REDD+ Readiness Preparation Proposal (RPP)

Republic of the Congo

Brazzaville, April 19, 2010

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General Information

1. Contact

Name	Georges Claver BOUNDZANGA
Organization	Ministry of Sustainable Development, Forest Economy and Environment (MDDEFE)
Title	REDD+ National Coordinator
Address	Palais des Verts, B.P. 98, Brazzaville, Republic of the Congo
Telephone	+242 666 73 21 ; +242 531 74 11
Fax	-
E-mail	bouzgege@yahoo.fr; cabc_george@yahoo.fr
Website	

2. RPP Development Team

Name	**Organization**
Georges Claver BOUNDZANGA	REDD+ National Coordination, MDDEFE
Gervais Itzoua MADZOUS	REDD+ National Coordination, MDDEFE
Lambert MABIALA	National expert, consultations
Brice Séverin PONGUI	National expert, implementation framework
Pierre Vincent BISSOUEKEME	National expert, implementation framework
Farel MOUYANGOU	National expert, SESA
Théophile NTIAKOULOU	National expert, SESA
Michel NIAMA	National expert, reference scenario
Basile MPATI	National expert, MRV system
Chérubins Brice OUISSIKA	National expert, MRV system
Suspense IFO	National expert, MRV system
Christian BURREN	Wildlife Conservation Society (WCS) Congo
Jean-Pierre PROFIZI	Independent consultant
Luc DURRIEU DE MADRON	Independent consultant
Matthieu WEMAERE	Attorney-at-Law, registered in Brussels and Paris
Olivier BOUYER	ONF International (ONFI)
Anne MARTINET	ONFI
Jean-Baptiste ROUTIER	ONFI

3. Acronyms

AFD	French Development Agency
ANE	National Environmental Agency
BEAC	Bank of Central African States
CARESCO	Coordination of Associations and Network of Civil Society in Congo
CBFF	Congo Basin Forest Fund
CBFP	Congo Basin Forest Partnership
CCOD	Consultation Council of Development NGOs
CDM	Clean Development Mechanism
CD-REDD+	REDD+ National Coordination
CEPAREC	Center for Promotion, Support, and Capacity-Building of Civil Society Organizations in Congo
CERGEC	Center for Geographic Research and Cartography Production
CITES	Convention on International Trade in Endangered Species
CNIAFF	National Center for Surveys and Forest and Fauna Resources Management
CN-REDD+	REDD+ National Committee
CNSEE	National Center for Statistics and Economic Studies
COMIFAC	Central African Forest Commission
CONADEC	National Convention of Development and Environmental Associations and NGOs in Congo
DFNP	Non-Permanent Forest Estate
DFP	Permanent Forest Estate
DRC	Democratic Republic of the Congo
ESA	European Space Agency
FCPF	Forest Carbon Partnership Facility
FECONDE	Federation of Development NGOs in Congo
FJEC	Forum of Young Enterprises in Congo
FLEGT	Forest Law Enforcement, Governance, and Trade
FMU	Forest Management Unit
FRA	Forest Resource Assessment
FSC	Forest Stewardship Council
GEF	Global Environment Facility
GIS	Geographic Information System
GOFC/GOLD	Global Observation for Forest and Land Cover Dynamics
Ha	Hectare
HIPC	Heavily Indebted Poor Countries
IDR	Rural Development Institute
IIASA	International Institute for Applied Science Analysis
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
ITTO	International Tropical Timber Organization

JRC	Joint Research Center of the European Commission
LIL	Low Impact Logging
MDDEFE	Ministry of Sustainable Development, Forest Economy and Environment
MRV	Monitoring, Reporting, and Verification
NAMA	Nationally Appropriate Mitigation Actions
NGO	Non-Governmental Organization
OFAC	Observatory for the Forests of Central Africa
ONFI	ONF International
OP	Operational policies
PAFN	National Forest Action Plan
PCPA	Multi-Actor Concerted Program
PDC	Program on Citizen Dialogue
PICV	Principles, Indicators, Criteria, and Verifiers
PNAE	National Environmental Action Plan
PNAT	National Land-Use Plan
PRSP	Poverty Reduction Strategy Paper
QA/QC	Quality Assessment / Quality Control
REDD+	Reduced Emissions from Deforestation and Forest Degradation, Maintenance and Enhancement of Carbon Stocks
RENAPAC	National Network of Indigenous Peoples in Congo
RIFFEAC	Network of Forestry and Environmental Training Institutions in Central Africa
RPP	Readiness Preparation Proposal
SESA	Strategic Environmental and Social Assessment
SNAT	National Land Planning Scheme
SNDR	National Rural Development Scheme
SNR	National Reforestation Service
SU	Sampling Unit
UCL	Louvain Catholic University
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	FAO, UNDP, and UNEP REDD Initiative
VPA	Voluntary Partnership Agreement
WCS	Wildlife Conservation Society
WRI	World Resources Institute

4. Executive Summary

The Republic of the Congo was selected by the Forest Carbon Partnership Facility of the World Bank to implement the program on Reducing Emissions from Deforestation and Forest Degradation (REDD). The present proposal (R-PP) includes the main strategic, technical, financial and methodology aspects as recommended by Congo for its preparation to REDD+.

This R-PP covers the 2010-2013 timeframe. The total budget for REDD+ readiness for the Republic of the Congo is 7,207 K$. This amount is divided between the Congolese government (262 K$ or 4%), the FPCF (3,235 K$ or 44%), UN-REDD (2,175 K$ or 30%), AFD (355 K$ or 5%), and CBFF (1,230 K$ or 17%).

Background

The Republic of the Congo straddles the Equator and lies at the heart of the world's second largest forest range. The country covers an area of 34 million hectares. Forest cover is estimated at 22.5 million hectares (or about 2/3 of the national territory) making Congo a highly forested country. The majority of the Congolese forests, or about 21,800,000 hectares, are dense wet forests and about 37 % (8,369,760 hectares) are almost permanently flooded, and hence naturally protected. Over 80% of the national forest area belongs to the national forest estate, which makes the State the primary forest owner in the country.

The population of the Republic of the Congo was estimated at 3.8 million inhabitants in 2008, with an average density of 10.5 inhabitants per square kilometer. The average annual population growth rate is 3.2%. Although about 60% of the population lives in the five main cities, the majority of the population still relies on forest for its livelihood (food, energy, medicine, etc.). The economy of Congo is mainly based on natural resources exploitation, including oil and timber, which represent 70% of the GDP (PRSP-2007). Agriculture employs 40% of the workforce, but represents only 6% of the GDP.

The main trends for conservation and sustainable ecosystem management, participatory management, and poverty reduction have been defined in: (i) The National Forest Action Plan (PAFN, 1992); (ii) The National Environmental Action Plan (PNAE, 1994); (iii) The National Rural Development Scheme (SNDR, 1997); (iv) The National Land Planning Scheme (SNAT,2005); (v) The Poverty Reduction Strategy Paper (PRSP, 2008); and (vi) The National Action Plan (PAN, 2008).

A sustainable forestry management process, officially initiated at the end of 2000, has helped the Republic of the Congo progress significantly in protecting its ecosystems and the people who depend on them. Forestry management was finalized for 3,831,820 hectares of concessions and is ongoing for an additional 6,842,490 hectares. It is estimated that by 2012, about 75% of the 13,434,200 ha of production forests will benefit from a management plan. Over 2 million hectares have been eco-certified, making Congo the first country in the world in terms of eco-certified exploitation surface in natural forests.

Furthermore, major efforts have been carried out on reforestation, including 84,420 hectares of plantations, among which 12,450 ha are in degraded forests. In addition, 3,531,820 hectares, or 10.3 % of the country's total area, have been classified as protected areas. The commitment of Congo to conservation and sustainable natural resources management has also been demonstrated by its accession to many international agreements, the most recent being the Treaty on Conservation and Sustainable Management of Forest Ecosystems in Central Africa, establishing the Central African Forest Commission (COMIFAC). This treaty was signed in Brazzaville on February 5, 2005 and ratified by Law 35-2006 of October 26, 2006.

Participation in REDD+ Readiness

The main consultation process to date has been carried out to develop the Poverty Reduction Strategy Paper (PRSP), with the objective of getting support under the Heavily Indebted Poor Countries (HIPC) Initiative. Building on results from the VPA/FLEGT process, the Republic of the Congo has identified three types of stakeholders to prepare its REDD+ strategy: public authority, private sector, and civil society.

These stakeholders have been engaged in the development of the REDD+ readiness proposal, through individual discussions as well as numerous workshops held throughout the proposal development process. The same stakeholders will be consulted and regularly informed during the finalization of the strategic (national strategy, implementation framework) and technical (reference scenario and MRV system) components of REDD+ readiness.

Strategic Aspects of REDD+ Readiness

Thanks to the low population density of the country, pressures on ecosystems are considered to be relatively low. Based on preliminary assessments, the annual deforestation rate was estimated at 0.75% (about 17,000 hectares).

The main direct causes of deforestation and forest resources degradation include the following, in ascending order of importance: (i) unsustainable slash-and-burn practices; (ii) unsustainable fuelwood production and consumption; (iii) unsustainable or even illegal logging; and (iv) urban development. These direct causes are compounded by many underlying factors including the lack of a common land-planning vision, discussed and approved by all stakeholders; poor rural populations; the population growth; the lack of alternative sources of energy adapted to low incomes; inefficient charcoal production and use; and weak forest governance by the State.

To address both direct causes and underlying factors of deforestation and forest degradation and hence reduce related emissions, the R-PP recommends a series of preliminary strategy options. These include: (i) strengthening of tenure security; (ii) sustainable forest resources management; (iii) improvement of agricultural production systems; (iv) streamlining of production and use of fuelwood, and (v) integration of REDD+ in other relevant sectors.

The REDD+ implementation framework will be guided by four principles: (i) participation of all stakeholders; (ii) regulation; (iii) incentives; and (iv) control. Adoption of a REDD+ law will establish the cross-cutting nature of the REDD+ policy and help integrate REDD+ activities in sectoral policies. The law will define roles and responsibilities of public authorities, as well as strategic priorities, core principles, and implementation tools, including incentives.

Therefore, an enabling Decree established within the Council of Ministers will create and define functions, composition, and organization of the REDD+ implementation bodies including: the REDD+ National Committee, the REDD+ Departmental Committees, and the REDD+ National Coordination. A National REDD+ Fund could be established to manage funding and promote investments for REDD+. Operation of this fund is discussed in detail under Component 2c. A National REDD+ Registry will also be created to index national REDD+ activities.

At this stage, the Republic of the Congo is examining two options. Option 1 is to consider sequestered carbon and emission reductions as natural resources. Therefore, they will be part of the holdings of the Republic and must be achieved for the country's best interests. Under this option, the State would have the full and complete ownership of carbon credits and would be the only legally able authority to transfer the legal title to third parties. Under Option 2, the sequestered carbon is considered as "industrial and natural commodities", depending on the level of human intervention. Carbon credits are therefore considered as "movable intangible property". Under this option, the owner of carbon credits would be the person who can prove ownership of the property.

These preliminary options for the REDD+ strategy and its implementation framework will be refined during the REDD+ preparation phase through a participatory process based on specific studies, as

well as on experiences of REDD+ pilot projects at sub-national level. Furthermore, the Republic of the Congo will initiate a strategic assessment of potential environmental and socioeconomic impacts of the proposed REDD+ strategy options, based on Decree # 2009-415 and international principles and criteria.

Technical Aspects of REDD+ Readiness

The reference scenario of Congo will be an historical adjusted baseline, as defined by the decision on methodology in Copenhagen (FCCC/CP/2009/11/Add.1). The reference scenario will have two components: a "spatial" component to estimate areas threatened by deforestation and a "quantitative" component to estimate future deforested areas.

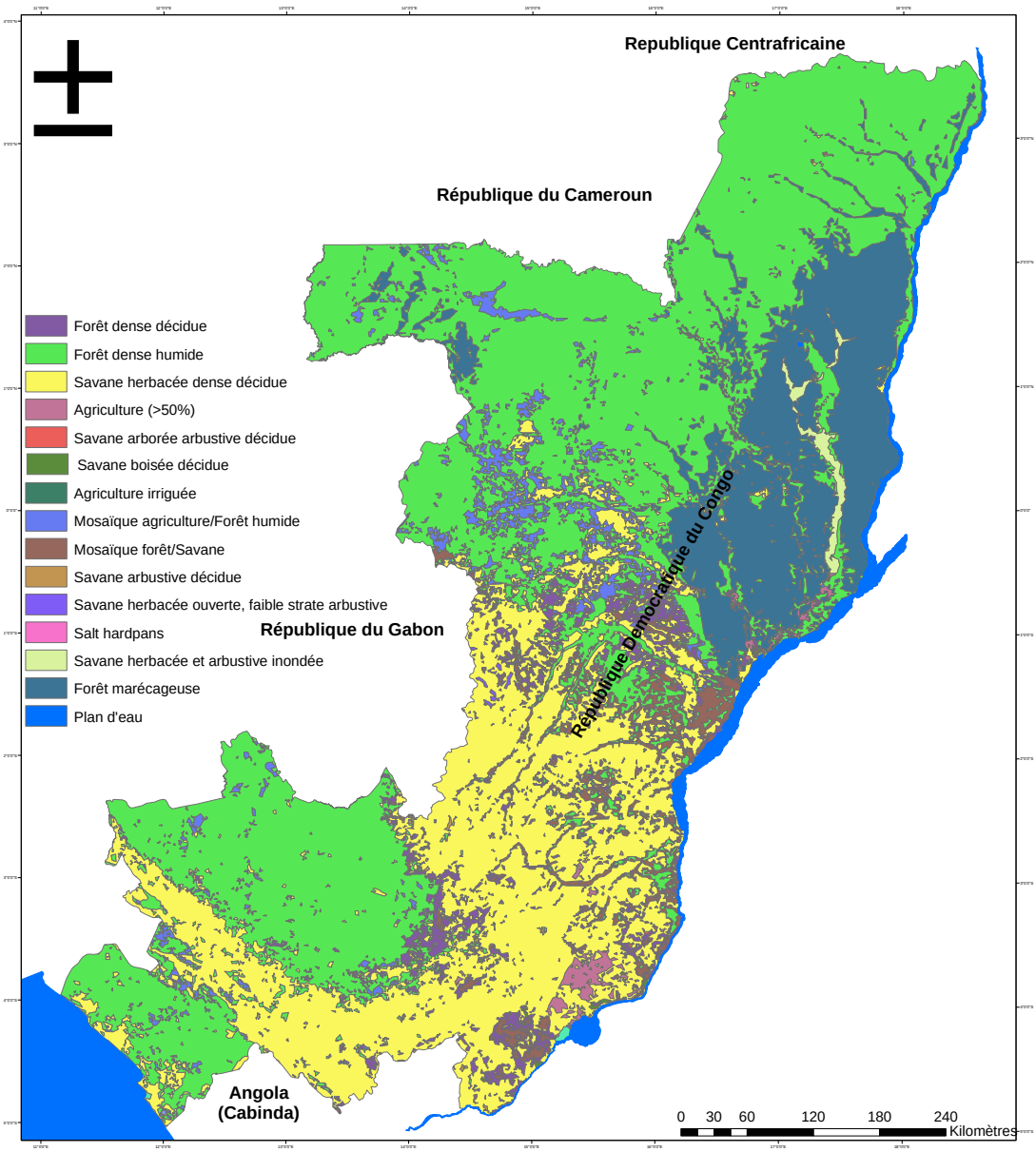
In the spirit of regional collaboration and South-South cooperation, a capacity-building scheme is also planned. Throughout its preparation for REDD+, the Republic of Congo is open to discussions, as well as to foreign experience, on this aspect.

The MRV system will be developed in consistency with the Copenhagen Decision 4/CP.15[1] on methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks. To complement this Decision, methodologies for MRV development will follow the Good Practice Guidance for Land Use, Land Use Change, and Forestry[2], developed by the Intergovernmental Panel on Climate Change (IPCC) in 2003, as well as the 2006 IPCC Guidelines for Agriculture, Forestry, and other Land Use[3]. The Republic of Congo plans to form a MRV team, to be hosted at the CNIAFF and with potential inclusion of some staff from CERGEC. Under the strategic authority of the National REDD+ Committee and the technical supervision of the REDD+ National Coordination, the MRV team will plan and implement MRV and QA/QC activities. The MRV team will receive all human and logistic resources needed for the MRV.

[1] http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf
[2] http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf_languages.html
[3] http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html

DEPARTEMENTS ADMINISTRATIFS DU CONGO

Couverture végétale du Congo



Brazzaville, Avril 2009

CNIAF/MEF

Sources: - Base de données actualisées du CNIAF
- GLC 2000 Congo

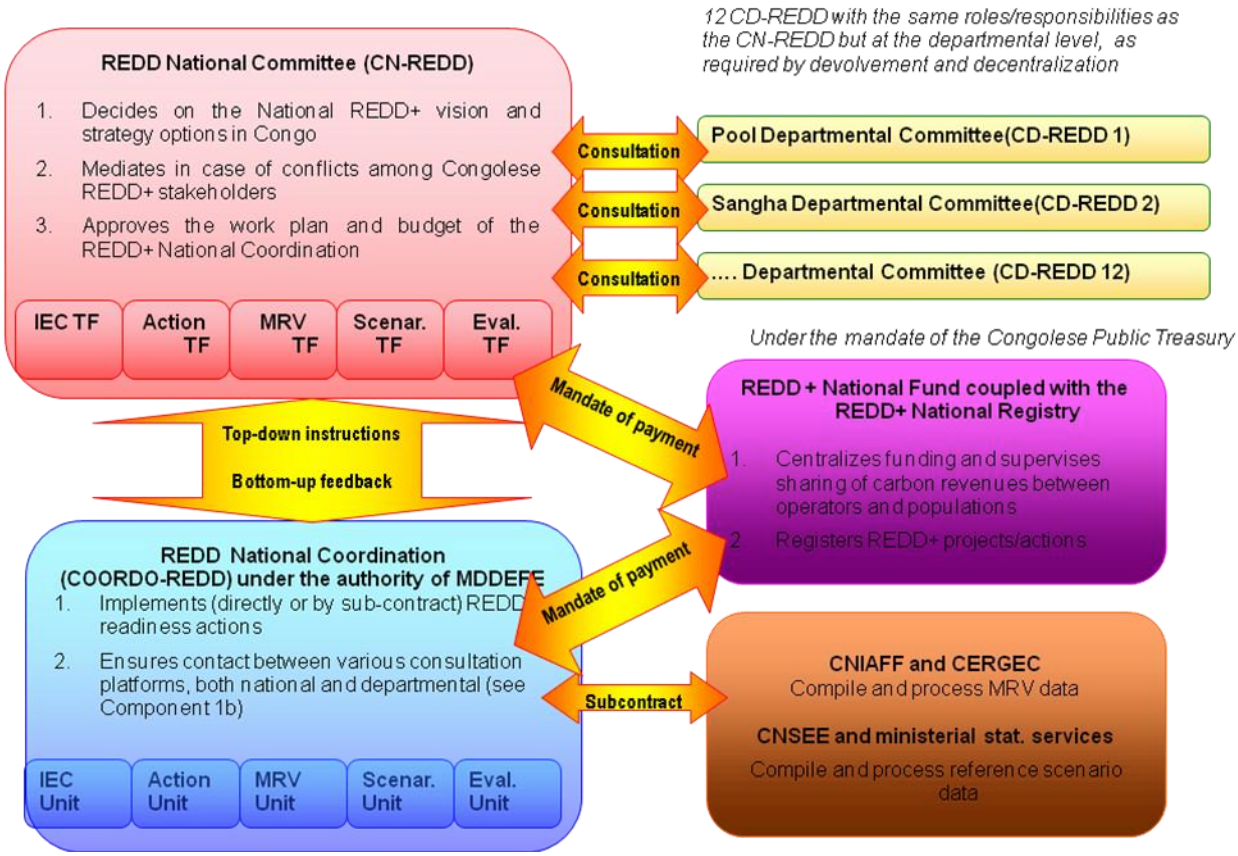
Projection: UTM 32N/WGS 84

Component 1. Organize and Consult

Component 1a. National Readiness Management Arrangements

1. OVERVIEW

A REDD+ Framework Law would structure all aspects related to the implementation of the REDD+ process in the Republic of the Congo. This law is outlined under Component 2c. To this effect, an enabling Decree established within the Council of Ministers will create and define functions, composition, and organization of the REDD+ implementation bodies. Functions of these entities and their interconnections will be as follows:



2. REDD+ NATIONAL COMMITTEE

2.1. Functions

The four main functions of the REDD+ National Committee are to:

(i) Make the decisions on the national REDD+ vision and strategy options in Congo;

(ii) Lead discussions on the national REDD+ among the public authority, civil society, and private sector platforms(see Component 1b);

(iii) Play a mediator role in case of conflicts between stakeholders of the Congolese REDD+; and

(iv) Approve the work plan and budget of the REDD+ National Coordination.

2.2. Composition

The REDD+ National Committee includes 42 members, each granted with a voting right. One third of the members will represent the public authority, one third the civil society, and one third the private sector. Details of the membership are as follows:

➔ Public authority platform: 14 members

2 members designated by the Presidency of the Republic;

2 parliamentary members elected respectively by the National Assembly and the Senate;

1 member elected by peers at the Economic and Social Council; and

9 designated members from ministries related to natural resources management (Forests, Environment, Agriculture, Mining, Hydrocarbons, Energy, Plan, Finance, Territorial Administration, and Tenure). The nine ministerial delegates will have full rights while additional delegates will be observers.

