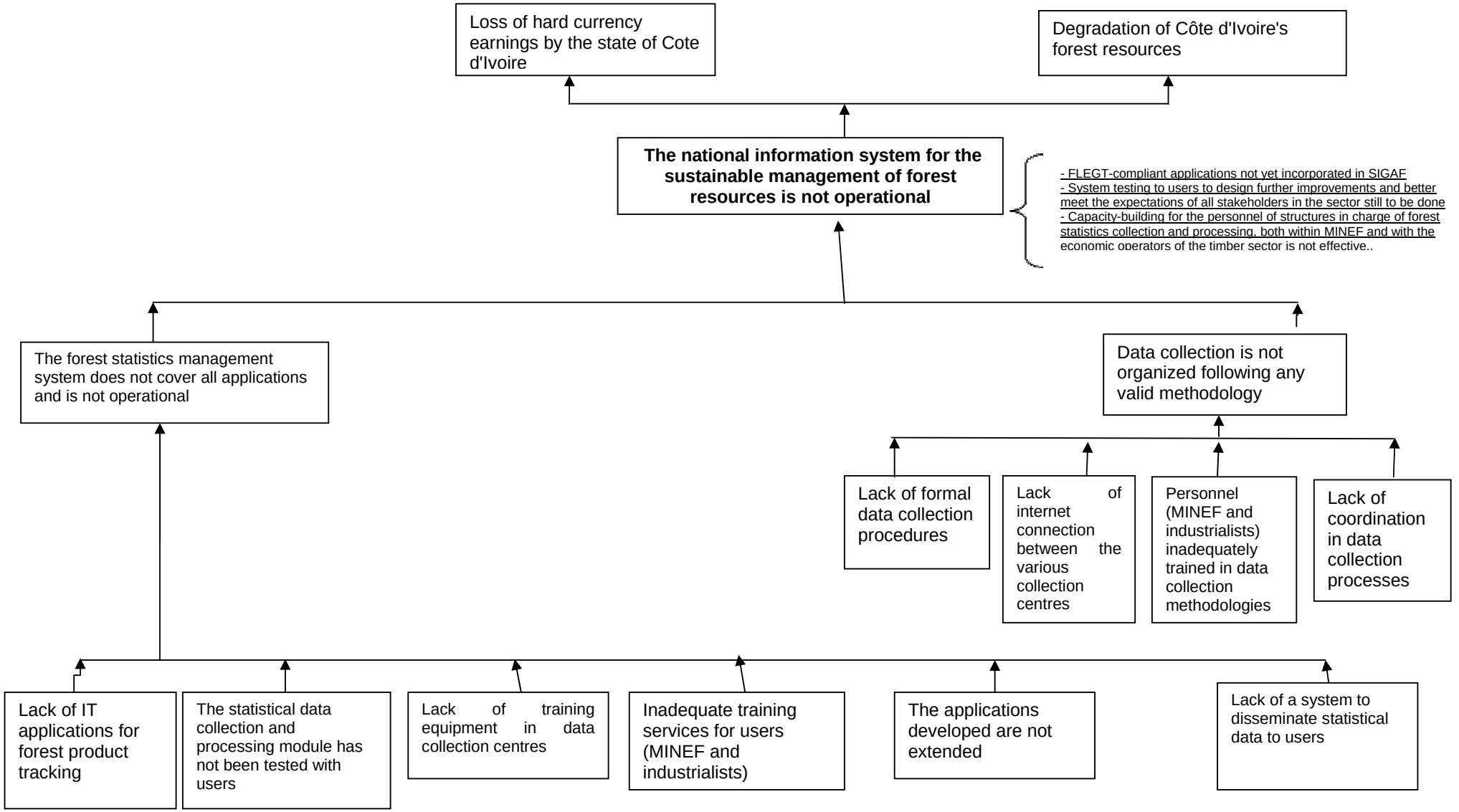
- **Lack of computer applications for the trackability of forest products;**
- **The computerized statistics collection and processing module is not being tested with users;**
- **Lack of computer equipment in the data collection centers;**
- **Lack of training of users (operators and MINEF);**
- **The applications developed are not disseminated;**
- **No statistical data dissemination system with users.**

The second cause identified has the following sub-causes:

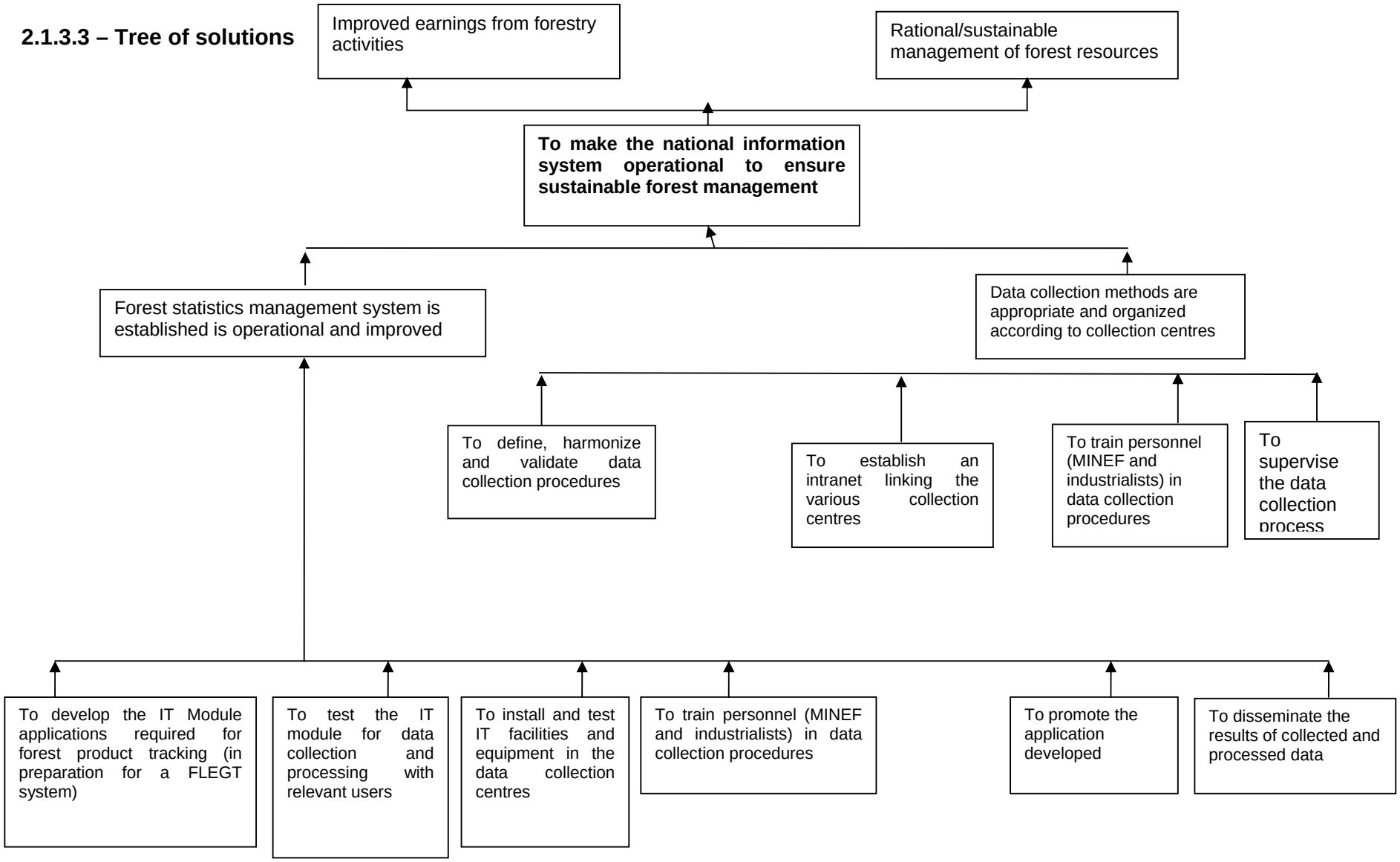
- **Lack of formalized procedures for collection;**
- **No internet-based connection between the various collection centers;**
- **Lack of staff training (MINEF and operators) to collect data;**
- **Lack of coordination in data collection.**

The needs of the beneficiaries will be addressed by tackling the causes and sub-causes identified as reliable information on the sector will be made available to better manage statistics and ultimately place forest resources under sustainable management.

2.1.3.2 Problem Tree



2.1.3.3 – Tree of solutions



2.1.3.4 Comments on the solution tree

The solution tree has been developed to reflect the priority outcome of the proposed project, which is: « **To make the National Information System for the Sustainable Management of Forest Resources operational** »

The achieved result will

- Improve revenue from forestry activities
- Help sustainably manage forest resources.

To achieve this priority result, two (2) activities and ten (10) tasks must be implemented:

Activity 1 that aims to improve and make the forestry statistics management system operational includes six (6) tasks, which are as follows:

- To develop the IT Module applications required for forest product tracking (in preparation for a FLEGT system)
- To test the IT module for data collection and processing with relevant users
- To install and test IT facilities and equipment in the data collection centres
- To train personnel (MINEF and industrialists) in data collection procedures
- To promote the application developed
- To disseminate the results of collected and processed data

Activity 2 is to adapt data collection methodologies and to organizing the methods for each centre, through the following tasks:

- To define, harmonize and validate data collection procedures
- To establish an intranet linking the various collection centres
- To train personnel (MINEF and industrialists) in data collection procedures
- To supervise the data collection process

2.1.4. Logical framework matrix

Strategy of intervention	Measurable indicators	Means of verification
DEVELOPMENT OBJECTIVE: To contribute to the sustainable management of forest resources in Côte d'Ivoire by the development of a national information system on forest resources	**By project completion date, the transparency of forestry and the timber trade is enhanced through the existence of an information management system accessible to all stakeholders.**	Annual revenue report published by th Inland Revenue Department (*Directio Générale des Impôts*)
	All stakeholders have updated, reliable information available by the fourth quarter of the second project year.	Information on statistics are publishe and disseminated at regular interva by SIESIA
SPECIFIC OBJECTIVE: To make the National Information System for the Sustainable Management of Forest Resources operational	**By the second quarter of Year 2, seventy percent (70%) of timber industrialists and 80% of logging companies use the system to report their activities**	Official record of system access cod installation for each user
	By project completion date, a dashboard of the forestry and timber economy is published at national level to guide the policies of both the public and private sector	**Publication of the "dashboard" (t monitor performances)**
OUTPUTS		
Output 1 The forest statistics management system is operational and improved.	The Intranet is operational by Year 1.	The messages exchanged betwee Government structures and releva industry stakeholders are available
	75% of industry stakeholders use the system to report statistics by Year 1.	Official record of system access cod installation for each user
Output 2 Collection methodologies are appropriate and organised among the different centres.	80% of industry stakeholders are connected to the system by Year 1.	Daily reports of connection establishe by the system administrator
	Data collection procedures are formalized and available	Manual of procedure
	Training of data collection personnel (MINEF and relevant industry stakeholders) is completed	Training report

2.2 Objectives

2.2.1 Development Objective and Impact indicators

To contribute to the sustainable management of forest resources in Côte d'Ivoire through the development of a national information system on forest resources.

Impact indicators

- **By project completion date, the transparency of forestry and the timber trade is enhanced through the existence of an information management system accessible to all stakeholders.**
- **All stakeholders have updated, reliable information available by the fourth quarter of the second project year.**

2.2.2 Specific Objective and Outcome Indicators

To make the National Information System for the Sustainable Management of Forest Resources operational

Outcome indicators

- **By the second quarter of Year 2, seventy percent (70%) of timber industrialists and 80% of logging companies use the system to report their activities.**
- **By project completion date, a dashboard of the forestry and timber economy is published at national level to guide the policies of both the public and private sector.**

PART 3 : DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Output and activities
3.1.1 – Outputs

Output 1 The forest statistics management system is operational and improved.

This system is based on applications to manage following:

1. Timber producing activities from logging areas,
2. The processing of timber resources,
3. Marketing activities for timber products conducted both domestically and internationally,
4. Activities to monitor compliance with the rules regulating forest logging, timber processing and marketing of timber products.
5. Forest products tracking (in preparation for the FLEGT Process implementation)

Output 2: Data collection methods are appropriate and organized among collection centres

3.1.2 – Activities

To attain this objective the project will seek to achieve the following results:

Output 1: The forest statistics management system is operational and improved.

The activities to achieve this result are the following:

A11: To develop IT Module applications required for forest product tracking (in preparation for a FLEGT system)

The implementing agency supported by the IT consultant will develop a timber tracking module to be incorporated into the system already in place.

A12: To test the IT module for data collection and processing with relevant users

Twelve (12) sites in ten (10) pilot municipalities: Abidjan (2 sites), Adzopé and San-Pedro (2 sites), Daloa, Abengourou, Lakota, Guiglo, Tiassalé, Gagnoa, Divo, have been selected to test the applications of the computer system. Testing operations involve the following: To implement the application in “cantonments”, with port customs inspectorates and the economic stakeholders of the timber sector. This will imply providing a continual support to the project team who will have to travel to the various sites.

A13: To install and test IT facilities and equipment in the data collection centres.

This will involve providing IT equipment and facilities **to 39 cantonments. (See Table 1 page 7)**

A 14: To train users (MINEF staff and industry stakeholders) in data processing procedures.

There will be two 3-day training modules for 25 pers. (MINEF employees and economic operators of the timber sector). The staff involved will be trained in the use of the applications developed to enable them to undertake the computerized data entry process required for those data collected at field level via data collection sheets for which they will received prior training. These training sessions will take place during the 2nd quarter of the 2nd year of project implementation.

A 15: To promote the applications developed

The project team will organize six (06) exchange meetings with forestry operators in their areas of activity to raise awareness on the value of the module.

A 16: To disseminate the results of collected and processed data

The website of the Ministry of Water and Forests (www. eauxetforets.gouv.ci) will be redeveloped to make updated forestry statistics available to users.

Dashboards (data matrices) will be developed, published and disseminated systematically in hard copies, at monthly, quarterly and semi-annually intervals, together with the forestry statistics yearbook.

Output 2: Data collection methods are appropriate and organized among collection centres

The activities to achieve this result are as follows:

A21: To define, harmonise and validate data collection procedures

A Manual of procedures for field-level data collection will be developed by the project team and IT consultant and approved in plenary session by the stakeholders of the timber sector.

A22: To establish an intranet system linking the various collection centres

The project team supported by the Computer consultant will link up the various collection centers via an on-line network.

A23: To train users (MINEF staff and industry stakeholders) in data processing procedures. The purpose of training will be to teach them to use the data collection sheets developed for this purpose.

Two 3-day training modules will be conducted with 25 participants per module (MINEF staff and stakeholders of the timber industry)

A24: To supervise the data collection process

Acting under the supervision of the project leader, the project team will develop a schedule of field-level missions to ensure that data collection procedures identified in the Manual are being applied by the cantonment operators and staff. Work sessions to be conducted with the relevant stakeholders will improve the mutual understanding and help assess their level of satisfaction regarding information collected and the collection procedure.

After the missions will be completed, the results achieved will enable further adjustments (corrective actions) to improve data sheet design.

3.2 – Approaches and methods of implementation
3.2.1 - The method of implementation

This project aims to radically change forestry statistics management procedure. This implies to obtain the full support of all stakeholders. To achieve this, the participatory approach, through workshops for different types of stakeholders (traders, technicians and Engineers of the Water and Forests Department), will be implemented.

These workshops will enable a dialogue with these various stakeholders, they will help explain them the project process, the results expected and the approach to adopt in order to have their opinions and observations taken into account and addressed whenever possible.

These workshops will enable the sharing of knowledge and experiences to develop new data collection methodologies and procedures, so as to make all actors involved in the development of these methodologies more likely to accept the implementation of these methodologies.

Finally, these workshops will help introduce what already exists in Cote d'Ivoire in terms of computer-aided data collection procedures (e.g. the experience of the Customs Department with its automated goods declaration and reporting system) to the stakeholders and provide them with training in information technology and communication, so as to break the barriers of prejudice.

3.2.2 – Approach

The implementation approach will revolve around three main focuses:

First focus: Automation of data collection process
This project, which is to automate the data collection chain, aims to solve the problems associated with the general slowness of statistics production and the error-prone method of processing such data. Indeed, the automation of the data collection chain has the merit of reducing the time lag after which data can become available. Once the project will be successfully completed this time lag will be reduced from 45 days or two months, to just three working days. Furthermore, the elimination of paper supports reduces the risk of error on the part of economic operators/members of the trade, which also reduces the risk of sanctions to which they are exposed.

The replacement of paper documents as basic data collection support by a formal procedure derived from the information system offers a definite advantage for all administrative structures responsible for forest monitoring. They will have quick and permanent access to data captured by stakeholders in the timber trade and industry.

Thus, the use of information and communication technologies will reduce delays, data losses and ensure the availability of such data.
The database managed by the Executing Agency SIESIA will be accessible on line, by all stakeholders, whether producers or consumers of information. Such access will be managed through accounts that will be created on demand by any industry stakeholder requesting to access the data.

This solution (access to applications via Internet) has the merit of making the system accessible globally regardless of the place where users are located.

Members of the trade will be provided computer kits comprising one or more computers (for those who do not have any yet) by the Executing Agency, and training sessions for their staff responsible for forestry statistics and an access code from an ISP will also be provided.

These same training sessions will be taught to technical staff in charge of monitoring water and forest management activities to enable them to properly use these applications.

Second focus: Establishing a network linking all stakeholders
The national fixed telephone lines operating company (Cote d'Ivoire Telecom) and all mobile phone companies allow any subscriber, regardless of its location on the national territory, to access the internet through the optic fibre network covering all cities in the country. We are looking to network all data collection centres so as to enable them to more easily exchange information. Thus, user groups will be created and distributed by management centres (central management or regional management), which form a mesh network very flexible to maintain.