➔ Civil society platform: 14 members

4 members from NGOs working in the environmental, development and human rights sectors and elected on the civil society platform (see Component 1b for more details on this platform);

6 members representing indigenous people and village communities and elected on the civil society platform; and

4 members from universities and research centers working in the environmental sector and elected on the civil society platform.

➔ Private sector platform: 14 members

3 members from the industrial forestry sector, elected on the private sector platform (see Component 1b below for more details on this platform);

3 members from the small loggers sector, elected on the private sector platform;

2 members from the agro-industrial sector elected on the private sector platform;

2 members from the mining sector elected on the private sector platform;

2 members from the oil sector elected on the private sector platform; and

2 members from the public works sector elected on the private sector platform.

In addition, the REDD+ National Committee could call on any observer member representing other administrations, national or international institutions, financial partners, etc. for any relevant input.

2.3. Organization

The REDD+ National Committee will hold regular and at least quarterly meetings. Decisions are by qualified majority of full-right members. Other practical operational arrangements will be outlined in its Rules and Regulations to be adopted at its first meeting.

A Secretariat will be established for the REDD+ National Committee. Its role is to communicate decisions and recommendations to external organizations, including the REDD+ Departmental Committees (see 3 below) and the REDD+ National Coordination (see 4 below).

If needed, the REDD+ National Committee can establish *ad hoc* task forces. Creation and dissolution arrangements, operational mode and membership of these task forces will be evaluated on a case by case basis. Potential task forces include:

(i) Information, education, and communication (see Component 2b);

(ii) Design of monitoring systems (MRV of emissions and removals, as well as of other REDD impacts and benefits) (see Component 4);

(iii) Development of reference scenario (see Component 3);

(iv) Design and actual implementation of REDD+ strategy options and monitoring of REDD+ pilot projects (see Component 2b);

(v) REDD+ Funding (see Component 2c);

(vi) Etc.

3. REDD+ DEPARTMENTAL COMMITTEES

The REDD+ national strategy does not intend to create empty shells. Therefore, departmental committees are not mandatory: they will be created only based on the interest for REDD+ demonstrated by stakeholders in each Department.

3.1. Functions

The four main functions of the REDD+ Departmental Committees are to:

(i) Facilitate implementation at departmental level of decisions made by the REDD+ National Committee and the REDD+ process;

(ii) Lead the REDD+ departmental discussions among public authority, civil society, and private sector platforms (see Component 1b);

(iii) Play a mediation role in case of conflicts between stakeholders of the departmental REDD+; and

(iv) Develop proposals for the REDD+ National Committee.

3.2. Composition and Organization

The national Administration is devolved and decentralized to 12 Departments. Therefore, *mutatis mutandis*, the REDD+ Departmental Committees can be based on the same principles applied to the REDD+ National Committee (balanced membership, decision by qualified majority, at least one quarterly meeting, etc.), with different functions.

Membership in the REDD+ Departmental Committees will be determined on a case-by-case basis, based on the specific context of each department and consistent with the principle of balanced representation among the public sector (1/3), the civil society (1/3), and the private sector (1/3).

4. REDD+ NATIONAL COORDINATION

4.1. Functions

The two main functions of the REDD+ National Coordination are to:

(i) Perform (directly or outsourcing) REDD+ readiness actions;

(ii) Ensure contacts among the various consultation platforms, both national and departmental (see Component 1b).

The REDD+ National Coordination will be in charge of the daily management of the REDD+ process in the Republic of the Congo. It will be placed under the administrative authority of the Ministry in charge of the Environment. The REDD+ National Coordination will answer for the decisions made by the REDD+ National Committee to which it will transfer any information relevant to the REDD+ process, in the form of activity reports or advice on specific issues for which the REDD+ National Committee requires its expertise.

4.2. Composition and Organization

The REDD+ National Coordination will include at least 6 members designated among national executives, by Order of the Ministry in charge of the Environment:

(i) One high-ranking civil servant as National Coordinator;

(ii) One expert in sociology as Chief of the Information-Education-Communication Unit;

(iii) One expert in forest survey and remote-sensing as Chief of the MRV Unit;

(iv) One expert in rural economy as Chief of the Modelling/Reference Scenario Unit;

(v) One expert in socio-environmental assessment as Chief of the Evaluation Unit;

(vi) One expert in development projects conception as Chief of the Action Unit.

The REDD+ National Coordination is assisted by support staff, including one administrative assistant and one accountant. It is also supported by a network of REDD+ contacts from the ministries relevant to REDD+ (Forests, Environment, Agriculture, Hydrocarbons, Energy, Plan, Finance, Territorial Administration, Tenure, Scientific Research, Education, etc.). Finally, it can call on any relevant help in the form of consultations or capacity-building.

5. REDD+ NATIONAL FUND AND REDD+ NATIONAL REGISTRY

5.1. Rationale

A REDD+ National Fund could be established to manage funding and promote investments for REDD+. Operation of this fund is discussed in detail under Component 2c.

Along with this Fund, a REDD+ National Registry will be established to index REDD+ activities. This Registry takes its inspiration from the international registry of Nationally Appropriate Mitigation Actions in Developing Countries (NAMA). A global NAMA registry could help communicate the mitigation actions considered by developing countries, and match their funding requests to offers by multilateral or bilateral donors, or even by private buyers of carbon credits.

The Congolese REDD+ National Registry would be a “miniature” version of this global registry: the State can use the registry to index national REDD+ activities and ensure that REDD+ funds do not overlap or, on the contrary, neglect any REDD+ strategy action. To be registered in the National Registry, REDD+ actions must be “readable” in the national MRV system (see Component 4).

5.2. Financial Management of Implementation of the REDD+ National Strategy

To ensure financial transparency, independence, and accountability, there are four recommended accounting steps for (i) running costs committed by the accountant at the REDD+ National Coordination and (ii) transactions, either for REDD+ funds or carbon credits, directly managed by the REDD+ National Fund:

Step 1 – Expense commitment and Step 2 – Clearance of expense (Verification of provided service) by the REDD+ National Coordination.

Step 3 – Mandate of expense by the Congolese Treasure, following recommendation by the Budget Task Force of the REDD+ National Committee and verification of items and actual service.

Step 4 – Payment by accountant at the REDD+ National Coordination (for operational running costs of the National Coordination) or by the REDD+ National Fund (for REDD+ funds or carbon credits).

This scheme will be refined by Study 3 planned under Component 2c, but will remain consistent with the provisions of the Anticorruption Law and must be approved by the Inter-ministerial Committee against Corruption, the National Commission against Corruption and the Anticorruption Observatory.

In any case, there will be a separation of powers between the mandating authority and the payer. In addition, all accounting documents and a financial statement will be presented at each REDD+ National Committee meeting.

6. OTHER INSTITUTIONS FOR THE REFERENCE SCENARIO AND THE MRV

The CNSEE (National Center for Statistics and Economic Studies) and the respective Offices of studies and planning or statistics in technical ministries in charge of natural resources management will contribute to the development of the reference scenario, in accordance with provisions of Component 3.

The CNIAFF (the National Center for Surveys and Forest and Fauna Resources Management) – under the authority of the MDDEFE – and the CERGEC (the Center for Geographic Research and Cartography Production) will participate in the development and implementation of the MRV system, in accordance with provisions of Component 4.

7. WORKPLAN AND BUDGET (IN K$) OF COMPONENT 1A

Table 1a - COMPONENT 1A						
Main activities	**Sub-Activities**	**2010**	**2011**	**2012**	**2013**	**Total**
Organization and Operation of the REDD+ National Committee	Establishment	2				**2**
	Committee Meetings (5 k$/meeting x 4 meetings/year)	10	20	20	20	**70**
	Equipment and Operation	2	2	2	2	**8**
	Capacity-building and Technical Assistance (10 k$/yr)	5	10	10	10	**35**
Organization and Operation of REDD+ Departmental Committees	Establishment (2k$ x 12CR-REDD+)	24				**24**
	Committees Meetings (2 k$/meeting x 4 meetings / yr x 12 CD-REDD+)	48	96	96	96	**336**
	Equipment and Operation (2 k$/yr x 12 CD-REDD+)	12	24	24	24	**84**
	Capacity-Building / Technical Assistance (4 k$/yr x 12 CD-REDD+)	24	48	48	48	**168**
Organization and Operation of the REDD+ National Coordination	Establishment	2				**2**
	Equipment and Operation (10 k$/month)	60	120	120	120	**420**
	Capacity-Building / Technical Assistance (10 k$/an)	5	10	10	10	**35**
Organization and Operation of the REDD+ Fund (2012-2013) and the REDD+ Registry (2010-2013)	Establishment (2 k$/structure)	2		2		**4**
	Salary 2 people (1 k$/month) + equipment/operation (1 k$/month)		3	3	3	**9**
	Capacity-Building / Technical Assistance (1 k$/yr)	1	1	1	1	**4**
Total		**197**	**334**	**336**	**334**	**1201**
Government		2	9	11	9	**31**
Forest Carbon Partnership Facility (FCPF)		**100**	**150**	**150**	**150**	**550**
UN-REDD Program		65	100	100	100	**365**
Agence française de développement (AFD)			15	15	15	**45**
Congo Basin Forest Fund (CBFF)		30	60	60	60	**210**

Component 1b. Stakeholder Consultation and Participation

1. PRINCIPLES AND OBJECTIVES

1.1. Principles

Forests in the Republic of the Congo are the living environment and source of livelihood for thousands of people. Forest exploitation, both small-scale and industrial, for wood and non-timber forest products, is a source of income for populations and for the government.

Developing a REDD+ national strategy requires consideration of all stakeholders' concerns and their full understanding of what is at stake. The Republic of the Congo will include all relevant stakeholders for REDD+ through an inclusive approach.

Specifically, the voices of the indigenous people – and the pygmies in particular- and local communities should be heard throughout the development of the REDD+ strategy, pursuant to the principle of "free, prior, and informed consent" from the United Nations Declaration on the Rights of Indigenous Peoples and consistent with the World Bank operational policy 4.10 on indigenous peoples.

1.2. Objectives:

(i) Promote first-hand feedback from community organizations, devolved and decentralized administrations, or local and international NGOs living and/or working in the field and aware of issues related to deforestation and forest degradation. These information should help improve decision-making for the development of the REDD+ national strategy;

(ii) Ensure understanding and acceptance of REDD+ strategy options to guarantee their flexibility, efficiency, and sustainability;

(iii) Ensure a transparent process, in particular on debatable issues within the Congolese society such as land planning, tenure regulation and use of natural resources, and distribution of carbon revenues.

2. EXPERIENCE IN PARTICIPATORY CONSULTATIONS

Emerging pluralism and liberalism of trade unions and associations has spawned new dynamics in the civil society for about 20 years. There is a large number of civil society groups, such as the Federation of Development NGOs in Congo (FECONDE), the National Convention of Development and Environmental Associations and NGOs in Congo (CONADEC), the Coordination of Associations and Network of Civil Society in Congo (CARESCO), the Consultation Council of Development NGOs (CCOD), the Center for Promotion, Support, and Capacity-Building of Civil Society Organizations in Congo (CEPAREC), the Forum of Young Enterprises in Congo (FJEC), the National Network of Indigenous Peoples in Congo (RENAPAC), etc.

After a period of conflicts, which ended in 1998, the Republic of the Congo has tried out several participatory consultations, at local or national level, in the forest sector or other sectors, ensuring the active and continuous involvement of stakeholders. Lessons learned for some of these consultations in support of the current process are listed below.

2.1. Participatory Consultations Outside of the Forest Sector

The main consultation process to date was for the development of the Poverty Reduction Strategy Paper (PRSP), with the objective of reaching a decision to benefit from assistance under the Heavily Indebted Poor Countries (HIPC) Initiative.

During this process, the Program on Citizen Dialogue (PDC), later modified to a Multi-Actor Concerted Program (PCPA), established several thematic platforms (Health and Environment, Education, Justice and Poverty, Water and Energy, Entrepreneurship). Contributions of these platforms through participatory analysis had a great impact on the development of the PRSP.

Another example was the creation of a platform on extractive industries transparency in the Republic of the Congo, following the Extractive Industries Transparency Initiative (EITI) launched in 2002 at the Johannesburg Summit on Sustainable Development.

This platform is still active and includes the Justice and Peace Commission of the Catholic Church and other activist NGOs working on human rights, health and environment, education, land tenure, agriculture, local communities, etc.

This platform engages in constant dialogue with public authorities (ministries in charge of mining and hydrocarbons, economy and finance, sea transport, etc.) and the private sector (oil and mining companies).

2.2. Participatory Consultations in the Forest Sector

Negotiation requirements for the Voluntary Partnership Agreement (VPA) between the country and the European Union, under the Forest Law Enforcement Governance and Trade (FLEGT) process led to the creation of three consultation platforms: public authority, private sector, and civil society.

At the level of the Sangha Department, in the North of Congo, design and implementation of forest management plans and ecological certification of two logging concessions, namely Congolaise industrielle des bois (CIB) and Industrie forestière de Ouesso (IFO), led to interesting participatory consultations: a permanent observation and monitoring authority (IPOS) for CIB and an entity in charge of community capacity-building and observation of their participation in forestry management (ORCCOP) for IFO.

The project on “effective participation and involvement of local institutions and populations in managing the industrial logging operation in the South of Congo”, implemented in the Lékoumou, Niari, and Kouilou Departments by the NGO Congo Environnement et Développement, has developed departmental consultation frameworks on forest governance.

Finally, the project on participatory mapping implemented by the Congolese Observatory of Human Rights and the Tropical Forest Foundation is another example of consultation.

It appears that the Republic of the Congo has a culture of participatory consultation, trained human resources, and appropriate tools to implement a consultation plan for the development of its national REDD+ strategy.

3. IDENTIFICATION OF STAKEHOLDERS AND CONSULTATIONS HELD

Based on outputs from the VPA/FLEGT process, the Republic of the Congo identified three types of stakeholders for its REDD+ readiness preparation. The proposed platforms mentioned under Component 1 are also based on these categories:

3.1. Public Authority

This group includes ministerial departments and other public bodies in charge of developing, voting, or enforcing laws and regulations impacting deforestation, forest degradation, resources use and access, revenue-sharing and customary and/or users' tenure rights:

(i) General Secretariat of the Government;

(ii) 19 ministerial departments in charge of (1) Plan and Land Planning, (2) Economy, Finance, and Budget, (3) Sustainable Development, Forest Economy, and Environment, (4) Transport, (5) Energy and Water Power, (6) Fisheries and Aquaculture, (7) Delegation of Major Works, (8) Public Works, (9) Agriculture, (10) Urban Planning and Housing, (11) Land Management, (12) Tenure and Preservation of Public Estate, (13) Mining and Geology, (14) Scientific and Technological Research, (15) Private Sector, (16) Trade and Procurement, (17) Small and Medium Enterprises and Craft Industry, (18) Traditional Medicine (Ministry of Health and Population), and(19) Justice;

(iii) Decentralized administrations: municipalities, departmental and communal councils;

(iv) Prefectures; and

(v) The Parliament.

3.2. Private Sector

All economic players active in the forest sector or impacting the forest environment should be included here. They include logging companies, mining companies, industrial agriculture companies, public works companies, small-scale loggers or groupings of small-scale operators, the National Federation of Traditional Health Practitioners in Congo, etc.

3.3. Civil Society

This group includes associations and NGOs, churches, opinion leaders, and community representatives. Indigenous peoples and specialist associations are also classified under this category.

3.4. Consultations Held to Date

General or component-specific consultations held between January and April 2010 are listed in Annex 1b-1 with the following information: meeting titles, if available last names, first names, and contacts of people met, content of discussions, and highlights.

4. CONSULTATIONS TO BE HELD AND COMMUNICATIONS PLANNED FOR 2010- 2013

4.1. Planning of Future Consultations (2010-2012)

Similar to the VPA/FLEGT negotiations between the Republic of the Congo and the European Union, consultations will be held in platforms (public authority, private sector, and civil society) and finalized with large-scale consultations including representatives of all stakeholders, at the national, departmental, and local level.

(i) Public authority platform: consultations with this platform will be held to prepare the REDD+ Framework Law (See Component 2c). In the absence of a Prime Minister, the REDD+ National Committee and the REDD+ National Coordination will receive the support of the President's Adviser for Forests and Environment;

(ii) Private sector platform: in practice, consultations will be sectoral and held by corporation through focus groups: (1) mining, (2) forests, (3) agriculture, and (4) oil industry. Discussions with employers' organizations such as UNICONGO (Inter-professional Union of Congo) will help consolidate outputs;

(iii) Civil society platform: consultations with the civil society platform will also be held by focus group. The following focus groups have been identified to date:

- NGOs: advancement of women, advancement of youth, human rights, environmental protection, development;
- Chamber of trades;
- Religious groups;
- Associations for the advancement of indigenous peoples;
- Rural actors: base organizations, local communities, opinion leaders, land owners and customary land owners ;
- Specialist groups: universities (literature, social studies, natural science, economic science, law, Rural Development Institute), research centers (General Office for Scientific and Technological Research, Center for Plant Studies and Research, Center for Geographic Research and Cartography Production, Study and Research Group on Biodiversity, etc.); and
- Field projects and consulting firms.

General or component-specific consultations to be held between 2010 and 2012 are presented in Annex 1b-2.

4.2. Wide Information and Communication: Multiplying Contacts

The national REDD+ strategy will be regularly discussed and amended by platforms created at the national level. Within the limits of its human and financial resources, the REDD+ National Coordination will attempt to establish the same platforms at the departmental level, taking into account the specificities of each of the 12 departments.

At the community level, the REDD+ National Coordination will hand the process over to civil society organizations active in the field. These organizations will focus their actions on the following points, with support from television, newspapers, and national and local radios:

(i) Raise the general public's awareness on REDD: process, ins-and-outs, benefits (and potential constraints);

(ii) Identify additional information needs;

(iii) Seek stakeholders' support for the national REDD+ strategy.

Information and communication tools and material will be adapted to local conditions and to the level of responsiveness and interest of communities:

(i) Work meetings;

(ii) Support and outreach of pilot actions;

(iii) Seminars, general-public workshops, conferences, and debates;

(iv) Focus groups with local and indigenous communities;

(v) Publication of articles;

(vi) Production and broadcasting of documentaries;

(vii) Production and dissemination of radio and television programs;

(viii) Production of shows.

4.3. International Communication

Communication actions at international level will also be initiated to help the country promote its progress in the initial implementation of its REDD+ strategy and seek funding to pursue its execution. These will be done by the President, the Ministers, the REDD+ National Committee and the REDD+ National Coordination through their participation in events related to REDD+ or the environment, as well as through publication and dissemination in foreign media of articles, documentaries, interviews, and stories.

5. SCHEDULE AND BUDGET (IN K$) OF COMPONENT 1B

5.1. Schedule

Activity	2nd Semester 2010						1st Semester 2011						Entity in charge of implementation
	1	2	3	4	5	6	7	8	9	10	11	12	
Initial contacts													National Coordination
Development of communication and information material													National Coordination, external consultants
Establishment of departmental platforms													Existing platforms, National Coordination
Establishment of national platforms													Existing platforms, National Coordination
Capacity-building of created platforms													Consultant with support from National Coordination
Establishment of REDD+ Departmental Committees (for info. : see Comp. 1a)													National Coordination

Activity	2011	2012		2013		Entity in charge of implementation
	Sem 2	Sem 1	Sem 2	Sem 1	Sem 2	
Design of consultation plan						National Coordination (IEC Unit)
Implementation of consultation plan (continuous, with highlights based on implementation of components)						National Coordination + entities based on themes (CNIAFF, CNEES, etc.)
Training of trainers at central and departmental (relay) level						Consultant with support from National Coordination
Consultations *per se* at departmental level						Local civil society organizations
Monitoring of consultations						National Coordination

6.2 Budget

Table 1b - COMPONENT 1B						
Main Activities	**Sub-Activities**	**2010**	**2011**	**2012**	**2013**	**Total**
Human Resources	Salaries (1 man @ 50% in 2010 et 13, 3 men @ 100% in 2011 et 12, @ 1 k$/month)	6	36	36	6	**84**
	Per diem + travel fees (lump sum 10 k$/yr)	5	10	10	10	**35**
Equipment	Purchase 1 car in 2010 (30 k$) + fuel/maintenance (15 k$/yr)	30	15	15	15	**75**
	Equipment (4 computers, printer, copy machine, scanner, TV/recorder/DVD, movie camera, video projector)	30				**30**
Communication Material	Design	10				**10**
	Copies (Lump sum 10 k$ /Department)		120			**120**
Establishment of Platforms	12 Departments x 3 platforms @ 1k$ /platform		36			**36**
Platforms Capacity-Building and Meetings	12 Departments x 3 platforms @ 2k$ /platform/yr x 3 years	36	72	72	72	**252**
Training of Trainers	Consultants (2 consultants, 1 inter. + 1 nat.)		30			**30**
	Workshops (2 workshops/Department x 12 Departments x 5 k$/workshop)		60	60		**120**
Consultations	Lump sum of 10 k$/Department/yr	60	120	120	120	**420**
Visibility Actions	Radio or TV programs, articles in national or international media, special events (lump sum of 30 k$/yr)	15	30	30	30	**105**
Total		**192**	**529**	**343**	**253**	**1317**
Government		2	14	8	8	**32**
FCPF		**100**	**210**	**150**	**120**	**580**
UN-REDD Program		80	190	120	100	**490**
AFD			15	15	15	**45**
CBFF		10	100	50	10	**170**

Component 2: Prepare the REDD+ Strategy

Component 2a. Assessment of Land Use, Forest Policy and Governance

1. BACKGROUND: MAIN CHARACTERISTICS OF THE COUNTRY AND ITS FORESTS

1.1. A Country with High Forest Cover Divided into Dense Forests, Open Forests, and Flooded Forests

The Republic of the Congo straddles the Equator and lies at the heart of the world's second largest forest range. The country covers an area of 34 million hectares. Forest formations represent 2/3 of the country (22.5 million hectares) and savannas 1/3 (11.5 million hectares). Forests are found in the South and mostly in the North:

➔ South of the Equator:

(i) The Mayombe Range and coastal forests (Kouilou Department) represent about 1.5 million hectares of *terra firma* open and dense forests (7% the total forest cover);

(ii) The Chaillu Range (Niari and Lékoumou Departments) cover about 4.5 million hectares of *terra firma* dense and open forests (19% of the total forest cover);

(iii) Gallery forests and forest mosaics in the South-East and the Central part (Bouenza, Pool, and Plateaux Departments) cover about 0.5 million hectares (3% of the total forest cover);

➔ North of the Equator:

(iv) *Terra firma* dense and open forests (Likouala, Sangha, and Cuvette Ouest Departments) represent about 7.5 million hectares (33% of the total forest cover);

(v) Flooded forests (Cuvette Department) cover about 8.5 million hectares (38% of the total forest cover).