To provide assurances to economic operators on the confidentiality of the data they will forward to the Administration, a public meeting, to be organized by the Administration, will be held to introduce SIGAF. During the meeting, a demonstration will be provided to the

operators that the access code to be allocated to each of them will only enable access to their own respective data, and not to any third party's. During the same event, the methodology to disseminate results will likewise be demonstrated to them. Two types of yearbook will be published:

- **One Yearbook for the general public in which all data will be anonymous and where data tables will appear in consolidated form. This Yearbook will be destined for external use.**
- **One Yearbook for the Forestry Administration in which data will be more detailed and destined for internal (administrative) use.**

Third focus: To harmonise data collection methods and procedures among all stakeholders concerned.

This new system will lead to changes in the working practices of all stakeholders, which requires putting in place new procedures that are appropriate.

These procedures will be discussed in a workshop with all stakeholders involved to take their concerns into account. This is an important condition for the accession of each stakeholder to the new system put in place.

We had already successfully tested the importance of these meetings when we began in 2005 to modify the media used in these data collection exercises. The meetings organized on this occasion with traders and the technical staff of the Water and Forests Department have helped explain the changes we wanted to make in these documents, to receive their comments and propose consensus documents. The implementation was then done without any difficulty, despite the increase in unit prices for the transfer of statistical documents.

3.2.3 – Project Strategy

This strategy will be based on:

At the institutional level, the structures that have been put in place (steering committee, technical committee and users groups) while ensuring that women play their full roles in the project. The project will ensure that the Executing Agency be provided the technical capabilities that will enable it to ensure the sustainability of the project, including managing the development of applications to enable them to always keep up with users' expectations.

Technologically, the operation of an optic fibre network and the development of cellular communication devices will enable the development of applications on a web platform, ensuring that each user enjoys continuous and secure data access, as regards both the feeding and browsing of the database. This will considerably reduce operational expenses for the members of the industry. This is a key consideration to be put forward during training sessions, so as to secure project support by the relevant stakeholders in the industry and members of the trade.

3.3 – WORK PLAN

OUTPUTS / Activities	Responsible Party	Year 1												Year 2											
		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Output 1 The forest statistics management system is operational and improved.																									
A11: To develop IT Module applications required for forest product tracking (in preparation for a FLEGT system)	SIESIA (Computer consultant																								
A12: To test the IT module for data collection and processing with relevant users	SIESIA (Coordinator)/ Computer consultant																								
A 13- To install and test IT facilities and equipment in the data collection centres	SIESIA (Coordinator)																								
A 14- To provide training to data collection staff (MINEF and stakeholders)	SIESIA/ Training institute																								
A15: To promote the application developed	SIESIA (Coordinator)																								
A16- To disseminate the results of collected and processed data	SIESIA (Coordinator)																								
Output 2: Data collection methods are appropriate and organized among collection centres																									
A21- To define, harmonise and validate data collection procedures	SIESIA (Coordinator) / Computer consultant																								
A22- To establish an intranet linking the various collection centres	SIESIA (coordonnateur / Computer consultant																								
A23: To train users (MINEF staff and industry stakeholders) in data processing procedures	SIESIA/ Training institute																								
A24: To supervise the data collection process	SIESIA (Coordinator)																								

3.4 Budget

3.4.1 – Main consolidated budget table by component

Category	Description	Total	Year 1	Year 2
10.	Project personnel			
11.	National Experts (long term)			
	11.1 Project Coordinator	14 400	7 200	7 200
	11.2 Forest Statistics Expert	14 400	7 200	7 200
	11.3 Assistant IT expert	12 000	6 000	6 000
	11.4 Accountant	7 200	3 600	3 600
	11.5 Secretary	7 200	3 600	3 600
12.	Other Personnel	-	-	-
	12.1 Driver	6 000	3 000	3 000
13.	National consultants (long-term)	-	-	-
	13.1 Development Engineer	-	-	-
	13.2 National Consultant (IT Expert)	30 000	30 000	-
14.	International Consultants	-	-	-
15.	Fellowships and training	-	-	-
	15.1 Training in Dbase Management Systems for SIESIA personnel	10 500	10 500	-
	15.2 15.2 Training in Dbase Development for SIESIA personnel	10 500	10 500	-
19.	**S/Total:**	**112 200**	**81 600**	**30 600**
20.	Sub-contracting			
	21. Training (data collection process)	18 500	18 500	-
	22. Training (Data processing)	18 500	-	18 500
	23. Development of the «hammering module»	47 100	47 100	-
	24. Testing the application	18 000	18 000	-
29.	**S/Total.**	**102 100**	**83 600**	**18 500**
30.	Domestic travels	-	-	-
31.	Daily subsistence allowance	-	-	-
31.1	National experts / Consultants	30 750	15 068	15 682
31.2	International Consultants	-	-	-
31.3	Others (duty travels by the Driver and DSA for training session participants)	8 709	4 818	3 891
32.	International travel	-	-	-
32.1	32.1 National experts / Consultants	14 400	7 200	7 200
32.2	32.2 International Consultants	-	-	-
32.2	32.3 Others	-	-	-
32.3	32.4 Local transport costs	-	-	-
39.	**S/Total**	**53 859**	**27 086**	**26 773**
40.	Capital Goods	-	-	-
41.	Infrastructure	-	-	-
42.	Land	-	-	-
43.	Vehicles	-	-	-
	43.1 4WD vehicle for field trips/missions	42 400	42 400	-
44.	Equipment	-	-	-
44.1	Computer Equipment	-	-	-
	44.1.1 Computer unit (PC)	64 200	64 200	-
	44.1.2 Laptop computer	35 000	35 000	-
	44.1.3 Power Surge protectors	5 280	5 280	-
	44.1.4 Antivirus	2 992	2 992	-
	44.1.5 Desk top for PC	17 460	17 460	-
	44.1.6 NB Laser Printers	8 160	8 160	-
	44.1.7 Colour laser printer	-	-	-
	44.1.8 Development software	6 500	6 500	-
	44.1.9 Upgrading of Ministry's website to enable the dissemination of results	14 000	7 000	7 000
44.2	Others	-	-	-
49.	**S/Total**	**195 992**	**188 992**	**7 000**

Category	Description	Total	Year 1	Year 2
50.	Consumables	-	-	-
51.	Raw material	-	-	-
52.	Spare parts	4 400	2 200	2 200
53.	Fuel and Lubricants	5 000	2 500	2 500
54.	Office Supplies	2 600	1 300	1 300
55.	Small Computer Equipment	5 000	2 500	2 500
56.	Internet subscription	25 200	8 400	16 800
59.	**S/Total**	**42 200**	**16 900**	**25 300**
60.	Miscellaneous	-	-	-
61.	Insurance cover	2 000	1 000	1 000
62.	Audit	4 000	2 000	2 000
63.	Report publishing	4 000	2 000	2 000
64.	Bank charges	3 600	1 800	1 800
65.	Monitoring Committee	3 600	1 200	2 400
66.	Translation	2 000	1 000	1 000
67.	Contingencies (Lump sum)	8 000	4 000	4 000
69.	**S/Total**	**27 200**	**13 000**	**14 200**
	General Sub-Total (10 to 69)	**533 551**	**411 178**	**122 373**
70.	Executing Agency's management costs	-	-	-
71.	Executing Agency's costs	13 601	8 395	5 206
72.	Monitoring costs by focal point (ITTO Focal Point)	9 864	4 932	4 932
79.	**S/Total**	**23 465**	**13 327**	**10 138**
80.	Project Monitoring and Administration Costs	-	-	-
81.1	ITTO Monitoring	12 000	4 000	8 000
81.2	ITTO Mid-term Evaluation and Review	-	-	-
83.	Final ITTO Evaluation	15 000	-	15 000
84.	ITTO Programme support costs	-	-	-
85.	ITTO Programme support costs (12% of budget items 10 to 82)	24 427	24 427	0
86.	Donors' monitoring	-	-	-
89.	**S/Total**	**51 427**	**20 594**	**30 833**
90.	Pre-project cost refund	62 555	62 555	-
99.	S/total	62 555	62 555	-
100.	**TOTAL**	**670 998**	**507 654**	**163 344**

NB: The counterpart contribution is already used as part of the 2013 investment budget.

3.4.2 ITTO Budget by components (in US$)

Category	Description	TOTAL	Year 1	Year 2
10.	Project Personnel			
11.	National Experts (long term)			
	11.1 Project Coordinator			
	11.2 1 expert in Forest Statistics			
	11.3 Assistant IT expert			
	11.4 Accountant			
	11.5 Secretary			
12.	Other Personnel			
	12.1 Driver			
13.	National consultants (long-term)			
	13.1 Development Engineer			
	13.2 National Consultant (IT Expert)	30 000	30 000	
14.	International Consultants			
15.	Fellowships and training			
	15.1 Training in Dbase Management Systems for SIESIA personnel			
	15.2 Training in Dbase Development for SIESIA personnel			
19.	**S/Total:**	**30 000**	**30 000**	**-**
20.	Sub-contracting			
	21. Training in data collection procedure			
	22. Training (Data processing))			
	23. Development of the «hammering module»			
	24. Testing the application	18 000	18 000	
29.	**S/Total.**	**18 000**	**18 000**	**-**
30.	Domestic travels			
31.	Daily subsistence allowance			
31.1	National experts / Consultants	30 750	15 068	15 682
31.2	International Consultants			
31.3	Others (duty travels by the Driver and DSA for training session participants)	8 709	4 818	3 891
32.	International travel			
32.1	32.1 National experts / Consultants			
32.2	32.2 International Consultants			
32.2	32.3 Others			
32.3	32.4 Local transport costs			
39.	**S/Total**	**39 459**	**19 886**	**19 573**
40.	Capital Goods			
41.	Infrastructure			
42.	Land			
43.	Vehicles			
	43.1 4WD vehicle for field trips/missions	42 400	42 400	
44.	Equipment			
44.1	Computer Equipment			
	44.1.1 Computer unit (PC)			
	44.1.2 Laptop computer	2 500	2 500	
	44.1.3 Power Surge protectors			
	44.1.4 Antivirus			
	44.1.5 Desk top for PC			
	44.1.6 NB Laser Printers			
	44.1.7 Colour laser printer			
	44.1.8 Development software			
	44.1.9 Upgrading of Ministry's website to enable the dissemination of results			
44.2	Others			
49.	**S/Total**	**44 900**	**44 900**	**-**

Category	Description	TOTAL	Year 1	Year 2
50.	Consumables			
51.	Raw material			
52.	Spare parts	4 400	2 200	2 200
53.	Fuel and Lubricants	5 000	2 500	2 500
54.	Office Supplies	2 600	1 300	1 300
55.	Small Computer Equipment	5 000	2 500	2 500
56.	Internet subscription			
59.	**S/Total**	17 000	8 500	8 500
60.	Miscellaneous			
61.	Insurance cover	2 000	1 000	1 000
62.	Audit	4 000	2 000	2 000
63.	Report publishing	4 000	2 000	2 000
64.	Bank charges	3 600	1 800	1 800
65.	Monitoring Committee	3 600	1 200	2 400
66.	Translation	2 000	1 000	1 000
67.	Contingencies (Lump sum)	8 000	4 000	4 000
69.	**S/Total**	27 200	13 000	14 200
	General Sub-Total (10 to 69)	**176 559**	**134 286**	**42 273**
70.	Executing Agency's management costs			
71.	Executing Agency's costs			
72.	Monitoring costs by the contact person (ITTO Focal point)			
79.	**S/Total**	**-**	**-**	**-**
80.	Project Monitoring and Administration Costs			
81.1	ITTO Monitoring	12 000	4 000	8 000
81.2	ITTO Mid-term Evaluation and Review			
83.	Final ITTO Evaluation	15 000		15 000
84.	ITTO Programme support costs			
85.	ITTO Programme support costs (12 % of budget items 10 to 82)	24 427	16 594	7 833
86.	Donors' monitoring			
89.	**S/Total**	**51 427**	**20 594**	**30 833**
90.	Pre-project cost refund	62 555	62 555	
99.	**S/total**	62 555	62 555	
100.	**TOTAL**	**290 541**	**217 435**	**73 106**

3.4.3 –Executing agency (EA) budget by component (in US$)

Category	Description	Total	Year 1	Year 2
10.	Project Personnel			
11.	National Experts (long term)			
	11.1 Project Coordinator	14 400.00	7 200.00	7 200.00
	11.2 Expert in Forest Statistics	14 400.00	7 200.00	7 200.00
	11.3 Assistant IT expert	12 000.00	6 000.00	6 000.00
	11.4 Accountant	7 200.00	3 600.00	3 600.00
	11.5 Secretary	7 200.00	3 600.00	3 600.00
12.	Other Personnel			
	12.1 Driver	6 000.00	3 000.00	3 000.00
13.	National consultants (long-term)			
	13.1 Development Engineer			
	13.2 National Consultant			
14.	International Consultants			
15.	Fellowships and training			
	15.1 Training in Dbase Management Systems for SIESIA personnel	10 500.00	10 500.00	
	15.2 Training in Dbase Development for SIESIA personnel	10 500.00	10 500.00	
19.	**S/Total:**	**82 200**	**51 600**	**30 600**
20.	Sub-contracting			
	21. Training in data collection procedures	18 500	18 500	
	22. Training (Data processing)	18 500		18 500
	23. Development of the «hammering module»	47 100	47 100	
	24. Testing the application			
29.	**S/Total.**	**84 100**	**65 600**	**18 500**
30.	Domestic travels			
31.	Daily subsistence allowance			
31.1	National experts / Consultants			
31.2	International Consultants			
31.3	Others (duty travels by the Driver and DSA for training session participants)			
32.	International travel			
32.1	32.1 National experts / Consultants	14 400	7 200	7 200
32.2	32.2 International Consultants			
32.2	32.3 Others			
32.3	32.4 Local transport costs			
39.	**S/Total**	**14 400**	**7 200**	**7 200**
40.	Capital Goods			
41.	Infrastructure			
42.	Land			
43.	Vehicles			
	43.1 4WD vehicle for field trips/missions			
44.	Equipment			
44.1	Computer Equipment			
	44.1.1 1 Computer unit (PC)	64 200	64 200	
	44.1.2 Laptop computer	32 500	32 500	
	44.1.3 Power Surge protectors	5 280	5 280	
	44.1.4 Antivirus	2 992	2 992	
	44.1.5 Desk top for PC	17 460	17 460	
	44.1.6 NB Laser Printers	8 160	8 160	
	44.1.7 Colour laser printer			
	44.1.8 Development software	6 500	6 500	
	44.1.9 Upgrading of Ministry's	14 000	7 000	7 000

Category	Description	Total	Year 1	Year 2
	website to enable the dissemination of results			
44.2	Autres			
49.	**S/Total**	**151 092**	**144 092**	**7 000**
50.	Consumables			
51.	Raw material			
52.	Spare parts			
53.	Fuel and Lubricants			
54.	Office Supplies			
55.	Small Computer Equipment			
56.	Internet subscription	25 200	8 400	16 800
59.	**S/Total**	**25 200**	**8 400**	**16 800**
60.	Miscellaneous			
61.	Insurance cover			
62.	Audit			
63.	Report publishing			
64.	Bank charges			
65.	Monitoring Committee			
66.	Translation and documentation			
67.	Contingencies (Lump sum)			
69.	**S/Total**	**-**	**-**	**-**
	General Sub-Total (10 to 69)	**356 992**	**276 892**	**80 100**
70.	Executing Agency's management costs			
71.	Executing Agency's costs	13 601	8 395	5 206
72.	Monitoring costs by the Focal Point (ITTO Focal Point)	9 864	4 932	4 932
79.	**S/Total**	**23 465**	**13 327**	**10 138**
80.	Project Monitoring and Administration Costs			
81.1	ITTO Monitoring			
81.2	ITTO Mid-term Evaluation and Review			
83.	Final ITTO Evaluation			
84.	ITTO Programme support costs			
85.	ITTO support costs (8% of budget items 10 to 82)			
86.	Donors' monitoring			
89.	**S/Total**	**-**	**-**	**-**
90.	Pre-project cost refund			
99.	S/total			
100.	**TOTAL**	**380 457**	**290 219**	**90 238**

3.4.4 Budget by activities, components and sources (in US $)

Outputs/ Activities	Description	Budget component	Quantity		Units	Unit Costs (US$)	Total cost (US$)	ITTO		EXECUTING AGENCY
			Year 1	Year 2				Year 1	Year 2	
	Expenditures not linked to any one activity but relating to project implementation as a whole									
	1 - Project Personnel									
	1 Coordinator for the 24-month project duration	11	12	12	Man/ month	600	14 400			14 400
	1 Deputy coordinator, Computer engineer for 24 months	11	12	12	Man/ month	600	12 000			12 000
	1 national expert in forestry statistics	11	12	12	Man/ month	600	14 400			14 400
	1 National consultant for 12 months	11	12		Man/ month	2 500	30 000	30 000		
	1 Accountant to manage project expenditures	11	12	12	Man/ month	1 500	7 200			7 200
	1 Secretary in charge of project admin. work	11	12	12	Man/ month	-	7 200	-	-	7 200
	1 Driver and messenger to deliver the mail	12	12	12	Man/ month	750	6 000			6 000
	Study tour in the sub-region to draw from existing experience	32	1	1	Voyage		14 400			14 400

Outputs/Activities	Description	Budget component	Quantity		Units	Unit Costs (US$)	Total cost (US$)	ITTO		EXECUTING
			Year 1	Year 2				Year 1	Year 2	
	2 - Capital Goods									
	Purchase of one 4WD vehicle for the missions	40	1		Unit	42 400	42 400	42 400		-
	60 Desktop computer units. CPU: **Intel Core 2 Duo 3 GHz, 3 Go RAM, 250 Go hard disk, TFT monitor (LCD) 21"**	40	60	0	Unit	1 070	64 200			64 200
	26 Laptop computers with a 2 Duo, 3-GHz CPU, a 4-Go RAM, one 320-Go HDD, 15-inch screen	40	28		Unit	1 250	35 000	2 500		32 500
	60 power surge protectors (rating: 650 VA)	40	60	0	Unit	88	5 280			5 280
	62 Antivirus Internet Security	40	60		Unit	50	2 992			2 992
	60 Table top for desktop computers	40	60		Unit	291	17 460			17 460
	24 B&W laser printer 19 ppm, 600x600 ppp definition, 16-Mo memory capacity	40	24		Unit	340	8 160			8 160
	Colour laser printer	40			Unit		-			
	Purchase of spare parts for the car	50	1	1	Unit	2 200	4 400	2 200	2 200	
	Fuel and Lubricants	50	1	1	Litre	2 500	5 000	2 500	2 500	
	Office Supplies	50	1	1	Unit	1 300	2 600	1 300	1 300	
	Small Computer Equipment	50	1	1	Unit	2 500	5 000	2 500	2 500	