Under REDD+, distinction between "wooded savannas" and "forests" might be modified based on selected criteria for tree height, tree ground cover ratio, and minimal surface of forest formations.

1.2. Low Deforestation and Degradation Rates

The Republic of the Congo is a country with high forest cover and low deforestation and forest degradation rates. The 2008 State of the Forests report for Central Africa estimates the annual deforestation rate at 0.03% and the annual degradation rate at 0.01%. The Forest Resources Assessment (FRA, 2005) estimates the deforestation rate at 0.08%[4].

Distribution is not homogenous across the country and varies based on population density, the quality of transportation infrastructure, forest richness and exploitation history, presence of urban areas, etc. Deforestation and degradation seem to be more intense in the South, as the North is not

[4] These figures differ based on applied methodologies, but both seem to be underestimated due to the lack of appropriate satellite images for the South of the country (usually very cloudy).

very populated (about 1.5 inhabitants/km² compared to the national average of 10.5 inhabitants/km²).

1.3. Devolved and Decentralized Administration

The administrative organization of the Republic of the Congo is regulated by the 2000 Law 3-2000 providing the principles of devolvement and decentralization. The 12 Departments and Communes are administrative constituencies and local collectivities. Design, programming, standardization, support, coordination, and control actions and operations for the economic, social, and cultural development are carried out at departmental level, through interventions of the government departmental services.

1.4. High Population Growth

The Congolese population was estimated at 3.8 million inhabitants in 2008. Average population density is 10.5 inhabitants/km² and average annual population growth is 3.2%. About 60% of the total population lives in the five main cities: Brazzaville, Pointe-Noire, Dolisie, Nkayi, and Ouesso. The remaining population (40%) lives in rural areas.

The Congolese population is very young: about 45% of the population is under 15. Life expectancy at birth is 51 years. The majority of the population still depends on forests for its livelihood (food, energy, medicine, etc.).

1.5. An Oil and Timber Export-Dependent Economy

The economy of Congo is mainly based on natural resources exploitation, including oil and timber. According to the Poverty Reduction Strategy Paper, oil and timber represented about 70% of the GDP (64% for oil and 5.6% for timber) and 98% of export revenues (93% for oil and 5% for timber) in 2004.

Agriculture employs 40% of the workforce but represents only 6% of the GDP. With over 22,000 direct and indirect employees[5], the forest sector is the second largest employer after the public administration. The forest sector produces about 150 million Euros in revenues annually. Tax revenues from the sector represent 2% of the State's total revenues while its export revenues contribute to 10% of the country's total export revenues.

1.6. State-Ownership of Forests

The State forest estate is divided between the non-permanent forest estate[6] (DFNP) and the permanent forest estate[7] (DFP), which includes the 18 Forest Management Units (FMU) covering an area of around 18.5 million hectares, or over 80% of the national forest area (see 2.1 below on forestry management).

Article 35 of the Forest Law provides that the State recognizes ownership rights of private forests owners, based on tenure titles or customary tenure rights, as recognized by the 1991 Sovereign National Conference.

This recognition should have been formalized through a legal bill to provide for a registration procedure of customary tenure rights. Although the principle of ownership rights for local collectivities is in effect, the transfer has not been implemented. As for individuals, registration of customary titles remains an issue. Presumption of ownership remains in the benefit of the State, still the main owner and manager of Congolese forests.

[5] Data collection forms for monitoring the state of the forests in Central Africa. National level in the Republic of the Congo. Ministry of Forest Economy (MEF), Brazzaville et and Forêt d'Afrique Project (FORAF), Kinshasa - 2008

[6] The non-permanent forest estate includes non-gazetted protected forests. This is the State public estate (Article 13, Law16/2000).

[7] The permanent forest estate includes lands allocated for forests and wildlife habitat (Article 5, Law 16/2000). The permanent forest estate includes forests from the State private estate, forests of public owners, communes and other local collectivities (Article 6, Law16/2000).

2. EXTENSIVE EFFORTS ON FORESTRY MANAGEMENT AND PROTECTED AREAS

2.1. Different Forest Exploitation Patterns between the North and the South of the Country

Forest exploitation and transformation of forest products are mainly encountered in the least populated, poorest and most remote areas. These activities provide social services (proper housing, schools and health centers, roads, drinking water, electricity, telephone, etc.) in the absence of public structures and investments.

Logging in Congo is selective due to the requirements of the international timber market, the restricted local market, and transportation costs. These costs are higher in the Northern range and restrict the number of profitable tree species. In the North, logging focuses on a dozen species (Sapelli, Sipo, etc.), as opposed to the South where about thirty species are logged (Okoumé, Limba, Niové, etc.).

Currently, the level of forest resources harvesting by populations is generally low in forest ranges far from urban centers. In spite of existing gaps, regulations seem to be respected and help maintain harvesting at a level compatible with natural growth.

However, the actual scale of industrial logging is doubtful, particularly in the South where logging has been carried out for a longer time and is less supervised. Sustainable harvesting for some species is a concern as their recovery rate can go below 20%.

Southern forests have been subject to several relogging events (see Box below) since the 1970s surveys. These surveys do no longer reflect the actual wealth of concessions granted to small companies. Extensive areas are logged without any knowledge on their actual capacities or without any form of sustainable resource management.

“Usage rights” for non timber forest products are important as they are an important and often crucial source of goods and services for forest-dwellers, including indigenous peoples who depend on them for food, energy, material, and medicine. Urban dwellers continue to use large quantities of firewood from forests often far from cities. Usage rights are a source of abuse that leads to deforestation and degradation.

2.2. Important Efforts since 2000s to Develop Forestry Management

A sustainable forestry management process (see Box below), officially initiated at the end of 2000, has helped the Republic of the Congo progress significantly in protecting its ecosystems and the people who depend on them. Moreover, important efforts have been made on reforestation and creation of protected areas. According to CNIAFF, in 2010:

(i) 84,420 ha of plantations, including 12,450 ha in degraded forests, have been created since 1950;

(ii) 3,531,820 ha (10.3% du pays) have been designated as protected areas since 1950;

(iii) 3,831,820 ha of concessions have been managed since 2001 (28% of production forests);

(iv) 6,842,490 ha are under management (51% of production forests) and by 2012, about 75% of the 13,434,200 ha of production forests will have a management plan;

(v) 8,369,760 ha (37% of forests) are under protection as they are almost permanently flooded; and

(vi) 834,000 ha (6% of production forests) were ecologically certified in 2008, a success for the country and for the companies who had this goal: Congo is therefore the first country in the world in terms of eco-certified logging area in natural forests!

➔ ***Focus on Forestry Management and Main Technical Terms***

In the Republic of the Congo, the forestry management plan represents (i) a **management and planning tool** for industrial logging and (ii) a **legal baseline,** for the duration of the management plan. It is approved by Decree in the Council of Ministers.

The **forestry management survey** is based on **systematic sampling** of concessions, along parallel and equidistant transects (2 to 2.5 km apart).

The plot is the **sampling unit** (0.5 ha unit, geo-referenced with GPS data). All trees with a diameter ≥ 20 cm are surveyed on the plot.

Data on regeneration, non timber forest products, fauna and **hunting and poaching signs** are collected along transects. This applies also to information on **forest habitat** (soil texture, cover density, liana abundance, etc.).

The forester has to implement **zoning** in **management series** (**production** series and **community development** series for exploitable areas, **protection** series and **conservation** series for non-exploitable areas to be protected and/or preserved).

Developing a **management plan** requires a **high level of technical expertise** of participants, particularly a command of Geographic Information System (**SIG**) software and **surveys on foot** techniques. Estimated cost is between 3 and 12 US$/ha (depending on the case).

Each management series produces **five-year management plans**. Production series, including **technical, industrial, social, and fiscal requirements**, will be harvested based on the **annual allowable cuts** on equivalent surfaces.

The **annual harvesting volumes** of commercial species are determined based on the **forest capacity** of the annual allowable cut.

Rotation is between 25 and 35 years and is determined by **recovery rate** of tree species and economic, ecological, and social sustainability of the forest concession. In addition, a **minimum diameter cutting rule** is determined for each species.

Plots exploited under annual allowable cuts are left for **regeneration** during the rotation period, before a new cut. A new harvest on an area with an annual allowable cut before the end of this period is called relogging.

Before any harvesting, management should be completed with **rational planning** of **skid trails**: after **felling**, the log must be **hauled** (moved from the annual-allowable-cut plot, from the felling spot to a trail).

This distance should be **optimized** (not too long to avoid damage on the plot and not too short to avoid opening too many trails). Location of **storage platforms** is also designed to mitigate degradation.

A **social and environmental impact monitoring** system is usually developed to ensure that logging contributes to **local development** (employment and income, access to health care and education, etc.) and that **environmental impacts** are **minimized** (for example, an assessment of impacts of road and trail networks on water and soil is taken into account for zoning of the various management series).

To speed up the management plan development process, the Congolese forestry administration, with a co-funding by the French Development Agency, initiated a project to help **Congolese small and medium-scale companies** with concessions in the southern forests develop management plans that are adapted to local conditions.

	2005		2008	
	FMU	Surface (ha)	FMU	Surface (ha)
Allocated Concessions	60	11,387,000	52	11,976,000
Management Process Initiated	10	4,114,000	22	6,372,000
Management Plan Validated	0	0	3	1,908,000
Certification received	0	0	2	834,000

Sources: Congo Basin Forest Partnership (CBFP, 2006) and Ministry of Forest Economy (MEF) – Forêts d'Afrique Project (FORAF) (MEF-FORAF, 2008)

Production of raw wood (logs) has more than doubled between 2000 and 2004, from 630,878 m³ to about 1,500,000 m³, following allocation of areas to new companies which started their activities after 2000, and resuming of activities of already-established companies.

The annual estimated capacity of 2,000,000 m³ for commercial species is far from being achieved. Dendrometric studies for management plans show that this figure is underestimated for commonly logged and traded species.

2.3. Development of Protected Areas: A Priority for the Republic of the Congo

Protected areas represent about 11% of the country, or 3.5 million hectares, including 74% of forests:

(i) 3 national parks (3.2 million hectares): Nouabalé-Ndoki, Odzala-Kokoua, and Conkouati-Douli ;

(ii) 7 reserves (1 million hectares): Léfini, Mont Fouari, Tsoulou, Nyanga Nord, Nyanga Sud, Dimonika, and Lac Télé;

(iii) 3 sanctuaries (0.3 million hectares: Tchimpounga, Lossi, and Lessio-Louna); and

(iv) 1 hunting estate (22,924 hectares: Mount Mavoumbou).

This important protected areas network, in addition to naturally protected forests (flooded forests, montane forests, protection and conservation series in managed forest concessions) is not significantly impacted by deforestation and degradation, but accurate and objective figures are unavailable due to the lack of specific studies.

2.4. Bases of the Congolese Forest Policy

The overall objective of the forest policy is to ensure economic, social, and ecological development of the country based on sustainable management of forest and fauna resources.

2.4.1. National Legislation

The legal framework at the foundation of the governmental policy for multidisciplinary forest and environmental sectors mainly includes:

(i) Law 003/91 of April 23,1991 on environmental protection;

(ii) Law 20/96 of April 15,1996 (amending the 1984 Law) instituting the Tree Day;

(iii) Law 16/2000 of November 20, 2000 providing the Forestry Code;

(iv) Law 17-2000 of December 31, 2000 on tenure ownership;

(v) Law 10-2004 of March 26, 2004 providing for the State Estate Code; and

(vi) Law 37-2008 of November 28, 2008 on fauna and protected areas.

With the exception of Law 003/9, which is under revision, the Forestry Law (16-2000), the Law on fauna (37-2008) and all other laws developed after the Rio de Janeiro World Summit (1992) integrate concerns of the international community to ensure economic, environmental, and social sustainability of natural resources (land, forest, water, fauna, etc.).

2.4.2. International and Regional Commitments

The commitment of Congo to conservation and sustainable management of natural resources is also demonstrated by its accession to many international agreements (see Annex 2a). The most recent is the Treaty on Conservation and Sustainable Management of Forest Ecosystems in Central Africa, establishing the Central African Forest Commission (COMIFAC). This treaty was signed in Brazzaville on February 5, 2005 and ratified by Law 35-2006 of October 26, 2006.

Agreements have been signed for transnational wildlife management:

(i) Between the Governments of Cameroon, Central African Republic, and the Republic of the Congo for the establishment of the Sangha Tri-National Park and Dja-Odzala-Minkébé Interzone (respectively in 2008 and 2009);

(ii) Between Angola, the Democratic Republic of the Congo and the Republic of the Congo to establish a tri-national protected area in the Mayombe Range.

Since May 2009, the Republic of the Congo has entered into a Voluntary Partnership Agreement (VPA) with the European Union under the Forest Law Enforcement Governance and Trade (FLEGT) process. The country will start issuing FLEGT permits in 2011, ensuring the lawfulness of all its timber exports.

The Republic of the Congo should use the legality assurance system for all timber and wood products (raw or processed wood, firewood, sawdust, cut-offs, wood chips and chipboards, charcoal from wood, shell or nut) for any target market, including the national one.

2.4.3. Weaknesses of the Forest Legislation

The forest legislation has major weaknesses as it was adopted before the recognition of traditional tenure rights by the 1991 Sovereign National Conference.

Definitions of the State Forest Estate are hardly compatible with rights claimed by the populations, leading to numerous conflicts among forest loggers, the National Reforestation Service of the MDDEFE, farmers, and city planning services in urban and periurban areas. Certification of concessions is not entirely taken into account by legislation; national standards have not been defined.

Finally, the administration is poorly equipped, hindering adequate control over the national territory. According to the World Bank, progress must be made in the following sectors: fiscal and adjudication of concessions, biodiversity conservation, sustainable management of production forests, participation of local and indigenous populations in sustainable forestry management, efficiency of legal systems, applicable forest and environmental protection measures, and institutional sectoral capacities.

2.5. Integration of Forest Policies in Development Policies

Main directions defined by the National Forest Action Plan (PAFN, 1992), the National Environmental Action Plan (PNAE, 1994), the National Rural Development Scheme (SNDR, 1997), the National Land Planning Scheme (SNAT, 2005), the Poverty Reduction Strategy Paper (PRSP, 2008), and the National Action Plan (PAN, 2008) fit into a common strategic vision and are mainly based on:

(i) Conservation and sustainable management of ecosystems ;

(ii) Participatory management; and

(iii) Poverty reduction.

Ministries involved in land and natural resources planning (forests, environment, agriculture, tenure reform, energy, mining, land planning, plan, tourism, etc.) have sectoral policies aiming both at sustainable ecosystem management and poverty reduction.

The main issue lies in the lack of field implementation of these sectoral policies, due to insufficient material and human resources. Cross-cutting reforms are also missing, such as land tenure reform and development of a land-use plan respecting all rights and preventing user conflicts.

3. CURRENT CAUSES AND DRIVERS OF DEFORESTATION AND DEGRADATION

The direct causes of deforestation and forest resources degradation include, in ascending order of importance:

(i) Unsustainable slash-and-burn practices (which could be a sustainable system);

(ii) Unsustainable production and consumption of fuelwood;

(iii) Unsustainable or even illegal logging; and

(iv) Urban development.

3.1. Agriculture

In the agricultural sector, the main direct cause, both historical and current, of deforestation and degradation appears to be the traditional household farming, a source of major land clearing. Traditional agriculture is the most widespread practice in the Republic of the Congo. It is based on slash-and-burn and is itinerant across the country.

In some areas, especially in the South, subsistence farming starts to feel the impact of gradual reduction of fallow time required for the soil to recover. Lands not left to lie fallow are invaded by *Chromoleana odorata* which can impede the first stages of forest regeneration.

There are five underlying drivers of deforestation and degradation by agriculture, i.e. itinerant slash-and-burn cultivation:

(i) Absence of a National Land-Use Plan;

(ii) Weak or inexistent agricultural extension services, leading to a low adoption rate of better agricultural techniques;

(iii) Low access to inputs (credit, improved seeds, fertilizers) contributing to better yields (reduced land needs) and to preserved soil fertility (no need to fertilize by burning);

(iv) Population growth creating a higher need for cultivated food, and hence more slash-and-burn and shorter fallow time; and

(v) More generally, poverty: farmers are not able to invest in more sustainable techniques and are reluctant to take risks and change their cultivation practices.

Industrial plantations (oil palm, rubber tree, coffee, cocoa) are not very developed. Large projects were carried out at the expense of forests and were abandoned in the 1980s, due to a lack of export profitability, a restricted national market for oil palm, and withdrawal of the State from the production economy.

It should be noted that since 2002, any forest area deforested on more than one hectare has been subject to a deforestation tax. Controls associated to this tax obligation seem to have limited

agricultural expansion, but the procedure is merely declaratory and household farming areas are often smaller than the thresholds defined by regulation.

3.2. Fuelwood

Demand for fuelwood (firewood and charcoal) is a direct cause, both historical and current, of deforestation and degradation. Demand is increasing in and around high population density areas (Brazzaville, Pointe-Noire, Dolisie, Nkayi, Ouesso, Gamboma, etc.). This increasing demand is compounded by the joint effect of three underlying drivers, including:

(i) Population growth;

(ii) Lack of alternative energy sources adapted to low incomes;

(iii) Inefficient charcoal production and use. On the supply side, carbonization rates are very low (10 to 15%) as techniques are very rough and charcoal-makers are non professional. Introduction of very simple techniques and training would help increase the yield to about 20 to 25%. On the demand side, efficiency rates are also very low (open stove). There is an ongoing promotion of improved stoves in Brazzaville: they could reduce charcoal consumption by 20-30%.

Firewood is still the main source of energy for cooking and heating in almost all Congolese households. According to the FAO Forest Resources Assessment (FRA, 2005), demand of firewood was estimated at 1,317,000 m^3 of raw wood in 2005, or 441,572 tons of firewood and 611,995 tons of wood to produce 73,734 tons of charcoal.

Alternative sources are being symbolically experimented and not promoted (solar), or produced in low quantities (electricity, fossil energy). Existing projects aim at fulfilling the estimated current demand and do not anticipate additional needs resulting from the gradual move from firewood for daily needs.

It is estimated that only 55 % of urban households and 25 % of rural households could have access to electricity by 2025. Firewood and charcoal will continue to be essential over the next decades, both in cities and in rural areas.

3.3. Logging

Unsustainable and/or illegal logging is a direct cause, both historical and current, of deforestation and degradation. It is compounded by six main underlying drivers:

(i) Weak forest governance by the State, the local collectivities and their agents, encouraging illegal logging, smuggling of firewood and charcoal, uncontrolled urban expansion due to the allocation of plots or construction permits in protected areas, etc. Weak governance is also due to the lack of enacting regulations, inadequate enforcement of laws and regulations, and insufficient qualitative and quantitative human resources ;

(ii) Proximity of consumption and export areas (especially in the South), encouraging illegal logging. Abuse has increased since permits for timber (construction wood) has been canceled, which legally allowed logging of up to 400 trees;

(iii) Operation of logging concessions without a preliminary management plan;

(iv) Infringement of low impact logging (LIL) regulations ;

(v) Absence of a national study on growth and recovery of tree species;

(vi) Lack of promotion and market opportunities for the so-called secondary species, creating a strong pressure on high-commercial-value species for export and preventing the promotion of indirectly felled trees.

3.4. Urban Development

Urban spread is a direct cause, both historical and current, of deforestation and degradation. It is compounded by three main underlying drivers:

(i) Population growth: if the current population growth rate (3.6 % per year) stays the same, the population should quadruple by 2050 to reach 14 million inhabitants, or 40 inhabitants/km²;

(ii) Rural-urban migration, due to the impoverishment of rural areas, associated with homecoming trends of young city-dwellers to their original villages, in low numbers but with strong impacts on traditional systems;

(iii) Absence or lack of respect of urban planning master plans. Uncontrolled urban development, notably in Brazzaville and Pointe-Noire, led to a strong decline of urban and periurban forests as well as of forests along road networks.

This urban spread is associated with an increase of logging, often illegal, to supply large urban markets where demand for wood (firewood and construction wood) remains strong.

In addition to its adverse impacts on climate, periurban deforestation (for firewood, charcoal, construction wood) leads to significant erosion on slopes, with severe consequences on habitat and infrastructures.