Outputs/Activities	Description	Budget component	Quantity		Units	Unit Costs (US$)	Total cost (US$)	ITTO		EXECUTING
			Year 1	Year 2				Year 1	Year 2	
	Internet subscriptions	50	6	12	Month	1 400	25 200			25 200
	Insurance cover for the Project Team	61	1	1	Year	1 000	2 000	1 000	1 000	
	Project auditing costs	62	1	1	Year	2 000	4 000	2 000	2 000	
	Project accounting costs	64	4	4	Quarter	450	3 600	1 800	1 800	
	Monitoring Committee Meetings Costs	65	1	2	Session	1 200	3 600	1 200	2 400	
	Contingency provision	67	1	1	Year	4 000	8 000	4 000	4 000	
	Executing Agency's costs	71	1	1	Year	6 801	13 601			13 601
	Monitoring costs by the Focal Point (4 monitoring and evaluation missions by the ITTO Focal Point)	72	2	2	Mission	2 466	9 864			9 864
	ITTO Monitoring	81	1	1	Mission	6 000	12 000	4 000	8 000	
	Final evaluation by ITTO	83	1		Mission	15 000	15 000		15 000	
	ITTO Programme Support costs (12% of ITTO budget components 10-82)	85	1	1	Year	7 542	24 427	24 427		
	Pre-project cost refund [PPD 61/02 Rev.1 (M)]	90	1		Year		62 555	62 555		

Outputs/Activities	Description	Budget component	Quantity		Units	Unit Costs (US$)	Total cost (US$)	ITTO		EXECUTING
			Year 1	Year 2				Year 1	Year 2	
Dépenses affectées aux activités										
Output 1:	**The Forest statistics management system is operational**									
A1.1	**To develop IT Module applications required for forest product tracking (in preparation for a FLEGT system)**									
	Acquisition of the development software	44	1		Unit	6 500	6 500			6 500
	Development of the «hammering» /forest product tracking module (in preparation of the APV/FLEGT agreement)	23	20		Man/ month	2 355	47 100			47 100
A1.2	**To test the applications on each site**									
	To provide training to ten staff members of the executing agency in SIGAF administration procedures	15	1		Session	10 500	10 500			10 500
	To provide training to ten staff members of the executing agency in the development of SIGAF maintenance applications.	15	1			10 500	10 500			10 500
	Application testing operations at each site	24	12		Site	1 500	18 000	18 000	-	
	6-person mission (Coordinator, Nat Consultant., Assistant IT expert, Accountant, Secretary, Driver) for 14 days	31	14		day	386,36	5 409	5 409	-	0

Outputs/Activities	Description	Budget component	Quantity		Units	Unit Costs (US$)	Total cost (US$)	ITTO		EXECUTING
			Year 1	Year 2				Year 1	Year 2	
A1.3	**To install and test IT facilities and equipment in the data collection centres**									
	6-person mission (Coordinator, Nat Consultant., Assistant IT expert, Accountant, Secretary, Driver) during14 days to install IT equipment on all 12 testing sites.	31	14	-	Day	488.64	6 841	6 841	-	
A1.4	**To provide training to data collection staff (MINEF and stakeholders)**									
	6-person mission (Coordinator, Nat Consultant., Assistant IT expert, Accountant, Secretary, Driver) during14 days to install IT equipment on all 12 testing sites.	31	12		Day	386.4	4 636.4		4 636.4	
	To organize two training sessions (five days each session) for users (24 Forestry staff and 26 workers of industrial units) in data processing using the SIGAF application	21	2		Session	9 250	18 500			18 500
A1.5	**To promote the application developed**									
	To organize a mission (Coordinator, Forestry Expert, Assistant IT expert, Accountant, Secretary, Driver) to promote SIGAF application during eight days with relevant stakeholders.	31		8	Day	386	3 091		3 091	
	To organize regional workshops to promote the SIGAF application.	31		6		300	1 800		1 800	

Outputs/Activities	Description	Budget component	Quantity		Units	Unit Costs (US$)	Total cost (US$)	ITTO		EXECUTING
			Year 1	Year 2				Year 1	Year 2	
A1.6	**To disseminate the results of collected and processed data**									
	To update the Internet site to enable the dissemination of results from data collection and processing	44	5	5	Man/ month	1 400	14 000			14 000
	To publish and disseminate collected and processed data, both via the Ministry's website and digital and/or printed supports.	63	1	1	Dissemination item	2 000	4 000	2 000	2 000	
	To implement the translation of reports containing the results from data collection and processing.	66	1	1	Man	1 000	2 000	1 000	1 000	
Output 2:	Collection methods are appropriate									
A2.1	**To define, harmonise and validate data collection procedures**									
	To organize a workshop to validate the newly-developed data processing procedure	31	1		item	3 000	3 000	3 000		
A2.2	**To establish an intranet linking the various collection centres**									
	To organize a 12-day mission comprising six persons (Coordinator, National Consultant, Assistant IT expert, Accountant, Secretary, Driver) to connect data collection centres within the Intranet.	31	12		Day	386.36	4 636	4 636		

Outputs/Activities	Description	Budget component	Quantity		Units	Unit Costs (US$)	Total cost (US$)	ITTO		EXECUTING
			Year 1	Year 2				Year 1	Year 2	
A2.3	**To train users (MINEF staff and industry stakeholders) in data processing procedures**									
	To organize a 12-day mission (Coordinator, Forestry Expert, Assistant IT expert, Accountant, Secretary, Driver) to train 24 staff members and 26 employees of relevant industry stakeholders.	31		12	Day	85.23	4 636		4 636	
	To train 50 users in data collection in two sessions.	22		2	Session	9 250	18 500			18 500
A2.4	**To supervise the data collection process**									
	To organize a 14-day mission (Coordinator, Forestry Expert, Assistant IT expert, Accountant, Secretary, Driver) to supervise the data collection process.	31		14	Day	386.36	5 409.10		5 409,1	
	Grand Total						**670 998**	**217 435**	**73 106**	**380 457**

3.5 – Key assumptions, Risks, Sustainability

3.5.1 Assumptions and risks

Against the development objective, the following key assumption has been entered: Stability of the institutional framework to secure the implementation of the project.

The solution proposed to address the risk of a lack of stability is to bring the minister for Water and Forests to promulgate two Orders:

1. One Order providing the creation of the project management and monitoring structures;
2. One Order appointing the key officers of these structures (Coordinator and Head of the Steering Committee).

Against the specific objective, the selected key assumption is the acceptance by users of the prerequisite and requirements for acquiring the system access codes.

The proposed solution to address this potential risk is to conduct an awareness campaign at the national level towards the economic operators of the timber industry to explain this new approach to forestry statistics information processing.

During this advocacy campaign the benefits the new system will bring them will be demonstrated in terms of time savings, productivity gains and production costs reduction. The advocacy will mainly focus on the major step such a system will mean towards the ultimate establishment of a traceability system for forest resources, which is a prerequisite for maintaining access of their products to the European market where they achieve over 80% of their sales

At Output 1 level "The forest statistics management system is operational and improved", the selected assumption is "The installation of optical fiber equipment for communication cover the cities where the main stakeholders of the system are established".

Any failure to address this prerequisite can be remedied through the extension to the entire territory of the facilities mobile phone operators extend to their customers, enabling the latter to access the Internet where their network is available. Through this alternative, even in cities where optical fibres will not be installed, stakeholders will still be able to access the established information system.

At Output 2 level: "Collection methodologies are appropriate and organised among the different centres"; the selected assumption is "Availability of ISPs networks."

The Telecommunication Agency of Côte d'Ivoire is the regulatory body for ISPs ; it is currently conducting a campaign to encourage them to undertake their best efforts to improve network accessibility. They have been ascribed as target to achieve 90-to-100% availability for their network during working hours.

3.5.2 – Sustainability

Before the project, the members of the trade/stakeholders obtained statistical forms to fill out from the Administration, for a fee. With the implementation of this project, they will not have to pay for documents since they may report their statistics through the computer applications deployed on the Internet. The amount of fee they will be paying will give them access to computer applications and will go towards maintain these facilities for the sustainability of project outcomes.

The financial involvement of the State will consist in the opening of a budget line that will be voted and allocated to the maintenance of project facilities, so as to ensure the renewal of equipment and help maintain applications.

There is no lack of justification for the opening of such budget line, since this project will help improve tax receipts from the timber trade two years after its implementation.

The applications developed will be available on-line, for a fee payable by users towards the cost of Internet access; that fee will entitle them to a personal account to access the service. The Internet-based system was the option selected because it is a safe and proven technology which benefits from continuous technological innovations in this area. It can effectively ensure the sustainability of project achievements.

Similar experiences were conducted in Côte d'Ivoire, particularly with the Customs Department for goods reporting procedures by freight forwarders, and for the monitoring of coffee and cocoa exports declarations.