3.5. Mining Infrastructure and Activities

This issue is mentioned for the record only as construction of hydroelectric dams or road expansion are not yet a source of severe deforestation in the country, with the exception of areas near cities.

With the exception of oil, which is currently exploited offshore, mining explorations (gold, ore, diamonds, potash, etc.) did not entail permits that were significant enough to have an important impact on deforestation and forest degradation.

Limited small-scale mining exists but such operations are carried out sheltered from the authorities and their impacts on forests cannot be estimated, neither in term of the mining activities *per se*, nor for the associated cultivation to feed their employees.

3.6. Importance of Underlying Drivers

Underlying drivers, including poverty, weak governance of the State or of the various collectivities (notably for law enforcement), population growth, etc. are cross-cutting elements for the previous assessment of direct causes. It is difficult to quantify their impacts, but they should be taken into account for developing the strategy options proposed under Component 2b.

4. FUTURE CAUSES AND DRIVERS OF DEFORESTATION AND DEGRADATION

Investments, both public and private, should increase due to:

(i) Good performance of the dollar and oil prices, improving the State's resources and capacity to develop infrastructures;

(ii) Conclusion of the HIPC Initiative, reducing debt and increasing the State's investment in poverty-reduction sectors, under the form of debt conversion;

(iii) Re-establishment of the Republic of the Congo as a transit place (enhancement of transportation channels);

(iv) Improvement of the business and infrastructure climate, after a period of unrest.

These macroeconomic factors should all lead to a phase of public and private investments, with the potential consequence of a forest-consuming development (periurban and commercial agriculture, mining, infrastructure, etc.).

4.1. Agriculture

As previously mentioned, the population could reach 14 million inhabitants by 2050. There is a risk of increasing slash-and-burn practices if agricultural production systems in Congo do not simultaneously progress and agricultural commodities markets are under strain from the joint effects of (i) diet change in large emerging countries (more animal proteins and calories), (ii) increasing demand for biofuels, and (iii) reduced supply due to climate change.

Simultaneously, a revival of cash crops (cocoa, coffee, oil palm, etc.) is always a possibility but is difficult to predict.

4.2. Fuelwood

The previous argument for agriculture also applies to fuelwood: population increase in Congo will increase the demand for fuelwood and hence deforestation and forest degradation.

In addition, it is noted that production and sale of fuelwood (firewood and charcoal) is becoming an alternative for young people in waiting for more appropriate and better-paid jobs.

This is especially true as many unemployed graduates have had to delay their full social integration. When returning to their native villages, these young people often challenge traditional forest management rules.

In addition, refugee populations have brought higher-yield carbonization techniques, increasing attractiveness of charcoal production.

4.3. Infrastructure

A program for infrastructure development and restoration in development corridors will be implemented during the 2009-2016 seven-year term of the President:

(i) Road/railway between Pointe Noire and Brazzaville;

(ii) Bridge / railway between Brazzaville and Kinshasa;

(iii) Road between Brazzaville and Ouesso;

(iv) River navigation between Brazzaville and Bangui.

Restoration of these channels will be associated with a construction program of social infrastructures and power supply for villages, potentially by grouping villages within better-equipped centers. Settlement along these roads will inevitably create front lines of deforestation and degradation.

4.4. Oil and Mining

Until now, oil exploitation has mainly been carried out offshore, with occasional and limited impacts on mangroves. A study done by the Environmental General Office of the MDDEFE, with support from the Global Environmental Facility (GEF), should provide updated information.

However, inland exploration is ongoing and should potentially lead to extraction. To date, there is no more to be said on this subject.

This also applies to the mining industry: extraction projects for potash, ore, gold, etc. could be initiated in light of the need for trade improvement, high prices of minerals, and infrastructure development by the State.

Exploration has low impacts, but exploitation will have direct consequences (open pits, excavation of steriles – excavated rocks without commercial value -, potential mercury concentration, pollution of water and soil resources, etc.) as well as indirect impacts (settlement in forests leading to clearing for cultivation, collection of fuel and construction wood).

4.5. Logging

Incentive measures to limit deforestation and forest degradation include requirements to develop and apply forestry management plans, creation of protected areas, and institution of fees, including on deforestation.

Joint pressure from the State (legal and regulatory constraints) and from the market (environmental requirements of consumers) will lead to increasing eco-certification in the North and a wide use of management plans in the South of the country, with constraints adapted to the low capital of entitled small and medium-scale companies.

These measures, associated with more efficient actions against illegal logging (VPA/FLEGT), should decrease forest degradation per surface unit from logging (even if the total logged surface increases).

5. BETTER KNOWLEDGE ON CAUSES AND DRIVERS

A series of studies will be launched in the next two years to gain objective knowledge on the direct causes and underlying drivers of deforestation and forest degradation.

5.1. Local and Commercial Agriculture

This analysis will be carried out with the active cooperation of the Ministry of Agriculture and Livestock. The objectives are to (i) quantify and spatialize deforestation and forest degradation from slash-and-burn and agro-industrial plantations (coffee, cocoa, oil palms, etc.) and (ii) identify underlying drivers of both types of agriculture:

(i) Links between the expansion of plantations and macroeconomic global or regional parameters: global commodity prices, impacts of opening-up the sub-region with infrastructure projects, variation of exchange rates, business climate in the sub-region, etc. ;

(ii) Links between the increase of slash-and-burn and national or local parameters: population growth and spatial distribution of urban and rural areas, economy of household exploitation, diet changes, level of dissemination of cultivation techniques, organization history of the agricultural professional, history of fallow practices (duration, location) by Department, state of soil degradation, access to inputs (credits, fertilizers, improved seeds), etc.

The study will be carried out by national and international consultants with qualifications in agronomics (2 people) and rural economy (2 people). It will be done in three stages: (i) literature research and consultations in Brazzaville with key individuals (about 1 week), (ii) field visits (about 1 month) in contrasted areas (periurban household agriculture vs. isolated rural areas, plantation areas, etc.), followed by (iii) presentation of results to the REDD+ National Coordination and to the REDD+ National Committee.

5.2. Fuelwood

This study will be done with the active collaboration of the ministries in charge of forests and energy. The objectives are to (i) quantify and spatialize deforestation and degradation from fuelwood production (firewood and charcoal) and (ii) identify underlying drivers of production and consumption, focusing on two components:

(i) Supply: firewood and charcoal volumes by Department produced by main activities of wood sellers and charcoal producers or by side activities (cutting, urban expansion, residual harvesting, sawmill by-products), techniques used and carbonization yields, quality and price of various types of fuels, influence of nearby roads and urban centers, etc.;

(ii) Demand: energy profiles of rural and urban households (socioeconomic survey with households to determine significance of prices, familiarity with some types of fuels, easy

access, etc.), population growth, impact of power supply in urban areas, dissemination/adoption rates of higher-efficiency stoves, etc.

This study will be carried out by national and international consultants with qualifications in bio-energy (1 person), sociology (1 person) and economy of the various industries (2 people).

The study will be done in 3 stages: (i) literature research and consultations in Brazzaville with key individuals (about 1 week), (ii) surveys (about 2 weeks) of rural households and upstream professionals (loggers, charcoal producers, wholesale carriers, etc.), (iii) surveys (about 2 weeks) in the 5 main cities, in wood markets and with households and (iv) presentation of results to the REDD+ National Coordination and to the REDD+ National Committee.

Before the study, the team will establish contact with the REDD Committee in the Democratic Republic of the Congo (DRC) – who is working on the same issue– to capitalize on their results.

5.3. Infrastructure

Construction of four main "development corridors" (see 4.3. below) is planned by 2016, providing infrastructure and power supply around these corridors, for either existing or "to be created" villages.

Unlike other planned studies focusing on often unplanned degradation and "mosaic" deforestation, the present study will focus on a planned deforestation scheme in "hotspots", which should make it easier.

This study will be carried out with the active collaboration of the ministries in charge of the plan, public works, and urban planning. The objective will be to quantify deforestation linked to infrastructure construction *per se*, and degradation caused by human settlement as a result of infrastructure development. In principle, the study should not focus on underlying drivers (they are already defined i.e. the policies to open-up the country) and spatialization efforts will be therefore limited.

The study will be performed by national and international consultants with qualifications in assessing impacts of public works (1 person) and in rural sociology (1 person). It will be done in 3 stages: (i) literature research and consultations in Brazzaville with key individuals (about 1 week), notably people with knowledge on past "villages centers" (ii) surveys in the 4 sites (2 weeks), and (iii) presentation of results to the REDD+ National Coordination and to the REDD+ National Committee.

5.4. Mining/Oil

The study will be carried out with the active collaboration of ministries in charge of the plan, mining, energy, hydrocarbons and will associate mining and oil companies.

The objectives will be to (i) quantify and spatialize deforestation and forest degradation due to small-scale mining – often illegal- and to the mining and oil industries and (ii) identify underlying drivers for both types of oil and mining exploitation:

(i) Links between the mining/oil industries and global (global commodity prices, exchange rate variation, business climate in the sub-region, etc.) or regional (maritime opening, etc.) macroeconomic parameters;

(ii) Links between illegal mining operations and national or local parameters: prices of minerals, governance, employment situation in "conventional" sectors (agriculture, small business, etc.), influence of population movements, etc.

This study will be carried out by national and international consultants with qualifications in mining/oil (1 person), macro and micro economy (1 person), and sociology (1 person).

It will be done in 3 phases: (i) literature research and consultations in Brazzaville and Pointe-Noire (oil activity site) with key individuals (about 1 week), (ii) field visits (about 2 weeks) in areas affected by mining/oil exploration or exploitation (small-scale illegal vs. industrial), and (iii) presentation of results to the REDD+ National Coordination and to the REDD+ National Committee.

5.5. Logging

The Congolese government is anxious to supervise logging, as shown by its commitment in forestry management, eco-certification, legislation of wood production and trade (VPA/FLEGT), etc.

However, impacts of unsustainable or even illegal logging on forests are difficult to quantify and spatialize. Instead of an isolated study on this issue, the suggested measure here is a medium-term (2010-2013) support to the independent Forest Observatory for activity assistance and contribution to the discussions on direct causes and underlying drivers of unsustainable or even illegal logging.

6. SCHEDULE AND BUDGET (IN K$) OF COMPONENT 2A

Table 2a - COMPONENT 2A						
Main activities	**Sub-Activities**	**2010**	**2011**	**2012**	**2013**	**Total**
5.1. Agriculture Study	25 md x 4 men (600 $/md)	60				**60**
	National validation workshop (jointly with fuelwood study)	5				**5**
5.2. Fuelwood Study	25 md x 4 men	60				**60**
	National workshop (jointly with agriculture study)	5				**5**
5.3. Infrastructure Study	15 md x 2 men		30			**30**
	National workshop (jointly with mining/oil studies)		5			**5**
5.4. Mining/Oil Studies	15 md x 3 men		30			**30**
	National workshop (jointly with infrastructure study)		5			**5**
5.5. Support logging monitoring	Annual lump sum for the independent Observatory (20 k$/year)	10	20	20	20	**70**
Total		**140**	**90**	**20**	**20**	**270**
Government		5	5	5	5	**20**
FCPF		**80**	**40**	**10**	**10**	**140**
UN-REDD Program		40	30	5	5	**80**
AFD		5	5			**10**
CBFF		10	10			**20**

Component 2b. REDD+ Strategy Options

1. DEVELOPMENT FRAMEWORK OF REDD+ STRATEGY OPTIONS

The Republic of the Congo views REDD+ as a true opportunity for sustainable development. This approach should take into account essential aspects of territorial planning, actions to mitigate adverse impacts of climate change, and poverty reduction.

1.1. Past Recommendations

For several decades, the Republic of the Congo has attempted to sustainably manage its natural resources. Past planning has identified 8 recommendations to tackle deforestation and forest degradation, and to maintain or even enhance forest carbon stocks.

These recommendations were repeated in the PRSP, the unique reference framework of national socioeconomic development actions:

(i) Recommendation 1: Increase the contribution of the forest and environmental sector in the GDP through sustainable forestry management, enhanced wood transformation, capitalization of environmental goods and services (carbon sequestration, non-timber forest products, ecotourism), and emergence of national operators;

(ii) Recommendation 2: Protect, preserve, and better manage forest, fauna, marine, coastal, and inland water ecosystems and protected areas;

(iii) Recommendation 3: Improve tenure security by developing a PNAT;

(iv) Recommendation 4: Engage rural populations and indigenous peoples in resources management;

(v) Recommendation 5: Strengthen inter-ministerial coordination and manage environmental aspects in an integrated way;

(vi) Recommendation 6: Develop and implement a household energy supply plan;

(vii) Recommendation 7: Develop green agriculture, settle itinerant farmers and promote agroforestry and community forestry;

(viii) Recommendation 8: Promote and better capitalize on non-timber forest products.

1.2. Strategy Options Refinement Process

Consultations with all stakeholders took place between January and April 2010 with the goal of reaching a preliminary consensus. Consultations were done through workshops, thematic meetings at both central and decentralized levels, as well as thorough discussions with resource people, officials, members of the academic community, and association representatives of forest communities and indigenous peoples.

Over one hundred people shared their visions on past, current, and future causes of deforestation and forest degradation, as well as on past, current, and future mitigation measures. These consultations, both held and planned, are presented under Component 1b.

Preliminary options are presented under this component. The preparation process, steered and implemented by the management structure presented under Component 1a, should help refine these strategy options between 2010 and 2012 in several ways:

(i) Consultations;

(ii) Specific studies;

(iii) Strategic Environmental and Social Assessment (SESA) (See Component 2d);

(iv) Monitoring, Reporting, and Verification (MRV) System (See Component 4b);

(v) Implementation of REDD+ pilot projects at sub-national level.

1.3. Strategy Options Assessment Framework

The sections below highlight how each proposed strategy option attempts to address direct causes and underlying drivers of threats on forests. For each option (O), "sub-options" (SO) will be presented, followed by a preliminary assessment of:

(i) Implementation costs of defined strategy options. This assessment should particularly focus on opportunity, investment, and transaction costs;

(ii) Benefits of implementation of each proposed strategy option. This assessment will focus on the option's contribution to deforestation and forest degradation reduction. In addition, other potential benefits will be assessed, especially those related to revenues of various stakeholders (State, local populations, etc.), food security, and other environmental benefits;

(iii) Implementation feasibility of proposed strategy options. This assessment will focus on political, social, economic (links between cost and benefit assessments mentioned above), and institutional aspects;

(iv) Sustainability of options and integration in development policies;

(v) Leakage risks during implementation of the REDD+ national strategy. If the REDD+ national strategy focuses on some areas, there is a risk that instead of reducing deforestation and forest degradation, it will only contribute to displacing them in other forest areas.

Terms of references for these specific studies are found in Annex 2b.

1.4. Pilot Projects

Sub-national pilot projects will be an important tool throughout the finalization process of the REDD+ national strategy. Specifically, they have three main goals:

(i) Provide information to help decision-making;

(ii) Test some proposals and highlight specific issues; and

(iii) Build all stakeholders' capacities on REDD+.

Therefore, the Republic of the Congo will launch a call for proposals as early as 2011 to develop and implement REDD+ pilot projects.

These pilot projects will be distributed across the national territory and cover all proposed strategy options, in order to take into account regional characteristics. There should be a total of 24 pilot projects, or an average of 2 projects per Department.

2. O1: ENHANCE TENURE SECURITY

2.1. Links between O1 and Direct Causes /Underlying Drivers of Threats

Absence of a land-planning common vision, discussed and approved by all stakeholders, hinders the implementation of development actions consistent with the preservation of common assets (including forests, soils, water) and protection of ecosystems.

Enhancing tenure security will consolidate activities and disseminate sustainable land-use practices, while preventing local populations from treating forests as a “free access” resource.

This is a cross-cutting strategy option: it should help mitigate the four causes of deforestation and forest degradation identified under Component 2a including (i) unsustainable slash-and-burn practices, (ii) unsustainable fuelwood production and consumption, (iii) unsustainable or even illegal logging, and (iv) urban development.

This option mainly aims at improving the tenure situation in and around forests, as well as transfer management responsibilities from the government to devolved and decentralized collectivities, local communities, and indigenous peoples.

2.2. SO1: 1.1 = “PNAT” and 1.2 = “Protected Areas”

SO1.1: Establish a PNAT

The national land-use plan (PNAT) will establish the bases of a sustainable response to the land tenure issue and will allow private users a secure access to natural resources (wood, mining, agriculture, etc.). It will help control the exploitation of resources, including forest resources, by the State. It will sustainably define the priority use of each part of the national territory based on pedoclimatic, demographic, and socioeconomic criteria.

The PNAT will include the following and not necessarily mutually exclusive areas: the permanent forest estate (forests from the State’s private estate, public owners’ forests, communal forests and other local collectivities’ forests), the non-permanent forest estate (protected forests), agriculture, mining, urban, hunting, fishing, and any other relevant area.

SO1.2: Enhance the Network of Protected Areas

Despite the lack of objective data, most experts agree that existing protected areas seem less degraded than other parts of the country.

Therefore, it is recommended to enhance sustainable management of existing protected areas, and test opportunities for and potential impacts of creating new protected areas, particularly in forests.

Strengthening management of existing protected areas and identifying new areas should obviously be done based on the PNAT. Local communities and indigenous peoples should be closely associated to all actions.

2.3. Analysis of O1

Table 2b1: Analysis of O1 "Enhance Tenure Security"

Costs (opportunity, investment, and transaction)	Benefits (CO2, other environmental advantages, social impacts)	Feasibility (socioeconomic, political, and institutional)	Sustainability and integration in development policies	Risks of leakage
+	**++**	**- ?**	**+/-**	**+/-**
• Opportunity: +/- limited to protected areas (assuming that the PNAT does not prevent "normal" access to resources but limits abuse). • Investment: +, related to the initial zoning process • Transactions: + enforcement of the PNAT by the State : water, forest police, etc.	• Advantages: ++ lower emissions and protection of water, soil, biodiversity, mitigation of pollution from mining and erosion, particularly in urban and periurban areas • Social: ++ limitation of abuse from some economic players, easier access to resources and mitigation of usage conflicts.	• Political: - legal issues related to tenure are complex (see Component 2c). • Institutional: +/- Application of the PNAT and protected areas requires mobilization of heavy human resources, at the level of devolved and/or decentralized services of Departments or of central services • Social: Citizen acceptance?	• Implementation of a PNAT involves the preliminary adoption of guidance law on land use planning (National Land Planning Scheme - SNAT). • Sustainable PNAT / protected areas if economic interests of players from the mining and forest sectors do not hinder their implementation by the State.	There are limited risks, if the PNAT and protected areas are the result of a thorough consultation with all economic players and rural populations, and if they are correctly implemented across the country.

Note: ++ = very high; + = high; +/- = medium; - = limited; -- = very limited

3. O2: SUSTAINABLY MANAGE FOREST RESOURCES

3.1. Links between O2 and direct causes/underlying drivers of threats

Unsustainable management of forest resources usually leads to overexploitation and contributes to forest degradation. Exploitation of some resources, including uncontrolled harvesting of fuelwood or illegal logging of precious woods, directly contributes to degradation, or even to deforestation over time.

Therefore, this strategy option aims at reducing deforestation and forest degradation through enhancement of sustainable forest resources management systems and promotion of more rational use of wood and non-timber forest products.

These measures, associated with improved wood transformation techniques and capacities will increase supply of sustainable forest products.

3.2. SO2: 2.1 = “Illegal Logging”, 2.2 = “Forest Management”, 2.3 = “Community Forest Management”, 2.4 = “Certification”, 2.5 = “Wood Transformation”

SO2.1: Address Illegal Logging

Illegal logging can take several aspects (failure to comply with authorized diameters, protected species, seed trees, relogging exploited areas at the expense of natural regeneration, etc.), but it is detrimental to everything: climate, biodiversity and therefore future generations, but first and foremost to the operator itself (accidents due to uncontrolled felling, low yield, wood left in the forest etc.) and for the customer (badly-cut square-edged wood, low-quality wood, etc.).

This sub-option is therefore extremely important. It covers illicit wood commercial channels and adds some measures to existing statistical controls, for an effective implementation of VPA-FLEGT for timber trade, both at national and international level. This will require enhancing monitoring of illegal logging with the assistance of the independent Forest Observatory and local NGOs in charge of detecting offenses on the ground.

SO2.2: Enhance Sustainable Management of Production Forests

The Republic of the Congo has been strongly engaged in developing sustainable management plan for logging concessions. However, management plans are not systematic in some areas, particularly in the south-western part of the country.

It is recommended to strengthen the development of management plans, mainly by building the capacities of the forestry administration, private sector concession managers, and new forestry managers. Funding and profitability of sustainable forestry management are crucial issues and require a detailed assessment.

SO2.3: Involve Local Communities and Indigenous Peoples in Forest Management

Local communities and indigenous peoples are not currently strongly involved in decision-making and natural resources management, resulting in a low awareness of their rights and obligations in regards to these common assets.

However, examples from other countries show that involvement of local communities and indigenous peoples in forest resources management can have a very positive impact on mitigating deforestation and forest degradation.

In addition, such management transfers can generate new sources of income for relevant populations. However, tangible benefits should be created for new managers to support management efforts that are truly sustainable and effective. Capacities for sustainable forest management should also be strengthened.

SO2.4: Promote Forest Certification

The Republic of the Congo was one of the first African countries to have some of its forests certified by the Forest Stewardship Council (FSC). Today, it is the first country in the world in terms of eco-certified surface. Much has been done but efforts must be pursued as certification is a powerful tool to promote best practices in forestry and to enhance independent observation of forestry activities.

Eco-certification is also an interesting example for REDD+, as it is based on continuous improvement: nothing is ever granted and there is always room for progress. The Republic of the Congo follows the same path, by launching REDD+ activities with ambitious but realistic goals, with the idea of a slow but steady progress on REDD+.

SO2.5: Improve Logging and Wood Transformation Techniques

Improved logging and transformation techniques – and capacity-building of forestry and timber experts to implement these techniques – would result in a short-term increase of sustainable wood supply, reducing the impacts of logging and hence carbon emissions. Several actions could be assessed:

(i) Developed low impacts logging (LIL) techniques: according to experts, management plans would help divide carbon emissions by three, compared to "conventional" (without management plan) logging. With LIL, there will be an improvement factor of 4. Although carbon capitalization of these emission reductions have not yet been defined, promotion of LIL seems important;

(ii) Improve transformation techniques (sawing, slicing, rotary cutting);

(iii) Use logging remnants (hollow logs, non-commercial species destroyed during felling or hauling, etc.) and related sawmill waste in the particle board industry (material capitalization);

(iv) Develop cogeneration in the wood transformation industry (exploitation of related sawmill waste and remnants) as it is considered by some sub-regional forest concessions (Rougier group for instance).

3.3. Analysis of O2

Table 2b2: Analysis of O2 "Sustainably Manage Forest Resources"

Costs (opportunity, investment, and transaction)	**Benefits (CO2, other environmental advantages, social impacts)**	**Feasibility (socioeconomic, political, and institutional)**	**Sustainability and integration in development policies**	**Risks of leakage**
+/-	**++**	**++**	**++**	**+/-**
• Opportunity : - sustainable management is more profitable in the medium/long run compared to unsustainable or illegal logging • Investment: +/- + in case of management, eco-certification and cogeneration. But fast return for wood transformation improved process • Transaction : + State should ensure law enforcement	• Environment: ++ with management and eco-certification (> illegal or conventional logging) • Social : ++ with community management • (Social: +/- - if response against illegal or convent. logging = more unemployment? But more support…)	• Political : ++ strong will in the Rep. of the Congo, adapted legislation • Social : ++ pressure of importers for certification • Social : ++ big loggers OK for management, eco-certification and improvement process • Social :+ small loggers OK since the support project in the south-west	• ++ because of continuation of existing policies, in line with the PRSP	• Possible displacement of deforestation • If less fuelwood from illegal or unsustainable harvesting, more fossil fuels?

Note: ++ = very high; + = high; +/- = medium; - = limited; -- = very limited

4. O3: IMPROVE AGRICULTURAL PRODUCTION SYSTEMS

4.1. Links between O3 and direct causes /underlying drivers of threats

Village farming in sub-Saharan Africa is often under-capitalized but employs significant family workforce. The main objective of slash-and-burn is therefore –rationally- to capitalize on this workforce to clear and get fertile lands at low cost, by burning biomass on site. This makes production of subsistence products possible, even without the use of chemical fertilizers, using low levels of organic fertilizers and often with a limited access to improved seeds.

After a few years of cultivation, the soil becomes impoverished and the slash-and-burn cycle resumes elsewhere. If the regeneration period is long enough, this is a sustainable system. When the population density increases, demand for lands also increases and soils become degraded (sometimes hardening, making them impossible to cultivate). This idea here is to settle itinerant farmers with actions against soil impoverishment while preserving, or even increasing, the agricultural production as required by a country with a booming population.

There is a potential adverse effect under this option: increasing income by surface unit might increase deforestation. Therefore, itinerant farmers need to be motivated by gradual settlement. Testing would help assess if this is an actual risk in Congo.

4.2. SO3: 3.1 = "Micro-credit" 3.2 = "Agricultural Organization", 3.3 = "Agricultural Extension", 3.4 = "Agroforestry"

SO3.1: Promote Access to Micro-Loans for Small Farmers

With support from Congolese banks and experienced micro-credit NGOs, micro-financing systems could be implemented for small producers to access loans to buy fertilizers and improved seeds, with the double effect of preserving soil fertility and increasing yields.

Loans will be granted for an agricultural campaign. Therefore, future harvest could be the collateral for repayment. In countries where such systems have been experimented, results are often interesting and allow small farmers to break out of the spiral of poverty and undercapitalization of their farm, a situation detrimental to natural resources.

SO3.2: Support Organization of the Agricultural Sector

Related to SO3.1, supporting the upstream organization of the agricultural sector (fertilizers and seeds wholesalers and retailers) will help small farmers access the inputs needed to preserve soil fertility and increase yields.

Organizational support for farmers would help improve their cultivation practices by sharing experiences, through farm-to-farm exchanges or participation in field tests. They could eventually develop economic activities such as self-management of micro-credit systems or seed banks, preventing them from resuming unsustainable slash-and-burn cycles.

SO3.3: Enhance Agricultural Research and Extension

Research plays an important role: by analyzing current cultivation systems and identifying gaps in terms of fertility and yields, alternatives could be suggested and tested in a research station, and later in the field. To facilitate this transfer of knowledge, agricultural extension specialists, or even management advisers, could be involved.

SO3.4: Promote Agroforestry Systems

Traditional agriculture often views trees as obstacles to be felled or at best temporary soil fertilizing elements. Agronomical research in Africa highlights the importance of agroforestry systems, both

for crops (preservation of water resources, natural fertilization, etc.) and farmers (non-timber forest products, construction and firewood).

4.3. Analysis of O3

Table 2b3: Analysis of O3 "Improve Agricultural Production Systems"

Costs (opportunity, investment, and transaction)	**Benefits (CO2, other environmental advantages, social impacts)**	**Feasibility (socioeconomic, political, and institutional)**	**Sustainability and integration in development policies**	**Risks of leakage**
+/-	**++**	**+/-**	**++**	**+**
• Opportunity : - in principle for small farmers, or even over the long run (preservation of soil fertility) • Investment : ++ to implement effective microcredit, research and agricultural extension systems • Transaction: + to ensure support for APO and upstream (research, extension, suppliers, banks, etc.)	• Advantages : ++ for soils, water, biodiversity • Social : ++ Secured revenues for upstream and agricultural sector, promotion of the often discredited farming profession • Social : ++ for food security over the medium/long run	• Social: -Resistance to change and poor households often excluded from the banking system • Institutional : - Research / Agricultural extension with limited material and human resources • Political : - research / extension / support to APO not always compatible with limited time of decision-makers	• Consistent with the PRSP	• Development of cultivated surfaces and pressure on forests if income by surface unit increases

Note: ++ = very high; + = high; +/- = medium; - = limited; -- = very limited

5. O4: STREAMLINE FUELWOOD PRODUCTION AND USE

5.1. Links between O4 and direct causes /underlying drivers of threats

Demand for unsustainable household energy is a significant cause of deforestation and forest degradation. Impacts are more severe in large urban centers: Brazzaville, Pointe Noire, Dolisie, Nkayi, Ouesso, and Gamboma. There are two problems: (i) on the supply side, charcoal production lacks efficiency and requires heavy exploitation; (ii) the demand is huge due to the widespread use of traditional stoves with low energy efficiency. In addition, afforestation/reforestation programs are not currently well developed in the Republic of the Congo.

5.2. SO4: 4.1 = "Structuring Fuelwood Channels", 4.2 = "Promote Afforestation/Reforestation", 4.3 = "Promote Energy Efficiency of Firewood"

SO4.1: Improve Supply by Structuring Firewood and Charcoal Channels

Charcoal production is very amateur and often illegal. It is usually very inefficient and requires a lot of wood to produce a small quantity of charcoal, resulting in heavy forest degradation or even complete destruction. Simple and low-cost measures would double efficiency and reduce wood needs by half.

Similarly to previously-mentioned measures to improve wood logging and transformation techniques, impacts of measures to improve carbonization rates would be felt in the short run, as opposed to reforestation and restoration initiatives presented below.

Actions under this sub-option could include:

(i) Identifying effective and adapted carbonization techniques (Casamance-type kilns, etc.);

(ii) Capacity-building for charcoal producers, by adapting training to usual techniques applied in the main production centers;

(iii) Developing relevant control and tax systems to supervise operation of charcoal supply channels, and closely involving local communities;

(iv) Developing local household energy supply plans: support implementation of forestry management plans in forests exploited for firewood, support the professional organization of loggers and wood transporters and promote official organization and formalization of their associations, support the creation of wood markets in the five main urban centers, etc.

SO4.2: Promote Afforestation/Reforestation, Including to Improve Fuelwood Supply

Reforestation and forest restoration are interesting options to increase wood supply and reduce pressures on natural forests. However, it should be noted that these measures will only have an impact in the medium to long run, even by using fast-growing species.

There are two types of reforestation: (i) for energy (often using fast-growing exotic species such as eucalyptus, acacia, etc.) and (ii) for construction and service wood production (valuable indigenous species such as Limba, Okoumé, etc.).

Furthermore, successful reforestation strongly depends on tenure security (see O1 above). Without such security, investors would not be interested. Without a PNAT, reforestation projects could even have adverse effects by increasing tenure competition with small farmers, who might opt for more destructive practices in neighboring forests.

Two methods to promote reforestation could be tested in the Republic of the Congo: (i) incentive measures for the private sector and local populations (tax arrangements, technical support, etc.), or (ii) State commitment to fund and implement reforestation, through the SNR, with an *ad hoc* funding channel such as the REDD+ Fund (see Component 2c).

Related experiences in the DRC (Ibi Batéké Project, Ecomakala, etc.) are valuable and field visits to the other bank of the river should be organized.

SO4.3: Reduce Demand by Improving Energy Efficiency

Energy efficiency of firewood and charcoal use is usually low, resulting in very high demands to cover household needs. Therefore, it is recommended to improve the efficiency of fuelwood use with the following activities:

(i) Review experiences using improved stoves in other countries;

(ii) Develop models of improved stoves for firewood and charcoal, adapted to the various situations in the Republic of the Congo; and

(iii) Develop effective tools to promote the widespread use of such improved stoves.

5.3. Analysis of O4

Table 2b4: Analysis of O4 "Streamline Fuelwood Production and Use"

Costs (opportunity, investment, and transaction)	Benefits (CO2, other environmental advantages, social impacts)	Feasibility (socioeconomic, political, and institutional)	Sustainability and integration in development policies	Risks of leakage
+/-	**++**	**+/-**	**++**	**?**
• Opportunity : - for charcoal producers (improved process), + for farmers (afforestation instead of cultivation) • Investment : + for afforestation +/- for improved stoves • Transaction: + dissemination of techniques (carbonization, improved stoves)	• Advantages: + for carbonization? For afforestation (depends…biodiv if exotic species?) • Social : ++ carbonization and afforestation are good for revenues • Health : ++ fewer particles in case of improved stoves	• socially : - resistance to change (carbonization, improved stoves) • Political: ++ voluntary forest policies	• Consistent with the PRSP	• ?: Development of afforestation at the expense of agriculture

Note: ++ = very high; + = high; +/- = medium; - = limited; -- = very limited

6. O5: TRANSVERSELY INTEGRATE REDD+ IN POLICIES

6.1. Links between O5 and direct causes/underlying drivers of threats

This is a cross-cutting option: solutions to mitigate threats on forests must sometimes be found far from the forest sector… The associated sub-options seem disparate, but they have the common potential of impacting underlying drivers. This option is not of the highest priority, as it mainly focuses on underlying drivers of deforestation and forest degradation, rather than on direct causes. There will be no detailed analysis at this point.

6.2. SO5: 5.1 "Improve Health System" 5.2 = "Develop Carbon-Efficient Sources of Energy as Alternatives to Firewood", 5.3 = "Mitigate or Compensate Impacts of Oil and Mining Exploitation", 5.4 = "Raise Awareness, Outreach and Train on REDD+", 5.5 = "Build Capacities on National Research on REDD+"

SO5.1: Improve Health System

Improving the primary health system in rural areas contributes to reduce rural flight to space-consuming cities. This action is also consistent with reducing rural poverty as sickness often creates immediate monetary needs and unsustainable use of forest products. This implies:

(i) Improving primary health care in rural areas, especially in forest areas;

(ii) Developing education on mother-and-child health and protection.

SO5.2: Develop Carbon-Efficient Sources of Energy as Alternatives to Firewood

Firewood and charcoal are the usual sources of energy for lack of secure and accessible alternatives. The country is currently developing a policy to supply household energy at an appropriate cost with a guaranteed regularity. Enhancement of this policy requires to:

(i) Promote alternative clean sources of energy, especially hydroelectricity, solar energy, and wind power;

(ii) Make sustainable electricity available to the entire population.

SO5.3: Mitigate or Compensate Impacts of Oil and Mining Exploitation

Mining projects have been identified as deforestation and forest degradation drivers without appropriate mitigation of or compensation for unavoidable impacts. Actions would include:

(i) Assessing and mitigating socio-environmental impacts of private or public projects;

(ii) Enhancing controls of illegal operations ;

(iii) Require compensation for impacts when they are unavoidable.

SO5.4: Raise Awareness, Outreach and Train on REDD+

Environmental education is essential to the implementation of a REDD+ strategy. One must be aware that any action would contribute to reduce consumed wood volumes and degraded areas. Environmental education is a prerequisite for many of the actions mentioned here. This option will be adapted to four audience levels:

(i) Awareness and outreach on key concepts for all Congolese (see Component 1b) ;

(ii) Integration of REDD+ related issues and environmental education in the curriculum of the first and second school cycles and training of students and teachers (in all disciplines);

(iii) Enhancement or even creation of professional degrees on sustainable forestry management and wood transformation (technician or advanced technician);

(iv) Development of *ad hoc* degrees with the University Marien NGOUABI and the Ecoles supérieures (on MRV, project management, SESA, negotiations, international business, etc.).

SO5.5: Build Capacities on National Research on REDD+

Research will provide national executives with needed tools, which will be appropriate for the Congolese context and not adapted from external solutions. Actions include:

(i) Developing appropriate technologies and methodologies (on MRV, economic modelling, sustainable agricultural systems, clean energy, etc.);

(ii) Establishing national study teams including researchers, members of the civil society, and resource people, based on themes and expected deliverables;

(iii) Building capacities and promoting exchanges with research centers in the Congo Basin Region countries including with the Environmental Excellence Pole in Kinshasa, the Observatory of Central African Forests (OFAC), the FORAF Project, etc. and institutions and donors interested by the Congolese REDD+ strategy.

8. SCHEDULE AND BUDGET (IN K$) OF COMPONENT 2B

Table 2b - COMPONENT 2B						
Main Activities	**Sub-Activities**	**2010**	**2011**	**2012**	**2013**	**Total**
Pilot Projects	Definition of needs and opportunities - (national consultants)	10				10
	Definition of procedures - (national consultants)	5				5
	Call for proposals - (national and international)	20				20
	Sub-national pilot projects (100 k$/project)		1,600	800		2400
Specific Studies	Identification of REDD+ priority areas - (International and national experts)	15				15
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 1 (tenure) - (National and international experts)	25				25
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 2 (forest management) - (National and international experts)	30				30
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 3 (agriculture) - (National and international experts)	30				30
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 4 (fuelwood) - (National and international experts)	25				25
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 5 (other sectors) - (National and international experts)	20				20
Finalization of REDD+ National Strategy	Review of results of specific studies based on strategy options - (National experts)		10			10
	At the level of pilot projects, review of experimentation based on options - (National and international experts)			30		30
	Finalization of the REDD+ national strategy - (National experts, national and departmental workshops)			90		90
	Report-out of the REDD+ national strategy- (National experts, workshop, communication)			35		35
Total		**180**	**1610**	**955**		**2745**
Government		10	60	15		85
FCPF		**100**	**600**	**400**		1100
UN-REDD Program		30	500	300		830
AFD		20	100	30		150
CBFF		20	350	260		630

Component 2c. REDD+ Implementation Framework

1. OVERVIEW OF PROPOSALS ON LEGAL AND INSTITUTIONAL FRAMEWORK

1.1. Content

This component includes proposals for (i) the legal and institutional framework to implement the Congolese REDD+ national strategy, (ii) development of incentive measures at national level, and (iii) planned actions and needed funding between 2010 and 2013.

The component is intrinsically linked to proposed actions under other components, including Component 2b, reflecting the country's willingness to ensure a consistent arrangement under this RPP.

1.2. Values and Principles

According to the Republic of the Congo, the legal and institutional framework should be designed and/or revised to ensure an integrated approach to the REDD+ national strategy, with the objective of contributing to sustainable development.

The implementation framework of the REDD+ national strategy should be based on six values: sustainability, accountability, equity, effectiveness, measurability, and transparency. In addition, the Republic of the Congo believes that successful implementation of REDD+ activities is dependent on involvement of all players, both public and private. Therefore, its implementation will follow four principles: participation, regulation, incentive, and control.

1.3 Scope

At this point, the Republic of the Congo's primary focus is to develop a national level approach. However, the proposed legal and institutional arrangement includes some mechanisms and institutions which would allow a sub-national approach, as needed.

This will be examined in the upcoming months and years, based on national and local conditions. A sub-national approach might further enhance involvement of public and private players, notably foreign ones.

2. IMPROVING THE EXISTING LEGAL AND INSTITUTIONAL FRAMEWORK

2.1. Objectives of Reforming the Existing Framework

Sustainable forestry management, including mitigation of deforestation and forest degradation, is not a new political objective, but rather an enhanced one for the Republic of the Congo. However, the legal and institutional framework should be improved to implement REDD+ activities. This will be a continuous improvement, contributing to anticipate the future REDD+ international arrangement under the UNFCCC.

REDD+ requires a clear and appropriate legal and institutional framework. Tenure rights, including customary tenure rights and their recognition, as well as forest resources usage rights should be clarified to define ownership rights of avoided or removed carbon and related legal titles.

A clear and appropriate legal framework should also ensure the full and sustainable involvement of all relevant players for REDD+ activities, including indigenous populations, and hence sustainable effectiveness of all activities at the environmental and social level.

Finally, action and intervention means of relevant public authorities, including devolved and decentralized local authorities, should be specified to contribute to effective implementation of REDD+ activities in the field.

2.2. Existing Legislation on Tenure Rights

2.2.1. Trouble Formalizing Customary Tenure Rights

Ownership right is granted by the Constitution of the Republic of the Congo. Any individual with a tenure title, subject to registration, can be a land owner. Without such title, the land is presumed to be part of the public estate.

Under Congolese law, the prerequisite for tenure rights is to obtain a written land title. Regulations pertaining to rural tenure provide for the recognition of customary tenure rights, which can be registered.

It is undeniable that in practice, customary rights as exercised by local populations often clash with modern written laws. Local populations face many challenges (illiteracy, tax and administrative constraints pertaining to registration) to register their tenure rights in the official mortgage registry.

In addition, local populations often do not recognize the validity of modern written laws. This is undoubtedly a source of conflict, which might prevent the participation of rural populations in REDD+ actions. The situation is compounded by the weakness of resources of governmental control officers for law enforcement and securing citizen property rights.

2.2.2. Bill under Review to Promote Recognition of Customary Rights

To overcome such challenges, the Government of the Republic of the Congo introduced a bill which is being reviewed at the Parliament, with the objective of promoting indigenous populations' rights and recognition of customary tenure and cultural rights.

The core elements of this bill on indigenous peoples include clarifying tenure rights and principles for exercising ownership rights, distribution of revenues from land-use, and conditions of participation of and consultation with all players.

2.3. Existing Legislation on Resource Exploitation Rights

2.3.1 Strengths

The existing legal framework secures several essential elements for REDD+:

(i) Forest ownership rights for public and private individuals and entities;

(ii) Forest resources usage rights for local populations (detailing duration and conditions of holding such rights) ;

(iii) The principle of local management of natural resources, including promotion of community forestry and private forests;

(iv) Legal, administrative, institutional, and financial tools needed to enforce the law establishing the Forest Code;

(v) A legal and institutional arrangement aiming at protecting biodiversity and high-biodiversity areas.

2.3.2. Weaknesses

Some weaknesses must be addressed to implement REDD+:

(i) Lack of coordination of agricultural, forest, etc. activities without a PNAT;

(ii) Lack of resources of the forest administration for law enforcement;

(iii) Lack of incentives for local communities in the Forest Code;

(iv) Absence of public resources transfer to decentralized local collectivities and local communities, even with the existing provisions in enacted regulations;

(v) Insecure natural resources usage rights of local communities:

(vi) Lack of involvement of local communities in natural resources management.

These challenges are more the results of the lack of resources to implement the legal framework, rather than gaps in the latter. They are also due to a conflict between customary rights and written law, even if the latter recognizes, officially and in procedure, customary rights, both for land and resources (see 1.1 above).

The main impacts of these weaknesses are conflicts on land-use, which might be a limiting factor for the development of REDD+ activities.

2.4. Improving the Existing Legislation by Promulgating a REDD+ Law?

2.4.1. Overview of this Law

Adopting a REDD+ law will validate the cross-cutting nature of the REDD+ policy and help integrate REDD+ activities in sectoral policies. This REDD+ law will determine the roles and responsibilities of public authorities, strategy priorities, core principles and implementation tools, including incentives.

This will be a Framework Law and its terms of implementation will be defined by regulations. Such terms will obviously include existing COP decisions on REDD+ as well as future decisions to establish REDD+ in the post-2012 agreement.

This legal framework will be developed in consistency with other policies, including the Forest Law (to be revised soon), the Law on Indigenous Peoples, the Mining Code, etc.