In return, the trade will have their capacity periodically enhanced to enable them to effectively use the tools and technology made available to them and better manage their businesses and increase turnovers.

PART 4: IMPLEMENTATION ARRANGEMENTS

4.1. – Organizational structure and stakeholder involvement mechanisms

4.1.1 – Executing agency (EA) and partners

SIESIA, a Department of the Ministry responsible for Forestry ("Ministry of Water and Forests") conducts missions in the area of information technologies, statistics and archive management. For more details on its missions and organization, see Annex A.

This was the Executing agency for pre-project PPD 61-02 Rev.1 (M) and is therefore qualified to continue the implementation of this project as Executing agency.

SIESIA manages forestry statistics based on information provided to it by industry stakeholders in the forestry sector. These data are processed and made available to users on request. Thus, since 2005 DISA has regularly published annual reviews of forestry statistics compiled from the information contained in statistical returns that members of the trade file in each month. These annual reviews ("Yearbooks") are as follows:

1. Yearbook of forest statistics 2004 to 2006;
2. Yearbook of forest statistics 2007 to 2008.

SIESIA also publishes monthly, quarterly, biannual and annual charts ("Dashboards") to track the evolution of forestry activities. These data are accessible on the website of the Ministry: www.environnement.gouv.ci

SIESIA has a multidisciplinary team that includes computer scientists (engineers and programmers, analysts), foresters, archivists and statisticians.

The Executing agency will have to work with all partners identified under the pre-project. They would have to collaborate with the EA to contribute to the successful implementation of the project. Some partners are already included in the project organization chart.

Project implementation may cause the Executing agency to seek more technical partners observing the ITTO rules of procurement for projects, and assign them specific tasks.

4.1.2 Participation mechanism

In line with the responsibilities and terms of reference described above, the actions of the collaborating agencies are precisely timed within the project implementation schedule and shall be prompted by the Executing Agency.

Summary Table of Roles Allocated to the Various Collaborative Structures

Structure	Role
Forest Productions and Industries Department (*Direction de la Production et des Industries Forestières* -- DPIF)	In charge of monitoring the stakeholders of the industry targeted by the project, it will be involved in every action to be undertaken with them, including the development of training material and media, the organization of meetings with these stakeholders, the validation of procedures to be established under the project.
Directorate of Surveys, Planning and Evaluation *(Direction des Études, de la Planification et de l'Evaluation* – DEPE)	It will help conduct the monitoring and evaluation tasks and project implementation, in liaising with ITTO.
The Directorate of Administrative and Financial Affairs (DAAF)	It will be involved in the financial management of the project (it will be the co-signatory of the bank account to be open for the project). In this capacity it will ensure that all financial transactions conducted by the Project Coordinator are regular and legal.
SODEFOR	As a structure also managing the activities of stakeholders of the timber trade within gazetted forests, SODEFOR will contribute to providing training and information on the activities it is responsible for in connection with the project. It will share its experience in ITTO project implementation and provide relevan guidance.
GNT-CI	National Working Group – Côte d'Ivoire (GNT-CI) National Working Group for Côte d'Ivoire is an associative structure established as part of the efforts to implement the principles, criteria and indicators for the sustainable management of forest resources in Côte d'Ivoire. It will review project activities to ensure that they effectively comply with these requirements.
SEPBA	*Société d'exploitation du Parc à bois d'Abidjan* (SEPBA). SEPBA will be in charge of supplying information on the flow of timber products through the log yards it manages in two ports (Abidjan and San Pedro), as well as their effective loading on-board ships.

4.1.3 - Project Management Team

Staff establishment of the Executing agency

The Executing Agency will nominate one National Coordinator to take the helm of the project. He will be assisted by a Project Team comprising the following:

1. One IT expert, Deputy-Coordinator;
2. One Forest Statistics Expert;
3. One National IT Consultant;
4. An Assistant Accountant;
5. One executive secretary;
6. One Driver / messenger.

4.1.4 Project management committee

It is the governing body of the project, having the following membership:

1. A Chairperson appointed by order of the Minister in charge of Water and Forests;
2. The representative of ITTO Secretariat ;
3. The national ITTO Focal Point.

4. Representatives of the ministerial sub-structures involved – Direction générale des impôts (Inland Revenue Department), Direction générale des douanes (Customs Dept.), General Directorate of Budget and Finance, the *Direction Générale des Eaux et Forêts* (DGEF), and corporate representatives of the timber trade (SPIB, FNISCI Bois);
5. The Coordinator representing the Executing agency of the project who also acts as secretary of the Steering Committee.

The Project Steering Committee is responsible for overseeing the project, approving expenditures, reviewing activities implemented and for reviewing and proposing any required changes to the budget and activities. The project steering committee monitors the overall strategic management of the project and ensures that it proceeds in a timely, efficient and effective manner in accordance with its logical framework matrix and other relevant project documents.

The Project Steering Committee will convene three times: at the commencement of the project, at mid-term and at project completion. After each PSC meeting a brief report will be established by the PSC Secretary containing a record of adopted decisions.

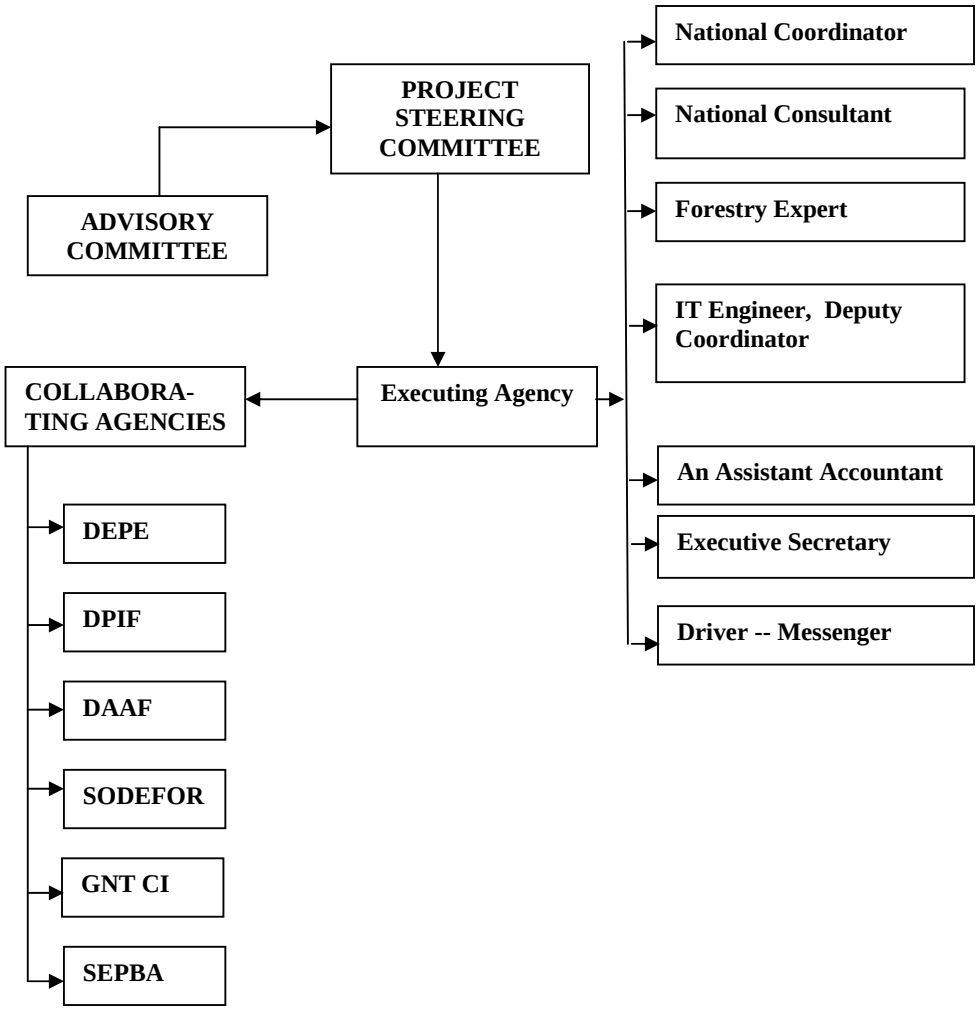
4.1.5 – Stakeholders participation mechanisms

The Executing Agency will establish an Advisory Committee in charge of providing solutions to problems that may arise during the course of project implementation.
The Advisory Committee membership shall comprise

Five representatives of timber trade associations,
Two representatives of the National Working Group – Côte d'Ivoire (GNT-CI);
Three representatives of local governments and sub-national authorities who are recipient of certain forest tax revenues.

The Advisory Committee is chaired by one of its members to be elected during the incipient meeting and this meeting will be convened by the Project Coordinator who acts as Advisory Committee Secretary.

Project Management Chart:



4.2 Reporting, Review, Monitoring and Evaluation

The Executing Agency will prepare reports and submit them to ITTO; the frequency of reports submitted to ITTO will be commensurate with the 2-year duration of this project. ITTO will have periodical monitoring and evaluation missions conducted by experts it will appoint.

The project will be monitored and evaluated by ITTO representatives in accordance with the usual procedures of the Organization.