2.4.2. Potential Content of the Law

Currently, the REDD+ law should include the following elements:

Strategy: The Law will define principles and main directions of the REDD+ national strategy, as well as revision procedures for the strategy, as presented under Component 2b;

Authority: Based on indications provided under Component 1a, authorities – central or decentralized/devolved– participating in the REDD+ strategy will be identified, as well as their roles under this REDD+ Law and laws on forest and environmental protection;

Authorization: Conditions for authorization and/or registration of REDD+ activities will be determined and a REDD+ National Registry will be created (see Component 1a);

Scenario: Procedures for the development of the national reference scenario and potential sub-national scenarios will be clarified (Note: the Republic of the Congo does not currently give priority to sub-national scenarios);

Fund: A REDD+ Fund, complementing the action of the national Forest Fund, will be created. Conditions of access to this Fund will be defined (performance based on the sub-national reference scenario, sustainable development criteria, specific criteria for each type of REDD+ activity, etc.);

Instruments: Economic and tax implementation instruments will be planned (payment of environmental services, management transfer contracts, etc.), as well as knowledge transfer to apply those tools;

Credits: Among such instruments, carbon credits will be given a specific focus: they will be legally defined and accounting and tax aspects related to transfer of these credits will be determined (see 3. below).

3. CARBON RIGHTS AND CARBON FINANCE

3.1. Rationale

With an ambitious but realistic REDD+ national strategy, the Republic of the Congo wants to contribute to international efforts to reduce global emissions. Strategy implementation should be supported by national and international funding, both public and private, and funding needs will change over time.

The Republic of the Congo would like to emphasize its willingness to use these funds in a responsible, effective, transparent, and equitable manner. The country wants to promote its mitigation efforts against deforestation and degradation and aims at maintaining or even enhancing carbon stocks.

It seems essential to clarify the legal status of carbon assets, to secure and hence facilitate transactions in response to requests from players, both governmental and private.

3.2. Various Legal Status of CDM or REDD+ Credits

Clean Development Mechanism (CDM) or REDD+ credits are *sui generis*[8] instruments, existing or planned, either by international law instruments, or by private voluntary initiatives. However, neither can define the legal nature of such credits: the former is not able to address legal State-to-State relationships, while the latter falls under the private estate and cannot replace the legislator.

Without appropriate provisions under international laws, the enforceable law will apply, for instance the law pertaining to sale of credits or the law of the country hosting activities.

To date, Congolese law does not provide for the legal status of carbon credits or even CDM credits. As *sui generis* instruments, REDD+ credits should be compared to other existing instruments, taking into account potential and relevant experience in other countries.

A CDM credit is usually viewed as an “intangible asset” or “tradable goods”, or sometimes as a financial instrument (if the transaction is constitutive of a futures contract) or a service. It can also be legally qualified as a title on a natural resource (removed/avoided carbon).

[8] Legal object “of its own kind”, which cannot be classified under an existing legal category

3.3. Two Options to Define the REDD+ Credit under Congolese Law

At this point, the Republic of the Congo is examining two options. Selection will be determined by efficiency in terms of funding of REDD+ activities, equity in terms of revenue-sharing, and sustainability of expected REDD+ outputs (increase of removals / reduction of emissions).

3.3.1. Natural Resource

Removed/avoided carbon would qualify as natural resources. Therefore, they will be part of the holdings of the Republic and must be achieved for the country's best interests. Under this option, the State would have the full and complete ownership of carbon credits and would be the only legally able authority to transfer the legal title to third parties.

REDD+ credit would not likely be privately acquired upon delivery, but only when transferred by the Congolese government, including to private investors interested by sustainable forestry management in Congo.

3.3.2. Intangible Movable Asset

The removed/sequestered carbon is considered an "industrial commodity", or "natural commodity", depending on the level of human intervention. Carbon credits are considered "movable intangible property"[9]. In countries of Latin legal tradition, such as the Republic of the Congo, carbon credit can be strongly related to movable (as it can be moved) and intangible (as it relates to immaterial removed/avoided carbon) property.

Carbon credit is therefore a title proving the result of an action (removed/avoided carbon). The title can be freely sold and transferred and its value depends on potential use (determined by required regulatory compliance or compensation on the voluntary market).

The property is subject to private acquisition (including for the benefit of public law entities, including the State, to manage their private holdings). Ownership of carbon credits will be granted to the entity able to prove ownership.

In this case, owner(s) of carbon credits would not be directly identified by law, but from several criteria or indications potentially specified by law, including:

(i) Tenure rights, including recognized and registered customary rights;

(ii) Resource usage rights, including by logging concession operators contributing to increase of removals or reduction of emissions;

(iii) Usage rights within the activity perimeter;

(iv) Capital or business inputs contributing to increase of removals or reduction of emissions.

Without formal regulations on ownership rights of carbon credits, ownership rights could be divided proportionately to the inputs or efforts given contributed by the various entities involved. Under the second option, private acquisition would be possible, but the Congolese government should be able to get an important portion of REDD+ credits, given its status as land owner and its predominant role for sustainable forestry management.

3.4. Role of the State in Carbon Transactions

The State could play a central role in carbon credit transactions, even under the assumption that it is not legally identified as the owner of the credits. Therefore, an authority or entity should be legally designated to carry out negotiations and transactions in the name and on behalf of the State.

[9] A property (movable or immovable) is tangible or intangible, and can be subject to private or public acquisition.

Nevertheless, the State might not be the sole seller of credits generated by activities developed in Congo. The Republic of the Congo intends to explore all possible options to encourage public and private investors to support its REDD+ activities.

3.5. Responsible and Transparent Management of Funding from a REDD+ Fund

Among options mentioned under 3.4, the Republic of the Congo considers creating a REDD+ National Fund to manage international and national investments, both public and private, supporting REDD+ activities. The Fund could collect external funding as well as internal revenues from tax instruments and royalties paid by occupiers of public estate.

This REDD+ Fund could be mandated as a financial focal point, capacitated by the Congolese Public Treasure, and given the authority to directly collect funds. It would order expenses to support registered activities in the REDD+ National Registry (see Component 1a), taking into account sustainable development criteria and REDD+ indicators defined by the REDD+ Law (see 2.4.4 above), and initiating call for projects if needed.

For equitable sharing of carbon benefits to local players, the Fund could utilize the Community Development Funds managed by Departmental Committees, to ensure consistency with decision-making at local level and full and complete participation of relevant people.

The Republic of the Congo would also like to explore the possibility of including an investment fund component in the REDD+ Fund, in order to encourage private investments and public-private partnerships. The State could also sell REDD+ credits through this Fund to directly receive revenues.

Activities of this REDD+ Fund should be coherently structured with activities developed by the Forest Fund and the Environmental Protection Fund, notably by specifying the mandate for payment of expenses for each type of activity.

Creation of the REDD+ Fund seems obvious, first to ensure that all eligible REDD+ activities are funded, and second to avoid dilution of revenues in the State budget, which would endanger the effective implementation of the REDD+ national strategy.

➔ ***Focus on provisions for transparency and anti-corruption***

The Republic of the Congo is a signatory of the United Nations Convention against Corruption. Therefore, the country wants to capitalize on its significant progress in terms of transparent management and actions against corruption to ensure transparent and equitable management of and distribution of revenues from the REDD+ Fund:

(i) The reform on transparency of State expenses (control of disbursements based on requests), supervised by the Plan Ministry would integrally apply to the REDD+ Fund. Cooperation between the REDD+ Fund and the Development Community Funds would ensure participation of indigenous peoples in decision-making;

(ii) Existing regulations on transparency and anti-corruption, including provisions of the anti-corruption law should apply. The Inter-ministerial Commission against Corruption, the National Commission against Corruption, and the Observatory against Corruption, established with support from the Bretton Woods institutions, should play their respective roles in order for the Fund to achieve REDD+ objectives.

4. TOOLS TO DEVELOP THE IMPLEMENTATION FRAMEWORK \

Development of the legal and institutional framework will be facilitated by four studies to establish an updated and prospective diagnosis, as well as support to implement pilot projects on some aspects of the REDD+ implementation framework.

4.1. Studies

Four studies are planned to develop the component, on the following themes: “Good Practice Guidance for REDD+ Pilot Projects”, “Preparation of the REDD+ Law in the Republic of the Congo”, “Governance of the REDD+ Fund”, “Tax and Economic Incentive Tools for REDD+”. Specific terms of reference for these studies are found in Annex 2c.

4.2. Pilot Projects

Pilot projects mentioned under Component 2b will detail some aspects related to the REDD+ Implementation Framework. The following aspects will be tested: (i) carbon ownership options; (ii) governmental role for REDD+ transactions; (iii) participants in REDD+ transactions; and (iv) distribution plan for revenues generated by REDD+ transactions.

5. SCHEDULE AND BUDGET (IN K$) OF COMPONENT 2C

Table 2c - COMPONENT 2C						
Main activities	**Sub-Activities**	**2010**	**2011**	**2012**	**2013**	**Total**
Study 1 - Develop guidance for REDD+ pilot projects	Nat. consultation (1 nat. consultant)	3				**3**
	National validation workshop (idem)	5				**5**
	Guide (1 nat.consultant. 1int.)	20				**20**
	Capacity-building (1 nat.consultant)	5				**5**
Study 2 - Develop a REDD+ law and enacting regulations	Nat. consultation / Bibliography / review of regulations (1 nat. consultant)		5			**5**
	Proposals (1 nat. consultant and1 int.)		15			**15**
	Support to bill development / presentation (nat. consultant + 1 int.)		20			**20**
	Departmental workshops (pre-validation)		15			**15**
	National validation workshop		5			**5**
	Parliam. capacity-building(2 nat.consultants)			10		**10**
	Adoption of law and enacting regulations					**0**
	Capacity-building on REDD+ Law (2 national consultants)			5		**5**
Study 3 - Develop a REDD+ Fund	National consultation (1 nat.consultant)			5		**5**
	Bibliography study (1 national consultant)			3		**3**
	Analysis Forest + Env. Fund F+ recomm. for REDD+ Fund (2 nat.consultants + 1 int.)			25		**25**
	Departmental workshops (pre-validation)			10		**10**
	National validation workshop			5		**5**
	Promulgation of creation decree					**0**
	Training of managers (1 nat.consultant)			10		**10**
Study 4 - Develop implementation instruments	National consultation (1 nat consultant)			3		**3**
	Biblio. study (1 national consultant)			3		**3**
	Departmental workshops (pre-validation)			10		**10**
	National validation workshop			5		**5**
	Field awareness (NGOs and assoc.)			10		**10**
	Training project promoters (1 consulting firm)			10		**10**
Total		**33**	**60**	**114**	**0**	**207**
Government		3	5	9		17
FCPF		**10**	**30**	**80**		120
UN-REDD Program		10	15	15		40
AFD		5	5	5		15
CBFF		5	5	5		15

Component 2d. Social and Environmental Impacts

1. PURPOSE & OBJECTIVE OF SOCIO-ENVIRONMENTAL ASSESSMENTS

1.1. Purpose: Minimize Damage to Environment and Human Kind

REDD+ strategy options (see Component 2b) aim at reducing emissions from deforestation and forest degradation and maintain or even enhance carbon stocks. Implementation of such options can have environmental and social impacts:

In terms of environmental impacts, enhanced sustainable management of production forests and protected areas should have positive impacts on soil, water resources, and biodiversity protection. On the other hand, reforestation, especially with fast-growing exotic species, could have adverse impacts on the same elements (soils, water, biodiversity…) even if it reduces pressure on natural forests by providing firewood and construction wood.

On the social side, capacity-building and improved forest and agricultural production systems should increase revenues and enhance food security for forest-dwellers and indigenous peoples. But reorganizing tenure could reduce their access to forests.

1.2. Objective: Link Impact Assessments and the REDD+ Strategy

These examples highlight the importance of assessing potential effects of the REDD+ strategy, through a Strategic Environmental and Social Assessment (SESA). The SESA must be initiated quickly for its results to be integrated in the final REDD+ national strategy.

The objective is to be able to (i) assess environmental and social impacts, both positive and negative, of REDD+ strategy options in order to (ii) confirm, or modify, or even simply invalidate initial REDD+ strategy options, and (iii) if needed, recommend corrective actions or compensation for potential damage.

2. WHAT IS THE USEFUL LEGAL BASIS UNDER CONGOLESE LAW?

In its Article 35, the Constitution of the Republic of the Congo stipulates that: "*Any citizen has the right to a healthy, satisfying, and sustainable environment and has the duty to defend it"* and that "*The State ensures environmental protection and conservation"*. On these grounds, Law 003/91 of April 23, 1991[10] defines the national policy on environmental protection.

Its Enacting Decree 2009-415 of November 20, 2009 defines the scope, content, and procedures of an environmental and social impacts assessment, defined as "*a study of analytical and prospective content, carried out in order to identify and assess the environmental, social, and health impacts of a project"*. It provides a basis to develop the social and environmental impacts assessment system for the REDD+ strategy. The main points of the Decree are presented below.

[10] In order to update this policy to new realities, particularly from the Rio Earth Summit (1992), text has been revised and the final document is currently at the Parliament for review and adoption.

2.1. Definition of Socio-Environmental Assessment Concepts

The Decree presents a glossary defining and validating all terminologies used in environmental assessments. Base concepts defined under this section are the following: project, environmental compliance certificate, environmental impact assessment, environmental study report, environmental impact note, developer, environmental and social management plan, administrative authorization, public audience, environmental assessment, public authority, environmental audit, public consultation, public survey, and technical recommendation.

2.2. Scope, Content, Study, and Socio-Environmental Impact Note

The Decree describes to project developers and political decision-makers which activities should be subject to an environmental and social impact assessment:

(i) A:High-impact activities, requiring an environmental impact assessment;
(ii) B:Medium-impact activities, requiring an environmental impact note;
(iii) C:Low-impact activities, requiring neither an environmental impact assessment nor an environmental impact note.

An environmental impact assessment includes the following elements:

(i) Analysis of the original state describing the bio-ecological and socioeconomic environment ;
(ii) Detailed project description with all needed arguments, including the precise nature of investments;
(iii) Prospective analysis of potential consequences of the project, highlighting negative and positive impacts in terms of bio-ecological and socioeconomic aspects;
(iv) Comparative analysis of different options or different scenarios;
(v) Indications on environmental risks (particularly based on existing similar projects);
(vi) Presentation of the environmental and social management plan;
(vii) Presentation of measures to mitigate negative impacts;
(viii) Estimation of environmental costs.

The environmental impact note should highlight the following:

(i) Description of the state of the site and its environment;
(ii) Description of planned activities;
(iii) Description of activities with negative or positive environmental impacts;
(iv) Identification of environmental elements which can be adversely affected;
(v) Definition of the nature and significance of environmental impacts;
(vi) Presentation of planned measures to remove, reduce, manage or compensate for negative environmental impacts and estimation of related costs.

2.3. Procedures related to the Implementation of an Environmental Impact Assessment:

The Decree also specifies aspects pertaining to:

(i) Linkage between the study or the note with a public survey;
(ii) Implementation conditions for a study or note (approval, terms of reference, copy of contract between the consultant or the consulting firm and the project developer);
(iii) Validation of impact study or note after a public audience and technical analysis;
(iv) Post-study or note social and environmental monitoring and monitoring control.

3. STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT

3.1. Principles of the Strategic Environmental and Social Assessment (SESA)

The SESA includes analytical and participatory approaches of strategic decision-making, in order to integrate environmental aspects in policies, plans, and programs and assess their interactions with economic and social concerns.

The SESA helps put planning in line with sustainable development and poverty reduction principles. The Republic of the Congo intends to implement a SESA for its REDD+ strategy, based on relevant elements from Decree 2009-415 and the following elements:

(i) The national legal framework on forest, environment, and tenure, including Law 16-2000 of November 20, 2000 establishing the Forest Code and two bills on indigenous peoples and REDD+, which could respectively be adopted in the short and medium term (see Component 2c);

(ii) Sustainable forestry management Principles, Criteria, Indicators, and Verifiers (PCIV) defined by the International Tropical Timber Organization (ITTO), and adopted by the Republic of the Congo in December 2006;

(iii) The VPA-FLEGT against illegal logging and illegal timber trade, to be ratified by the Republic of the Congo in April 2010 (1er country of the Congo Basin to do so);

(iv) The Convention on International Trade in Endangered Species (CITES) approved by the Republic of the Congo in 1983 ; some Annex II species (endangered) are found in Congo;

These bases will be completed by the World Bank safeguard provisions, including the following operational policies: OP 4.01 on environmental assessment, OP 4.04 on natural habitats, OP 4.11 on cultural heritage, OP4.20 on indigenous peoples, OP 4.36 on forests, and OP 4.37 on safety of dams.

3.2. Stakeholders and Responsibilities for the Congolese SESA

The following organizations will be involved in the SESA:

(i) The Environmental General Office (DGE) of the MDDEFE would be the main instigator of the SESA, with the potential support of the General Office for Sustainable Development (DGDD) from the same ministry, and relevant services in the ministries in charge of the plan, mining, territorial planning, tenure, research, and agriculture;

(ii) The National Environmental Agency (ANE), within the MDDEFE. The ANE has not been created yet: its creation has been planned for two years, with support from the European Union. Organic laws for its creation are being reviewed at the Parliament level. The ANE would eventually be responsible for supervising environmental and social assessments and should take over from the DGE/MDDEFE;

(iii) The World Bank would make available its expertise on operational policies (see 2.2. above) and will be consulted as needed;

(iv) The independent Forest Observatory[11] would have an advisory role and will bring its expertise on monitoring and control of commitments against illegal logging and illegal timber trade, as defined under the VPA-FLEGT. Its capacities could be extended to cover the entire scope of the SESA.

[11] http://www.forestsmonitor.org/fr/capacity_building_congo

3.3. Socio-Environmental Assessments Process

To ensure regular, open, and transparent consideration of socio-environmental impacts during the development of the REDD+ national strategy, the following processes will be implemented:

(i) SESA of REDD+ strategy options by the DGE/MDDEFE and eventually, by the ANE;

(ii) Presentation of SESA results to the REDD+ National Committee and to the 12 REDD+ Departmental Committees, as well as to public authority, civil society, and private sector national and departmental platforms, to establish the bases for clear and objective discussions;

(iii) Collegial decision within the REDD+ National Committee (after feedback from the REDD+ Departmental Committees) to enhance/adjust the REDD+ strategy options and minimize negative socio-environmental impacts (and vice versa);

(iv) Periodic monitoring by the ANE of social and environmental impacts of the REDD+ national strategy, using sustainable procedures (see Component 4b) and annual validation workshops, at central and departmental level.

3.4. Needed Capacity-Building

National capacities in terms of SESA and related university programs are lacking. The creation of a major in SESA under a REDD+ Master's degree is being considered. This program could be offered at the Rural Development Institute (IDR) at the Marien NGOUABI University (see 3.2. of Component 3).

4. WORKPLAN AND BUDGET (IN K$) OF COMPONENT 2D

Table 2d - COMPONENT 2D						
Main activities	**Sub-Activities**	**2010**	**2011**	**2012**	**2013**	**Total**
Creation and implementation of a SESA management framework	At MDDEFE level (1 international consultant + 2 local consultants)	5				**5**
	At ANE level (2 ANE local consultants @ 100% x 1 k$/month)		24			**24**
Capacity-building of players	Develop appropriate training tools (1 international consultant + 1 local consultant)	5				**5**
	Capacity-building workshops at central level (1 international consultant , 2 training sessions)	5				**5**
	Capacity-building workshops at departmental level (national consultants, 5 training sessions)	25				**25**
Implementation of the SESA	Development of intervention program (1 international consultant , national consulting firm)		5			**5**
	Establish the initial situation without REDD+ (1 international consultant, national consulting firm)		10			**10**
	Analysis of the legal/institutional framework to develop the SESA (1 international consultant ,national consulting firm)		5			**5**
	Assessment of env. and. soc. impacts of REDD+ strategy options (1 international consultant , national consulting firm)		15			**15**
	Assessment of env. and. soc. impacts of implementation framework (consulting firms, National Coordination)		10			**10**
	Prioritize/ spatialize potential environmental and social impacts (1 international consultant ,national consulting firm)		10			**10**
	Socio-environmental management framework with mitigation/compensation measures (1 international consultant , national consulting firm)		10			**10**
SESA evaluation	Evaluation by the MDDEFE and the ANE (MDDEFE and ANE executives, REDD+ National Coordination)		5	5		**10**
	Presentation of the SESA and evaluation by stakeholders (REDD+ National Committee and Coordination)		5	5		**10**
	Communication on the evaluation of the SESA		5	5		**10**
Sustainable monitoring of impacts and benefits (MRV 4b)	Creation of monitoring system for impacts/benefits. - MRV 4b (national and international experts)		40			**40**
	Implementation of MRV 4b (2 ANE consultants @ 50% x 1 k$/month)			12	12	**24**
	Design/implementation of corrective actions (2 ANE consultants @ 50% x 1 k$/month)			12	12	**24**
Total		**40**	**144**	**39**	**24**	**247**
Government		5	9	4	4	**22**
FCPF		**20**	**70**	**20**	**5**	**115**
UN-REDD Program		**5**	**55**	**5**	**5**	**70**
AFD		**5**	**5**	**5**	**5**	**20**
CBFF		**5**	**5**	**5**	**5**	**20**

Component 3: Develop a Reference Scenario

1. REDD+ REFERENCE SCENARIO: THE VISION OF THE REPUBLIC OF THE CONGO

1.1. Key Principles

The key principles for the development of reference scenarios are the following:

(i) Scope: in principle, the reference scenario will include both emissions from deforestation and forest degradation and removals from enhancement of carbon stocks. Inclusion of both emissions and removals will be done gradually until the end of 2012 (i) consistent with future UNFCCC decisions, and (ii) in conjunction with the evolution of the MRV system, presented under Component 4. Under this Component 3 and without existing related guidelines, the focus will be on emissions;

(ii) Objective: the reference scenario will define national objectives of emissions reduction and removals increase, and refine strategies to achieve these objectives;

(iii) Decision-making support: the reference scenario will support decision-making through (i) *ex ante* identification of threatened areas, and (ii) *ex post* assessment of effectiveness of implemented strategies;

(iv) Transparency: the reference scenario will be the basis of negotiations on reference levels. Therefore, specific attention will be given to credibility and transparency. Data, methods, and models used during the development phase will be available to any interested third party;

(v) Methodology: there are no existing guidelines on reference scenarios. The Republic of the Congo realizes that determining the reference scenario in a country with high forest cover and low deforestation rate will have a strong impact on the amount of available incentives. Therefore, the Republic of the Congo will not opt for a single methodology but will test several approaches instead.

1.2. The Question on Sub-Scenarios

The Republic of the Congo realizes the potential risks of distorted benefit-sharing if the national scenario does not reflect the various departmental trends (when transfer of funds from the national level to the local level is based on results). The national scenario will therefore be validated at each departmental level, to prevent any imbalance and equitably promote departmental efforts.

In addition, there are no existing international guidelines defining the terms of allocation of potential carbon revenues at sub-national level, in the event of poor national performance (when actual emissions are higher than the level planned in the reference scenario). During the REDD+ preparation phase, the Republic of the Congo remains open to discussions on the subject, as well as feedback from other countries.

In addition, during implementation of projects, *ad hoc* and more specific reference scenarios could be designed by project developers whenever required to improve accuracy at project level.

If this is the case, the only requirements for developers would be to (i) use project-level MRV methods compatible with national-level MRV methods, and (ii) voluntary use a conservative approach to estimate emissions reduction or removals increase, to prevent being compensated only for actual flows that have not been measured and reported in the national MRV system.

Finally, it should be noted that the Republic of the Congo will make available to project developers all data used for the national scenario.

1.3. Overview of the Development Steps of the REDD+ Reference Scenario

According to Decision 4/CP.15[12] adopted in Copenhagen on the various REDD+ methodology aspects, "*developing country Parties in establishing forest reference emission levels and forest reference levels should do so transparently taking into account historic data, and adjust for national circumstances […]*".

Therefore, Component 3 is structured around, first, estimated historic emissions (see 2.1 below) and then, adjustment based on national circumstances.

Adjustment will be done with relevant variables (see 2.2. below) and will be based on two components[13], (i) "quantitative", (see 2.4 below), to estimate future deforested areas, and "spatial" (see 2.5 below) for geographic distribution of deforested areas, based on calculation done under the "quantitative" component.

Once future land-use changes have been quantified and spatialized, data on emission factors from Component 4-MRV will be used to calculate future emissions and removals associated with these changes (see 2.6 below).

2. KEY ELEMENTS FOR THE DEVELOPMENT OF THE REDD+ REFERENCE SCENARIO

2.1. Estimation of Historic Emissions

Existing data and capacities on MRV are presented under Component 4a, as well as methodology directions to estimate historic emissions.

Estimation of historic emissions will be done under Component 4a. Due to technical constraints relative to Component 4a, estimation will not be finalized before mid-2011. In the meantime, efforts under this Component 3 will focus on capacity-building and data collection.

2.2. Inventory of Available or to be Collected Data to Adjust Scenario

Based on analysis of direct causes and underlying drivers presented under Component 2a, as well as recommendations from consulted experts, variables have been identified for each direct cause to forecast its future trend.

Data on these variables are applied at two levels, detailed and aggregated. Each level is associated with a prediction method of future changes in forest carbon stocks, respectively called "national simplified" and "national advanced" (see 2.4.1 below).

Variables have been selected and a preliminary identification of existing data (past, present, future) has been performed. This list will be updated based on a more thorough study on the causes of deforestation, as planned under Component 2b. Aggregated data related to these variables are presented below, while the detailed data can be found in Annex 3:

[12] http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf

[13] Distinguishing the spatial from the quantitative aspect does not seem detrimental as the Republic of the Congo is a country with high forest cover but with high potential for agricultural and forest exploitation. There are relatively few limiting spatial factors (except infrastructure, which is taken into account here both at the spatial and quantitative level) with potential influence on deforestation extent which might require considering interconnections between spatial and quantitative aspects.

Aggregate variables	Existing data on these variables	Reliability (unreliable +, to very reliable +++)
Population size	General population census available for 1974, 1984, 1996, 2006 at CNSEE. Predicted population change based on continued growth rate as noted during the last assessment period.	Past data : ++ Current data : ++ Predictions: +
National average poverty index	At the General Office for Plan and Development (DGPD) of the Ministry of Transportation for 2006/2009 and at the International Monetary Fund (IMF), the World Bank (BM) and the Bank of Central African States (BEAC) for projections	Past data: ++ Current data: ++ Predictions : +
Distances of paved roads, railroads, and waterways	At the Ministry of Transportation: DGPD, General Office for Management of Terrestrial Transportation (DGATT), General Office for the Congo Océan Railroad (DGCFCO), General Office for Waterways, Ports, and River Transportation (DGVNPTT)	Past data : ++ Current data : ++ Predictions: +
Percentage of energy needs covered by firewood	No systematic statistics except a UNDP-FAO survey on Nkayi et Brazza. Inclusion in the five-year population and health surveys of an indicator of firewood consumption is planned	Past data : 0 Current data : 0 Predictions: ?
Weighted index of price trends of export commodities (cash crops, oil, and mining resources)	FAO or United Nations Conference on Trade and Development (UNCTAD) international databases, modelling results (Macro Congo) of the General Office of Plan and Statistic Surveys of the CNSEE	Past data : ++ Current data : ++ Predictions: +
Advancement rate of forestry management (and reduction of unsustainable or even illegal logging)	CNIAFF data on forestry management, data to be collected under the VPA-FLEGT. Apparently, no data on illegal logging (even at the Independent Forest Observatory)	Past data : + Current data : + Predictions: ?

The table above shows a lack of reliability for some variables, particularly for prediction data. Therefore, two studies on firewood and logging will be required (see 3.1 below).

2.3. National Capacity-Building in Data Collection

The General Office of the National Center for Statistics and Economic Studies (CNSEE)[14] is responsible for collecting general interest data. Offices for studies and planning or for statistics within ministries are in charge of collecting sectoral data. These structures have devolved services in all departments.

There are two main problems: (i) resources are lacking for all these structures, and (ii) there are no existing sound and comparable methodologies among structures. A new law on statistics adopted in October 2009 plans to initiate an assessment of needs of entities in charge of collecting statistical information.

This assessment should produce the proposed National Strategy for the Development of Statistics for the 2011-2015 period. Therefore, and because statistical data needs (and predictions from these data) are not confined to REDD+, there is no planned capacity-building on this aspect for the REDD+ strategy.

The REDD+ National Coordination will follow closely the reform of the Congolese statistics system and will assess if such change will ensure the quality of REDD+ data. If this is not the case, the REDD+ National Committee might consider implementing new collection systems.

[14] The CNSEE is in charge of three surveys: (i) health (every 5 years, the first one took place in 2005), (ii) poverty (idem), (iii) population and housing (every 10 years). There is a first agricultural survey underway.

2.4. Estimation of Future Deforested Areas

2.4.1. Three Possible Modelling Options

Three options have been identified to estimate the future volume of deforestation. The Republic of the Congo wishes to contribute to the international debate on reference scenarios and plans to test all three options presented below:

Option 1- "National simplified approach"	Option 2 – "National advanced approach"	Option 3 – "National adaptation of the IIASA regional model[15]"
➔ Characteristics		
Simple correlation between historic emissions and some aggregate key variables at national level (see 2.2. above): (i) population number, (ii) poverty level, (iii) volume of firewood consumption, (iv) kilometers of roads and other existing transportation networks, (v) weighted index of the evolution of export commodities prices, (vi) advancement of forestry management	Cause by cause approach, quantifying future deforestation and degradation by estimating the evolution of needs of surfaces for agriculture, firewood collection, and mining or logging activities, based on assumptions. At first glances, data used could be those in the table presented in Annex 3.	Global model of partial equilibrium, in forest and agricultural sectors (including biofuels). It is spatialized at the scale of the Congo Basin with pixels between 10km*10km and 50km*50km. It is being refined at regional level, and results can be obtained by country.
➔ Potential for decision-making support		
Low (accurate simulations are difficult to achieve as data are very aggregate)	Possible simulations: variables help test the impact of various elements of the strategy	Significant simulation potential, assuming a good ownership by national experts.
➔ Estimated cost		
Low	Medium	Low (as far is isolating results based on the regional model)
➔ Required capacities		
Statistics	Statistics, economy, prospects and understanding of deforestation	Complete command of the IIASA model
➔ Accuracy		
Limited prediction capacity (it assumes that links among variables do not change)	Risk of over-estimating future deforestation, as international demand and competitiveness compared to other countries are not taken into account. It would be interesting to validate this Option 2 with the first results of Option 3.	To be evaluated : a global model assuming that agricultural and forest activities react to international prices, but currently giving little weight to factors such as slash-and-burn or firewood collection.

2.4.2. Existing National Capacities in Modelling

The Republic of the Congo does not have a research center working on economic or land-use changes modelling. Past efforts related to specific requests from institutions, such as the Ministry of Plan to prepare the Poverty Reduction Strategy Paper[16], or independent research, sometimes under an international research network. In general, this is an area where national production is poor.

[15] The International Institute for Applied Systems Analysis, based in Laxenburg, Austria, has supported the COMIFAC for over a year to model future deforestation and degradation using the general partial equilibrium model, GLOBIOM. For more information on GLOBIOM, see http://www.iiasa.ac.at/Research/FOR/globiom.html?sb=6

[16] Models used by the Ministry of Plan are the RMSX of the World Bank (balance of payments model), and the MACRO Congo model, also focusing on the balance of payments, but intrinsically generating projections on sectoral GDP (from international prices and national price elasticity data). Note: Agricultural GDP projections could become indicators of consistency for Option 2, in terms of prediction of areas allocated to commercial agriculture.

A call for proposals will be issued for options 1 and 2 for the initial implementation of these options, as national capacities are not structured. Works will involve national and international experts with precise terms of reference.

Execution will be monitored by a steering committee including the Scenario Unit of the REDD+ National Coordination and the Scenario Task Force of the REDD+ National Committee, in accordance with elements presented under Component 1a. Results will be validated by the steering committee and a review by external experts.

2.5. Location of Future Deforested or Degraded Areas

2.5.1. Map Deforestation or Degradation Risks

Mapping deforestation or degradation risks will be done through historic regression of land-use changes (1990-2000-2005 or 2010) based on spatial variables impacting the location of deforestation or degradation.

Therefore, the spatial distribution of future deforestation or degradation will depend on the historic location of deforestation or degradation, taking into account some key variables (e.g.: population trends or road network development at district level) which can modify the location of future deforestation or degradation. Software such as GEOMOD, Land Change Modeler, etc. could be used.

During the MRV workshop in Brazzaville (February 2-4 2010), the Louvain Catholic University (UCL) presented some work identifying key data to map deforestation risks in the DRC. With the assumption that both countries share some characteristics, data used in DRC were listed and an attempt was made to assert the existence of those data in the Republic of the Congo:

Data used in DRC	Existing data in Congo
Map of existing infrastructures	1960 map of infrastructures. To be updated with support from CERGEC.
Density map of villages	1960 topographical map. To be updated with support from CERGEC
Altitude and slope map	Field numerical model available at CNIAFF
Hydrography	1960 topographical map. To be updated with support from CERGEC
Forest concessions	Map of concessions available at CNIAFF and updated every year
Protected areas	Map of protected areas available at CNIAFF and updated every year

This map of deforestation or degradation risks can be used to support prioritization of intervention areas, as presented under Component 2b.

2.5.2. Existing Mapping Capacities

A number of maps should be produced to locate deforestation and degradation risks: topographical map with recent data and thematic maps (for instance: map of infrastructures, population density map, etc.).

The CERGEC is the institution in charge of producing topographical and thematic maps, but its activity has been reduced and the most recent maps are from the 1960s. The CERGEC has a huge need for capacity-building, both in terms of equipment and training (geography, computer, project management, etc.)

The CNIAFF is also very active and has a team of about 40 people with mapping software training (currently used to map logging concessions). The CNIAFF also offers some training to interested ministries.

Creation of an MRV team is under consideration within CNIAFF, to include CNIAFF and CERGEC staff and in charge of producing topographical and thematic maps relevant to REDD+. Roles and creation of this team are presented under Component 4a. For Component 3, this team would be in charge of updating topographical and thematic maps (evolution of land-use changes, infrastructures, population, etc.)

2.5.3. Existing Capacities in Spatial Modelling (Map of Risks)

The Republic of the Congo does not have a structure with an expertise in spatial modelling. The work will initially require a call for project.

Terms of reference for this call for project will include production of a spatial model, an update protocol for this model, and a capacity-building plan for at least two people from the MRV team presented before.

Work will start as soon as maps on land-use history are available (i.e. end of 2011). In the meantime, efforts will focus on producing previously-described thematic maps. When estimation data on future emissions are available (i.e. mid-2012), the MRV team will internally handle the work.

2.6. Calculation of Future Emissions Taking into Account Emission Factors

Once the emissions/removals data related to various land-use changes have been produced under Component 4a, the MRV team will couple data to predicted soil-use trends and estimate future emissions/removals.

3. STUDIES, CAPACITY-BUILDING, AND BUDGET

3.1. Studies

Two studies are planned to collect information on two key variables of the national reference scenario, firewood consumption and logging. Both studies will be carried out as soon as possible, in 2010 or in the beginning of 2011, based on protocols to be identified. The objectives will be to address the following questions:

(i) Firewood: (i) what is the volume of firewood from felling? (ii) What is the volume of firewood represented by logging remnants and sawmill by-products? (iii) What are the volumes consumed in rural and urban areas? (iv)What are the predicted trends for these volumes (based on agricultural, forest, and energy policies)? The firewood study will be done jointly for Components 2a and 3 ;

(ii) Logging: (i) What volumes of wood are produced from unsustainable and/or illegal logging? What are the differences in terms of carbon stocks between the illegal and/or unsustainable logging vs. managed logging vs. managed logging using low impact logging techniques?

3.2. Capacity-Building: Creation of a REDD+ Master's degree

3.2.1. Rationale and Content

Evaluation of existing data, for mapping, spatial modelling or economic modelling, highlights the need for capacity-building, both for training and research, to create a pool of experts on these various REDD+ specific themes.

This applies to all countries of the Congo Basin. The Republic of the Congo recommends a regional approach, to promote economies of scale and experience-sharing.

Creation of a professional Master's degree on REDD+ is recommended here. The first semester will focus on the global REDD+ themes, both methodological and strategic, as well as on answers in English to call for projects. The second semester would focus on specialization on a specific theme: strategies against deforestation or degradation, mapping or spatial modelling, monitoring of carbon stocks, economic modelling, etc. The second semester will include an internship.

3.2.2. Institutional and Financial Arrangement for the Master's Program

The Master's program would be offered under the Network of Forestry and Environmental Training Institutions in Central Africa (RIFFEAC) and at the level of the Brazzaville Rural Development Institute (IDR) (a public higher education institution at the Marien NGOUABI University).

Links between the Master's program and the Climate Excellence Integrated Pole (training, research, and studies/consulting functions) planned by the DRC, will be discussed with relevant institutions from the Congo Basin. The Republic of the Congo hopes that the Research Pole planned by the DRC in Kinshasa will help structure research in the sub-region.

Lecturers would come from the sub-region and/or under the South/South cooperation (for instance, collaboration is planned on mapping and spatial modelling with Mexico, which has an extensive experience on these aspects).

Postgraduate education, funded at regional level, exists in the region, such as the National School of Waters and Forests in Libreville or the Post-graduate Training School on Integrated Tropical Forest Management in Kinshasa.

The Republic of the Congo will initiate discussions with its regional partners to leverage co-financing for this Master, which will benefit the entire sub-region. Parts of the costs are included here, under the REDD+ readiness funding for the country. Sub-regional countries would eventually contribute using their own funds.

4. WORKPLAN AND BUDGET (IN K$) OF COMPONENT 3

Table 3 - COMPONENT 3						
Main activities	**Sub-Activities**	2010	2011	2012	2013	**Total**
Identification of variables following analysis of causes	10 md on quantitative component	6				**6**
	10 md on spatial component	6				**6**
	1 national workshop	5				**5**
Collection of existing data	Operation of CNSEE and stat. services of ministries at central and devolved level (5 k$/yr)		10	10	10	**30**
Support to the REDD+ team at CNIAFF	2 m at 100% (50% in 2010), 1 eng. + 1 tech. @ 1 k$/month	12	24	24	24	**84**
	2 computers, software, reprography	4				**4**
	Equipment maintenance (1 k$/yr)		1	1	1	**3**
	Travel expenses for field validation (2 k$/yr x 2 people)	2	4	4	4	**14**
	Initial staff training	5				**5**
Implementation of approaches 1 and 2	30 md to adjust /validate models @ 600 $/md		18			**18**
	1 workshop to present quantitative results and define simulations		5			**5**
	20 md for simulations and related reports @ 600 $/md			12		**12**
	1 workshop for results presentation			5		**5**
	Travel expenses		5	5		**10**
	10 md for changes after workshops @ 600 $/md				6	**6**
	Thesis scholarship @ 0.5 k$/month		6	6	6	**18**
Getting the results of the IIASA study in Congo	20 md IIASA for Congo version		16			**16**
	Travel expenses		2			**2**
	Results presentation workshop		5			**5**
Design of the spatial model	30 md (design + update protocol) @ 600 $/md		6	12		**18**
	Travel expenses (for training)		5	5		**10**
	10 md for changes after workshops				6	**6**
Nat. and dep. validation of scenario	3 workshops (North, South, South-West) @ 5 k$/workshop				15	**15**
	1 national workshop				5	**5**
External validation of scenario	10 md of outside international expertise				8	**8**
	Travel expenses				4	**4**
Design of Master's Program*	2 men at 50% (settlement January 2011 for training starting Sep. 1)		12	12	12	**36**
Implementation of Master's Program* (logistical costs paid by Rep. of the Congo, remaining costs divided by the 6 neighboring countries)	Core curriculum (20 students x 6 months x 0.5 k$/student/month / 6 countries)		10	10	10	**30**
	Specialization (20 students x 6 months x 0.5 k$/student/month/ 6 countries)			10	10	**20**
	Internship grants (20 students x 0.2 k$/student/month)			4	4	**8**
	Office equipment, room with 20 computers and software		40		20	**60**
Total		**40**	**169**	**120**	**145**	**474**
Government			14	5	10	**29**
FCPF		**20**	**80**	**60**	**70**	**230**
UN-REDD Program		10	60	40	50	**160**
AFD		5	5	5	5	**20**
CBFF		5	10	10	10	**35**

Component 4: Design a Monitoring System

Component 4a. Emissions and Removals

1. MAIN DIRECTIONS OF THE FUTURE REDD+ MRV SYSTEM IN CONGO

1.1. A MRV System Compliant with UNFCCC, IPCC, GOFC/GOLD Recommendations

The MRV system will be developed in accordance with Decision 4/CP.15 of Copenhagen[17] on methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks.

To complement this Decision, the MRV development methodologies will follow the Good Practice Guidance for Land Use, Land-Use Change and Forestry[18], developed in 2003 by the Intergovernmental Panel on Climate Change (IPCC), as well as the 2006 IPCC Guidelines for the Agriculture, Forestry, and Other Land Use Sector[19].

The technical paper on indicative costs and technical recommendations for developing REDD+ MRV systems[20], produced in May 2009 by the UNFCCC Executive Secretary will also be used.

Finally, the MRV will also apply recommendations from the latest version of the REDD Sourcebook[21], developed by the Global Observation of Forest and Land Cover Dynamics (GOFC/GOLD) in November 2009.

1.2. A MRV System Based on IPCC Key Principles

The Republic of the Congo will strive to develop a MRV system compliant with the IPCC key principles on greenhouse gases inventory:

- Consistency: To ensure consistency of REDD+ activity measures over time, the same types of data and methods will be used for the reference year and for subsequent inventory years;
- Accuracy: The Republic of the Congo will apply methods consistent with IPCC guidance to carefully estimate emissions and removals from REDD+ activities. Uncertainties, over-estimation and under-estimation of measures will be minimized as much as possible;
- Transparency: Data, assumptions, and methodologies used by the Republic of the Congo will be clearly explained and easily accessible to facilitate third-party evaluations of results;
- Comparability: By complying with IPCC guidance, results of the MRV system in the Republic of the Congo will be comparable to those of other Parties (methods, presentation of results, category distribution, etc.);

[17] http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf
[18] http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf_languages.html
[19] http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html
[20] http://unfccc.int/resource/docs/2009/tp/01.pdf
[21] http://www.gofc-gold.uni-jena.de/redd/sourcebook/Sourcebook_Version_Nov_2009_cop15-1.pdf

- Completeness: The MRV system will include all pools and all greenhouse gases mentioned in the IPCC guidelines, if they are measurable and relevant to REDD+.

1.3. A MRV System with Realistic Ambitions

For the MRV system, the Republic of the Congo has to define emission factors in teCO2/ha/yr (with a certain level of accuracy) and activity variables in hectare (with a certain level of approach). Emission factors and activity variables will be multiplied to estimate emissions (in teCO2/year).