4.2.1 Project Progress Reports

An inception report on early progress achieved will be submitted six (6) months after the project began. Semi-annual reports will be submitted to ITTO no later than February 28 and August 15 of each year.

The financial audit report of annual accounts will also be produced and submitted no later than March 31 of each year over the duration of the project.

4.2.2 Project Completion Report

A completion report will be prepared and submitted to ITTO three months after the close of the project and the final financial audit report.

4.2.3 Technical Project Reports

All technical reports prepared during the project will be made available to ITTO and other relevant bodies concerned within three months following the closing of the project.

4.2.4 Monitoring, review and inspection by the Management Committee

After twelve months of implementation, the project will be visited by the Management Committee. Subsequently, the project will be visited by an annual supervision mission on a date to be set by mutual agreement between the Executing Agency and ITTO.

4.3 Dissemination and mainstreaming of project learning

4.3.1 Dissemination of project results

The dissemination of project results will be through technical reports, progress reports and even the final report. The reports of the workshops, which will be organized both to outreach and provide training to project stakeholders, will also be edited and published. The dissemination process may be carried out through the website of the Ministry.

4.3.2 Mainstreaming of project learning

This project proposes to give prime of place to information technology and communication in the management of data on forestry statistics. Using a web server is a first in Côte d'Ivoire in this kind of project. Indeed, similar projects exist, but based on servers that are accessible through dedicated phone lines. This innovative project underpins the use of Internet as a means to access and manage data. It allows all users with an access code to gain access to data, regardless of the location (in Côte d'Ivoire or abroad).

It may well inspire other State projects, given the significant benefits it will bring.

Annexes

ANNEXE A:
PROFILE OF THE EXECUTING AGENCY AND COLLABORATING AGENCIES

I. Executing Agency Profile

Pursuant to Decree No. 2011 - 402 of 16 November 2011 on the organization of the Ministry of Forestry, the Department of Information, Education, Outreach, Information technologies and Archives (SIESIA) is responsible for:

- ensuring the computerization of Ministry Department services and connect them to the Internet;
- developing or acquiring new computer software programmes;
- establishing forestry and water management statistics;
- organizing and managing the network statistical databases on forestry and water management;
- implementing the Geographic Information System;
- managing documents and archives;
- managing the website of the Ministry of Water and Forests;
- working in conjunction with the Non-Governmental Organizations that must take over duties relating to information policy, education and outreach among the communities;
- developing and implementing in conjunction with all structures of the Ministry and public and private partners, the National Education, Information and Outreach Programme covering the activities of the Ministry, through national and international media;
- providing media coverage of the Ministry's activities.
- executing as and when instructed by the Minister, any information, education, communication and outreach missions.

The Information, Education, Outreach, Information Technologies and Archives includes three sub-directorates:

- Sub-Directorate of Information Technology and Statistics;
- The Sub-Directorate for Documentation and Archives;
- The Sub-Directorate of Education and Outreach.

A. Human resources

Table 2 : Staff establishment

Staff Category	Overall Workforce at end of Year	Comments
A4	07	Two Computer Engineers, Five Ingénieur des Eaux et Forêts (Water & Forest Engineer)
A3	01	One Forestry Technologies Engineer
B3	04	4 Senior Technicians in computer maintenance seconded to SIESIA
C2	04	Two production assistants with the Plant and Animal Production Division and two administrative assistants
Document Clerk	01	One Document Clerk
IT professionals under contract	03	Analyst Programmer, Web Development Engineer and a maintenance technician
Contracted Secretary	01	One Secretary

Details of budget expenditures for 2012

Description of expenditures	Annual Budgeted Allocation	Actual Expenditures	Ratio Expenditures/ Budget
Purchase small equipment, office supplies	1 000 000	559 982	55.99%
Purchase of fuel	1 000 000	800 000	80%
Supplies and consumables for computer equipment	1 000 000	649 998	64.99%
Small Equipment and technical supplies	600 000	300 000	50%
IT Maintenance work	800 000	350 000	43.75%
Maintenance of premises (Maintenance Equipment and Supplies)	800 000	400 020	50%
Maintenance and maintenance of furniture and equipment (not including IT equipment)	800 000	520 000	65%
Vehicles maintenance and repair, tyres	800 000	800 000	100%
TOTAL	**6 800 000**	**4 380 000**	**64.41%**

Details of capital expenditures budget vs effective capital expenditures for the Year 2012

Description of expenditures	Annual Budgeted Allocation	Actual Expenditures	Ratio Expenditures / Budget
Studies, research and development	8 070 907	8 070 907	100%
Management Systems Software Packages	20 000 000	20 000 000	100%
Office Furniture and equipment (Other than Computer)	10 000 000	9 999 999	99.99%
Desktop Computer & Hardware	30 000 000	30 000 000	100%
Purchase of fuel	1 500 000	1 500 000	100%
Purchase of supplies and consumables to the computer hardware	5 500 000	5 500 000	100%
Purchase small equipment, office supplies	5 000 000	4 998 702	99.99%
Maintenance of IT Equipment	1 500 000	1 499 999	99.99%
Maintenance of premises (Maintenance Equipment and Supplies)	1 500 000	1 500 000	100%
Maintenance and maintenance of furniture and equipment (not including IT equipment)	2 500 000	2 500 000	100%
Vehicles maintenance and repair, tyres	1 500 000	1 499 999	99.99%
Sub-contracting	38 000 000	-	0%
TOTAL	**125 070 907**	**87 069 606**	

USD 1 = F CFA 480 on average over the past five months.

ANNEX B:

DUTIES AND RESPONSIBILITIES OF KEY EXPERTS HIRED BY THE EXECUTING AGENCY

The staff of the Ministry of Waters and Forests, seconded to the project on a full-time basis by the C.I Government include the following specialists:

1. Project Coordinator

The Project Coordinator holding a Computer engineer's diploma, an extensive experience in forestry statistics and training is the Director of Information, Education, Outreach, IT and Archives (SIESIA). He will be responsible for coordinating all project activities according to the work plan developed. As General Manager Executing Agency, he will interface with ITTO through progress reports on the progress of the project, he will also interface with the collaborating structures, he will be in charge of project administrative work and will to report to the Ministerial Cabinet and Supervisory Committee on the progress of project activities.

He will be ultimately responsible for the execution of tasks carried out as part of project implementation, and will lead the coordination team, which will also include one Deputy Coordinator. He will be undertake project monitoring tasks with the support of the Deputy Coordinator.

He is **Mr. Apata** Gustave, the Director of the Information, Education, Outreach, IT and Archives Department since 2003 (gustave.apata @ egouv.ci) born in Abidjan, Côte d'Ivoire, 19-09-1961, a certified IT Development Engineer (1990).

2. Computer expert (Deputy Coordinator)

The computer expert is a senior executive of the Information, Education, Outreach, IT and Archives Department (SIESIA). In his capacity as deputy coordinator he will support the project coordinator in the project activities coordination tasks in accordance with the work plan developed. He will also provide technical and coordination support to the national IT consultant.

He is **M. ATTE KOUADIO** Abel Alix, a Research Officer with the Information, Education, Outreach, IT and Archives Department (SIESIA) since 2008 (abel.atte@egouv.ci); born in Abidjan, Côte d'Ivoire, 18-06-1979, a certified IT Development Engineer (2005).

3. Expert in Forestry Statistics

The Statistics Expert is one senior statistics consultant with the Information, Education, Outreach, IT and Archives Department (SIESIA). She will be responsible for developing the format of data input and editing, developing the platform for publishing data and for defining the frequency of data publication for each selected media.

She is **Miss TOURÉ Bénédicte Laure N'dayoban,** a Research Officer with the Information, Education, Outreach, IT and Archives Department (SIESIA) since 2008 (benedicte.toure @ egouv.ci) born in Abidjan, Côte d'Ivoire, 07-08-1973, a certified Fisheries Development Engineer with a specialism in Water and Forest Resources Management (2002).

4. Forestry expert

The forestry expert is one of the executives of the Information, Education, Outreach, IT and Archives Department (SIESIA). He will be responsible for providing forestry expertise to the project.

He is **Mr. Apata Yavo** NICOLAS, a Research Officer at the Information, Education, Outreach, IT and Archives Department (SIESIA) since 2005 (nicolas.apata @ egouv.ci) born in Agboville, Côte d'Ivoire, 06 -02 1967; a development engineer in Water and Forests Resources Management (2010).

5. Assistant Accountant

She will keep records of all project financial operations and will develop a cash flow management plan, will manage project payroll accounts and log book; she will prepare all project documents to be audited and will establish the balance sheet at the end of each Year.

She is **Ms. DELLA N'Guessan Emma-Rachel**, an Assistant Accountant contracted by SIESIA since 2004 (emmadellafr@yahoo.fr) born in Bouaké, Côte d'Ivoire, 19-04-1980; a Computer Maintenance Technician by training (2003).
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6. Secretary

She will be responsible for assisting the Coordinator in secretarial duties and to prepare, edit, file and store project documents, manage phone calls and the work schedule of the Project Coordinator, ensure the publication of reports of meetings chaired by the Coordinator, manage the various project staff hiring contracts and contracts with suppliers.

She is **Miss ASSALE N'GUESSAN ODETTE**, an Executive Secretary with the Information, Education, Outreach, IT and Archives Department (SIESIA) since 2008 (odette.assale@egouv.ci) born in Guiguidou (DIVO), Côte d'Ivoire on 06-06-1976; a senior technician in secretaryship by training (2005).

7. Driver

He will be responsible for driving the vehicle used in the project, to ensure mail delivery to other collaborating structures, to lead project teams to different venues both in Abidjan and upcountry en to monitor vehicle maintenance.

He is **Mr. KOTTIA N'DA JEAN EUDES**, a Driver with Information, Education, Outreach, IT and Archives Department (SIESIA) since 2005, born in Biédy (Yakassé Attobrou), Côte d'Ivoire on 19-08-1978; a professional driver by training (2002).

8. National IT Consultant

A national IT consultant will be recruited computer and he will be responsible for preparing the detailed project plan, conducting monitoring and evaluation of the implementation of the comprehensive plan, developing standards for data collection, designing data collection procedures in conjunction with the Coordinator and participating in collection validation procedures.

ANNEX C:

TERMS OF REFERENCES OF THE INFORMATION TECHNOLOGIES CONSULTANT FINANCED BY THE ITTO CONTRIBUTION

1. National IT Consultant
   (full-time service during the entire first year of project implementation)

Qualifications:

- Engineer's Degree in Computer Sciences;
- A sound experience in Web application development;
- Extensive experience in forest statistics;
- A thorough knowledge of African forestry institutions, including the Ministry of Water and Forests of Côte d'Ivoire;
- A high level of proficiency in the French language;
- At least five (5) years of experience in a similar position.

Duties:

1. Develops the detailed project plan;
2. Performs the monitoring, evaluation and implementation of the comprehensive plan;
3. Develops standards for data collection;
4. Designs data collection procedures in connection with the Coordinator;
5. Participate in the validation of data collection procedures.

ANNEX D :

RECOMMENDATIONS BY THE EXPERT PANEL

1 - Add a list of all 39 towns or indicate on map	See Table 1 in page 7 of the document
2 – Describing of the forest resource base - Is there a national forest inventory in place or not? - What are the quantities of harvested timber?	- Forested areas cover the southern half of the country. Climate in this area is generally tropical with four seasons – two dry and two rain seasons. The plant cover is subdivided into two areas which are the evergreen closed moist forest and the semi-deciduous closed moist forest. The forested area covers a vast floral and wildlife diversity. Unfortunately, from 16 million hectares in the early XXth Century the closed moist forest had been reduced to 9 million hectares in 1965 and to 2.5 million hectares in 1991. Presently, it is estimated to cover some 2.5 million hectares. This situation is due to the extensive agricultural practices based on shifting cultivation (slash-and-burn), overexploitation of forest for timber and fuel wood, bushfire, uncontrolled mining and illegal logging. - It should also be noted that to this day there is no National Inventory on the status of forest resources in Côte d'Ivoire that would provide detailed, recent figures. All the figures available to us are from estimates cross-checked with our own field experience data.. - Nevertheless we have data available on the volume of timber harvested each year by the logging trade (see annexes).
3 - Further elaborate the expected outcomes at project completion, particularly on the contribution of the project to improve the forest resource and sustainable forest management	Implementation of the Information System will enable the Ministry to have a reliable database on forestry activities in Côte d'Ivoire. The availability of data on forest resources will provide a sound basis for effective decision-making in the sector. All players, regardless of their location can consult the database in the system, which will be managed and maintained on a daily basis. This database will also provide information that will be used in operational planning studies for national forest resources, in the context of the implementation of measures for sustainable management of these resources. The capacity to better monitor the activities of operators will bolster the capacity to detect cases of fraud or illegal activities and to report them to the Forest Administration. Finally, the determination of areas to be reforested in accordance with the specifications of the logging industries will be better managed and so will the monitoring of afforestation work by the Forest Administration.

4 - Improve the problem analysis and problem tree with reformulation of logical links between main causes, the key problem and related consequences. The key problem in the problem tree should be clearly identified	**Problem analysis** The detailed analysis of the problem identified has uncovered two main causes: The forestry statistics management system is not operational and does not cover all applications Collection methods are neither appropriate nor formalized The first cause identified has pointed to the following malfunctions: - Lack of computer applications for the trackability of forest products; - The computerized statistics collection and processing module is not being tested with users; - Lack of computer equipment in the data collection centers; - Lack of training of users (operators and MINEF); - The applications developed are not disseminated; - No statistical data dissemination system with users. The second cause identified has the following sub-causes: - Lack of formalized procedures for collection; - No internet-based connection between the various collection centers; - Lack of staff training (MINEF and operators) to collect data; - Lack of coordination in data collection. *The Problem Tree* 1 – Key Problem **TO MAKE THE NATIONAL INFORMATION SYSTEM OPERATIONAL TO ENSURE SUSTAINABLE FOREST MANAGEMENT**: - FLEGT-compliant applications not yet incorporated in SIGAF - System testing to users to design further improvements and better meet the expectations of all stakeholders in the sector still to be done - Capacity-building for the personnel of structures in charge of forest statistics collection and processing, both within MINEF and with the economic operators of the timber sector is not effective..

5 - Reformulate the indicators for development objective and specific objective so as to make them consistent within the proposal	Impact indicators • By project completion date, the transparency of forestry and the timber trade is enhanced through the existence of an information management system accessible to all stakeholders. • All stakeholders have updated, reliable information available by the fourth quarter of the second project year. Outcome indicators • By the second quarter of Year 2, seventy percent (70%) of timber industrialists and 80% of logging companies use the system to report their activities. • By project completion date, a dashboard of the forestry and timber economy is published at national level to guide the policies of both the public and private sector.
6 - Clarify the relations between the two training activities of A1.4 and A2.3	**A14** To train users (MINEF staff and industry stakeholders) in data processing procedures There will be two 3-day training modules for 25 pers. (MINEF employees and economic operators of the timber sector). The staff involved will be trained in the use of the applications developed to enable them to undertake the computerized data entry process required for those data collected at field level via data collection sheets for which they will received prior training. These training sessions will take place during the 2nd quarter of the 2nd year of project implementation.
	A23 To train users (MINEF staff and industry stakeholders) in data processing procedures. The purpose of training will be to teach them to use the data collection sheets developed for this purpose. **T**wo 3-day training modules will be conducted with 25 participants per module (MINEF staff and stakeholders of the timber industry)
7 - Activity A2.4: Supervision of data collection needs more details (quality control)	To supervise the data collection process Acting under the supervision of the project leader, the project team will develop a schedule of field-level missions to ensure that data collection procedures identified in the Manual are being applied by the cantonment operators and staff. Work sessions to be conducted with the relevant stakeholders will improve the mutual understanding and help assess their level of satisfaction regarding information collected and the collection procedure. After the missions will be completed, the results achieved will enable further adjustments (corrective actions) to improve data sheet design.

8 - Provide explanation on providing assurances to project stakeholders.	To provide assurances to economic operators on the confidentiality of the data they will forward to the Administration, a public meeting, to be organized by the Administration, will be held to introduce SIGAF. During the meeting, a demonstration will be provided to the operators that the access code to be allocated to each of them will only enable access to their own respective data, and not to any third party's. During the same event, the methodology to disseminate results will likewise be demonstrated to them. Two types of yearbook will be published: - One Yearbook for the general public in which all data will be anonymous and where data tables will appear in consolidated form. This Yearbook will be destined for external use. - One Yearbook for the Forestry Administration in which data will be more detailed and destined for internal (administrative) use.
9 - Reconsider the necessity for purchasing the 4WD vehicle for the missions of the project.	The project proposal still provides for the purchase of a mission vehicle. During the two years of project implementation, there will be 86 days of field trips upcountry. If we elect to hire a vehicle we would have to pay a total of (86x150,000) FCFA 12,900,000, i.e. 26,000 dollar, i.e. USD16,400 less. However, this would cause difficulties when securing the sustainability of project outcomes, which requires monitoring and control missions.
10 - Further clarify the high budget costs for the National IT consultant and A1.2 particularly on the two trainings for only 10 staff members of the Executing Agency in administration procedures and maintenance applications	Activity A1.2 has partly been conducted by SNDI, the Government structure mandated to the Ministries for all that concerns the computerization of government structures. Under the project, the implementation of computer applications and training of personnel of the Executing Agency is to be the responsibility of SNDI which will invoice us the training costs (ORACLE). The amount budgeted in the project has been set by this structure. Regarding the national consultant : it should be noted that in Côte d'Ivoire, a computer engineer working full time on a project is paid USD 3,000 to 4,000 per month, i.e. USD 36,000 to USD 48,000 on an annual basis. Below this amount, it would be difficult to engage an IT Engineer for a 12 month period. We have budgeted USD 30,000 in the budget, i.e. USD 2,500 per month, hoping to hire one for this amount of remuneration.

ANNEX E:

VOLUME OF HARVESTED TIMBER 2004-2010

Year	Total Harvested Volumes (cc.m)
2004	**1 698 926.500**
2005	**1 736 319.807**
2006	**1 507 344.238**
2007	**1 608 262.352**
2008	**1 528 523.890**
2009	**917 899.506**
2010	**991 298.122**