Therefore, a monitoring system of forest cover and forest cover trends should be recommended, as well as a monitoring system of carbon stocks and carbon stocks trends for the different forest carbon pools (aboveground and belowground biomass, litter and dead wood, and soil carbon).

Three levels of precision are defined to estimate evolution of carbon stocks. At tier 1, the IPCC default values will be used. At tier 2, country-specific data will be used. At tier 3, country-specific biomass inventories exist, with repeated measures over time. The Republic of the Congo aims at Tier 2, a good compromise between accurate results and generated costs.

There are three approaches to the representation of land in the 2006 IPCC guidelines, regardless of the targeted tier:

- Approach 1 compares areas between land-use categories at different dates, without information on spatial distribution of data and without information on the nature of conversions between land-uses;
- Approach 2 adds to Approach 1 information on areas and conversions between land-use categories. However, under this approach, location of these conversions is not spatially determined;
- Approach 3. In addition to Approach 2, data are spatially explicit and allow monitoring of land-use conversions over time. This type of information can be produced by sampling or with full cover of the national territory or a combination of both.

The Republic of the Congo targets Approach 2.

2. AVAILABLE BASES FOR DEVELOPING THE REDD+ MRV IN CONGO

Congo has undeniable assets, including past or ongoing country-wide inventories, an operational mapping service, finalized studies on biomass and deforestation rate calculation, etc.

2.1 Available Structures and Equipment

Various structures can play a role for the MRV, including:

(i) The CNIAFF, under the authority of the MDDEFE, particularly its Forest Survey and Forest Management Service and its Mapping and Photo Interpretation Service;

(ii) The CERGEC;

(iii) Forestry management units of logging companies;

(iv) The Marien NGOUABI University, the workplace of experts in biomass estimation.

These different structures have the potential needed human and material resources to support the process, subject to additional equipment and training.

2.2. Raw Mapping Data, Available or Not

Existing satellite images and maps available at CNIAFF include:

(i) LANDSAT TM: 24 scenes with a 30m resolution, for the whole country and for 2000-2003;

(ii) LANDSAT 7 ETM+: 24 ortho-rectified scenes, with a 30m resolution in multispectral and 15 m in panchromatic, for the whole country, for 2000- 2003;

(iii) ASTER: 120 scenes with a 25 m resolution, for part of the country (120 out of the 200 needed), for 2000-2003;

(iv) RADAR JERS 1: 7 scenes with a 15m resolution, for the whole country for 2005;

(v) Topographic maps: 42 IGN 1 :200000 topographic base maps, in color and black and white, for the entire country, for 1960, 1965, 1967, and 1970;

(vi) Very low-altitude aerial photography: With support from ITTO and the NGO Winrock International, the CNIAFF has initiated the "three-dimensional aerial photography" project (MADI) to monitor forest management and protected areas. There are images for the south-western part of the country.

(vii) Other mapping documents: a soil map, a geological map and a bioclimatic map exist. There is no other aerial photography besides MADI.

Other data exist but they are not directly available at CNIAFF:

(i) SPOT data: Acquisition of SPOT data (5m, 10m, 20m) will be easier starting in 2011 with the opening of a satellite station in Libreville, Gabon (better opportunities for cloudless images) and the AFD / SPOT IMAGE agreement. It will include archive data (already acquired –AFD / SPOT IMAGE agreement) and programming data (to be acquired - AFD / SPOT IMAGE agreement/ reception antenna);

(ii) CBERS data: with the Libreville reception station, it should also be possible to get data with 20m resolution from the Chinese-Brazilian satellite. There are no available archive data on Congo;

(iii) Geocover data: Circa 1990 and circa 2000, respectively from LANDSAT GeoCover TM 1990 and Landsat GeoCover ETM+ 2000 (MDA Federal (2004), Edition Mosaics Tile N-03-05.TM-EarthSat-MrSID, 1.0, USGS, Sioux Falls, South Dakota).

2.3. Processed Mapping Data: Forest Area

The Republic of the Congo applies the FAO definition for forest for its national inventory: forest is defined as land spanning more than 0.5 hectare with trees higher than 5 meters and a canopy cover of more than 10%. It does not include land that is predominantly under agricultural or urban land use.

This definition should be discussed and validated or modified for REDD. A "high" definition (cover threshold of 30 %) would give more priority to emissions from deforestation, while a "low" definition (threshold of 10 %) would take into account more emissions from degradation and less from deforestation. In principle, Congo would keep the 10% threshold.

To monitor vegetation cover, CNIAFF applies the visual on-screen interpretation of LANDSAT 7 ETM images, with cross-verification with other image sources. This method is similar to most methods applied in the region. For REDD+, mapping quality should be improved through occasional field missions, notably in areas potentially threatened by degradation, and with complex landscapes to be determined by LANDSAT images (mosaics of farmlands, forests, fallow areas, etc.).

2.4 Processed Mapping Data: Deforestation and Degradation Rate

Two studies were carried out in 2000 and 2005 in the Republic of the Congo, under the Global Forest Resources Assessment[22] (FAO FRA 2005 and 2010). There is an ongoing study in 2010 for the same assessment. These studies estimated the areas of the different forest strata and the deforestation rate. CNIAFF was a stakeholder and mapped the forest strata for 2000-2003.

In the FRA 2005 report, the estimated deforested area between 2000 and 2005 is 0.1%. The degraded area was estimated by multiplying the population growth by the cultivated surface per year and per person, resulting in a rate of 0.075%. This method cannot be applied for REDD+.

It should be noted that beyond methodology challenges to estimate degradation, there is a definitional issue. An IPCC report (2003)[23] suggests and analyzes 5 definitions of forest degradation but could not agree on one. Nevertheless, a proposed useful synthesis states that: "*Degradation is a long-term loss (persisting for x years or more) of at least y% of forest carbon stocks since time T et and not qualifying as deforestation, i.e. the conversion of "forest" land to another land-use category"*.

In Chapter 6 of the 2008 State of the Forest report for the Congo Basin[24], the gross annual deforestation rate of the Republic of the Congo is estimated at 0.07% between 1990 and 2000 and the gross annual afforestation rate at 0.05% for the same period, or an annual net deforestation of 0.02%. It should be noted that the annual net deforestation rate was estimated at 0.03% in the 2006 State of the Forest report for the Congo Basin, showing that there was a slight improvement.

These are the results of a comparison of LANDSAT TM (1990) and LANDSAT ETM+ (2000) images at regional level, on sample plots 10 km apart (or an inventory rate at 3.3%), carried out by the Louvain Catholic University (UCL) and the Joint Research Center of the European Commission(JRC-EC). Due to the cloudiness of the southern forests, these estimations are probably under-evaluated.

Finally, it should be noted that for the next Global Forest Resources Assessment (FRA 2010), FAO has launched a satellite image-based remote-sensing survey, in collaboration with UCL, South Dakota State University, JRC-EC, OFAC and the FORAF project. The main objective is the systematic and global monitoring of the distribution of forest-use trends between 1990, 2000, and 2005.

Finally, there are two forest monitoring projects under development, (i) The GAF-AG project with the support of the European Space Agency (ESA) and (ii) the World Resources Institute (WRI) project with support from CBFF.

2.5. Raw Data from Surveys on Foot

2.5.1. National Forest Survey

Partial data exist as the survey is ongoing with support from FAO. The sampling plan is based on sampling units (SU) about 25 km apart. Each SU covers 2 ha and includes 4 plots of 0.5 ha each where trees with a 10cm and higher diameter are surveyed and identified. Sampling units are geo-referenced and therefore periodically measurable. Diameter at breast height, height to the first large branch, and total height are measured.

About a hundred SU have been surveyed out of the planned 450. Work has resumed in February 2010 and about 60% of the SU will be surveyed by the end of the year. Finalizing data collection and publishing results would require 18 months. There is an ongoing discussion with the COMIFAC on a potential doubling of the SU density.

[22] http://www.fao.org/forestry/fra/2000/report/en/ et http://www.fao.org/forestry/fra/fra2005/en/
[23] http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/degradation_contents.html
[24] http://www.observatoire-comifac.net/docs/edf2008/FR/Etat-des-forets_2008-06.pdf

2.5.2. Forestry Management Surveys

They produce recent data on 11 logging concessions, or a little less than 5 million hectares of forests, mainly in the North of the country. Surveys are carried out by loggers on a large part of each concession, based on national standards. These surveys are validated first by the CNIAFF, and then by inter-ministerial consultation.

Characteristics of forestry management surveys	**Observations**
Systematic sampling with a % survey rate of forest strata surfaces	Possibility of controlling results by forest stratum
10 to 15% accuracy for 50,000 ha areas	Variation of forest carbon stocks is potentially discernible
Volumes calculated by diameter category, with a 10cm increment	Possible calculation of carbon stocks using allometric equations (see 2.6.1 below)
Volume table applicable for diameters of or above 40cm	Need to build additional tables for diameters below 40 cm
Long-term planning of annual harvests and deforestation due to creation of parks and trails	Potentially applicable to estimate emissions from degradation

Eastern flooded dense forests and mangroves are not surveyed. *Terra firma* dense forests and clear forests of northern Congo are partially surveyed.

Dense forests of the south-western part are more degraded than those found in the North, while being subject to fewer survey efforts. A comparison study between forest surveys of both areas will help determine if they should be considered two distinct forest strata.

2.6. Processed Data from Surveys on Foot: Forest Carbon Stocks

The focus is on the five following forest carbon pools: aboveground biomass, belowground biomass, dead wood, litter, and soil carbon. Biomass data exist for the entire Congo Basin (NASI *et al*. 2008; MUGNIER *et al*., 2009).

2.6.1. Aboveground Forest Carbon

There are two alternative methods. Based on the comparison of precision at regional level, none of these methods seemed preferable (MUGNIER *et al*. 2009):

(i) The CHAVE et al. (2005) allometric equation estimates the aboveground biomass stock using tree diameters or even heights. Raw data on diameters and heights can be obtained from the Congolese national forest survey;

(ii) The BROWN and LUGO (1997) equation estimates the aboveground biomass based on merchantable timber volume. Forest management surveys could provide data on wood volume. Numbers are available for each volume class and for each merchantable tree species.

Anhydrous density data per species, used in both methods, are available for several species. The biomass expansion factor used in the BROWN and LUGO equation should be estimated at sub-regional level to reach tier 2. There is no current *ad hoc* value for this factor in the Congo Basin

Ideally, in areas of coexistence of national survey data and management survey data, the level of accuracy of both methods could be compared. However, to go beyond the previously-mentioned regional scale, data on the actual biomass per hectare would be ideal, which is only possible after destruction, desiccation and weighting of vegetation material on a plot sample.

This is a lengthy and costly method with at least a 17 % error margin (PUIG *et al*. 1989). Selection between both methods will therefore be based on easy access to raw data and processing costs.

2.6.2. Soil Carbon

This pool is rarely measures in forest carbon inventories. Soil carbon is often extrapolated from aboveground forest carbon. This should apply to Congo, as there are very few national assessments of soil carbon (SCHWARTZ and NAMRI, 2002; IFO, 2010). Site studies could be performed based on a protocol to be defined, to specify the correlation between aboveground carbon and soil carbon, in order to achieve tier 2.

2.6.3. Other (Sub-) Pools: Liana, Epiphytes, Litter, Dead Wood

Other aboveground biomass sub-pools (liana, epiphytes) will be estimated using IPCC default factors. For litter, some national studies could be used (LOUMETO, 2002; GOMA-TCHIMBAKALA, and BERNHARD-REVERSAT, 2006). For deadwood, a specific study should be finalized shortly (IFO, 2010).

2.7. Processed Data from Surveys on Foot: Emissions from Degradation

There are a few data on the impacts of logging on forest carbon stocks in the Republic of the Congo (BROWN, 2005). Emissions are estimated for significant cover disturbance by degradation, without a specific threshold, based on suggestions from a 2003 IPCC technical report (see 2.4 above).

3. DEVELOPMENT AXES OF THE CONGOLESE MRV

3.1. Strengths

(i) Equipped mapping service and qualified and operational staff, subject to specific additional training on IPCC guidelines;
(ii) Satellite data are partially acquired or to be acquired shortly;
(iii) Qualified and operational staff to perform surveys on foot;
(iv) Ongoing national survey;
(v) Forestry management surveys are available for part of the dense northern forest and establishment of permanent plots in the new management plans;
(vi) Aboveground forest carbon pool stocks can be easily calculated.

3.2. Challenges

(i) National definitions to be validated for “forest” and “degradation”;
(ii) Raw data from surveys on foot to be obtained for mangroves and flooded forests;
(iii) Biomass estimation parameters (wood densities for main species, biomass expansion factor, root coefficient of expansion, etc.) and emission factors (for fires) to be identified for the Republic of the Congo;
(iv) Selection between the CHAVE et al. (2005) and the BROWN and LUGO (1997) methods to estimate aboveground carbon stocks, for the different forest strata;
(v) Selection between “stock-difference” and “gain-loss” methods to estimate emissions from degradation. The latter requires data on tree growth as well as on harvest and mortality. Therefore, the former is favored by countries that do not have such statistics;
(vi) Selection between (i) complete cover of forest areas (wall-to-wall), a conventional and appropriate approach in a national context, and (ii) sampling, which is cheaper and faster to implement. Both methods have yielded good results (Brazil, India, French Guyana, etc.). In any case, the Republic of the Congo will aim for a type 3 approach;
(vii) Recent satellite images to be obtained (maybe through an agreement with the AGEOS-TECH in Gabon to obtain images from the Libreville reception station);
(viii) Hardware and software equipment to be renewed based on planned methodologies and information volume to be processed.

3.3. Planned Cross-Cutting Actions

(i) Analyze MRV system projects at global and regional level and refine selection for the Congolese MRV;

(ii) Create a MRV-specific team inside CNIAFF;

(iii) Train existing staff and new recruits of the MRV team in IPCC, REDD Sourcebook recommendations and relevant software;

(iv) Define and approve definitions of “forest” and “degradation”. The latter will be probably based on the synthesis proposed by IPCC – see 2.4 above. Thresholds, in terms of logged volume and canopy cover rate, could be determined to define different levels of degradation;

(v) Create a quality assessment and quality control (QA/QC) system to determine accuracy of calculated figures;

(vi) Verify methods and results at national level with sub-national REDD+ projects and regional REDD+ programs.

3.4. Specific Actions Relative to Land-Use Monitoring

First, areas of the different forest strata will be evaluated for different dates (in principle, 1990, 2000, 2005 or2010), based on the selected definition of forest. This will be done by getting images for the relevant years, their ortho-rectification and removal of areas affected by cloud and haze.

Mosaics established for each date will be classified (either exhaustively or partially using a sampling process) to determine forest or other land-use changes, for the different dates. Control and field verification missions will ensure accuracy of image classification.

Reconstruction of forest and other land-use changes between 1990 and 2005 will help develop the historic reference scenario (see Component 3 above). In the future, actual forest and other land-use changes will be determined.

Planned related specific actions include:

(i) Select and approve the monitoring method for land-use change (exhaustive or sampling);

(ii) Acquire satellite images for 1990, 2000, 2005 or 2010 (or possibly, sign a convention with the AGEOS-TECH in Gabon to obtain images from the Libreville station);

(iii) Process and interpret satellite images and produce vegetation maps using a standardized and replicable method;

(iv) Conduct field verification missions;

(v) Determine forest strata and other land-use changes between various reference dates and deduct deforestation rates (or even degradation rates if remote-sensing allows distinction between forest strata).

3.5. Specific Actions Relative to Carbon Stocks Monitoring

3.5.1. Collection of Raw Data from Surveys on Foot

This implies estimating each carbon pool using field raw data (forest inventories at national level or from forestry management plans or study arrangements) or specific measures. Specific actions include:

(i) Acquire survey equipment (GPS, chainsaws, clinometer to measure tree height, relascope prism to estimate basal areas, etc.);

(ii) Finalize the national survey (75% of SU remaining);

(iii) Compile available forestry management survey data and ensure proper creation of permanent plots in FMUs;

(iv) Perform correlative analysis of forestry management surveys compared to forest strata, including density analysis, sample representativeness and accuracy, comparability and consistency of results;

(v) Compare forestry management survey results in the northern part to national survey results when available. This would validate the survey rate of the national inventory, and hence the results for flooded forests (a stratum without available survey data, similar to mangroves, but very limited in size - about 5,000 ha - and therefore not very significant at national level);

(vi) Organize, if needed, additional studies on flooded forests (to be covered in principle by the national forest survey if all goes well) and mangroves (also covered in principle, but low survey rates might not yield meaningful results as this stratum is very limited).

3.5.2. Estimation of Biomass Stocks and Monitoring of Carbon Stocks

This implies converting field raw data into biomass stocks, and then into carbon stocks. Specific actions include:

(i) Identify for the Republic of the Congo the biomass estimation parameters (wood density for the main species, biomass expansion factor, root coefficient of expansion, soil carbon, etc.) and emission factors (for fires);

(ii) Select between the CHAVE et al. (2005) and the BROWN and LUGO (1997) methods to estimate aboveground carbon stocks, based on forest strata. If the CHAVE equation is used, refine it based on local parameters (precipitations, strata, etc.);

(iii) Select between “stock-difference” and “gain-loss” methods to estimate emissions from degradation;

(iv) Evaluate biomass stocks and carbon stocks.

3.6. Specific Actions Relative to Monitoring of Emissions from Deforestation and Degradation and Removals from Afforestation or Forestry Management

(i) For deforestation or afforestation: cross-check data on land-use changes (conversion of forest into another category and vice versa) with carbon stock values associated with the initial category (before deforestation) and the final category (after deforestation) ;

(ii) For degradation (reduction of carbon stock) or sustainable forestry management (maintenance or even enhancement of carbon stocks) there is no land-use change. Therefore, there are two options: Option 1 (very optimistic): remote-sensing makes it possible to discern land-use changes between forest strata (e.g.: intact forest vs. very degraded below x% of forest cover), therefore back to case (i). Option 2 (more realistic): discerning forest strata by remote-sensing is impossible, reduction or increase of carbon stocks is estimated through surveys on foot and resulting values are multiplied by relevant areas.

4. MRV IMPLEMENTATION

4.1. Roles and Responsibilities for the MRV

The Republic of the Congo plans to create a MRV team at CNIAFF, to potentially include CERGEC staff. Under the strategic authority of the REDD+ National Committee and the technical authority of the REDD+ National Coordination, its roles will be to plan and execute MRV and QA/QC activities. This MRV team will be given the human and logistical resources needed for MRV.

4.2. Implementation Schedule

Planned actions	2010 sem 2	2011 Sem 1	2011 Sem 2	2012 sem 1	2012 Sem 2	2013 Sem 1	2013 sem 2
Cross-cutting actions							
Analyze other countries' MRV							
Create a MRV-specific team							
Train and recruit MRV staff							
Validate definitions of "forest" and "degradation"							
Establish a QA/QC system							
Verify with sub-national and regional projects							
2. Specific actions on land-use monitoring							
Choose between exhaustive and sampling methods							
Obtain images for 1990, 2000, 2005 or 2010							
Process and interpret satellite images							
Conduct field verification missions							
Determine land-use changes							
3. Specific actions on carbon stocks monitoring – Data collection from surveys on foot							
Purchase survey equipment							
Finalize national survey							
Compile forestry management survey data							
Conduct correlative analysis of FM surveys							
Compare results of FM surveys vs. national							
Conduct *ad hoc* studies on flooded forests and mangroves							
4. Specific actions on carbon stocks monitoring – Calculation and monitoring of biomass stocks							
Identify national biomass parameters							
Choose between CHAVE and BROWN and LUGO							
Choose between "stock-difference" and "gain-loss"							
Evaluate biomass stocks and carbon stocks							
5. Specific actions on monitoring of forest emissions and removals							
Estimate emissions from deforestation							
Estimate removals from afforestation and forest man.							
Estimate emissions from degradation							

4.3. Potential Studies and Capacity-Building

As the preferred approach under this MRV component is learning by doing, capacity-building activities will be directly integrated in the action plan for MRV development (see 4.2 above). Studies are also mentioned in this plan.

5. WORKPLAN AND BUDGET (IN K$) OF COMPONENT 4a

Table 4 - COMPONENT 4						
Main activities	**Sub-Activities**	**2010**	**2011**	**2012**	**2013**	**Total**
Recruitment	Unit Coordinator (1 man@ 100% @ 1k$/month)	6	12	12	12	**42**
	Development of methodology, data processing (3 engineers @ 1 k$/month)	18	36	36	36	**126**
	Computer management, database and archives (1 technician @ 0,5 k$/month)	3	6	6	6	**21**
	Field control of forest surveys (2 drivers @ 0,3 k$/month)	4	8	8	8	**28**
Equipment	Office, electricity, Internet	1	1	1	1	**4**
	Purchase and maintenance of field equipment	30	3	3	3	**39**
	4 computers+software, printers, supplies	10	1	1	1	**13**
	Purchase 1 car in 2010 (30 k$) + fuel/maintenance (15 k$/yr)	30	15	15	15	**75**
MRV Training	Travel expenses (plane tickets, per diem, visa) - lump sum 10 k$/yr	5	10	10	10	**35**
International TA	Fees, international flights, travel expenses - lump sum 10 k$/yr	5	10	10	10	**35**
Additional studies	Field missions, analyses soil, litter, wood density, etc.	50				**50**
Field	IFN, thematic and mapping control. - lump sum 40 k$/yr	20	40	40	40	**140**
QA/QC	External audit - lump sum 10 k$/yr	10	20	20	20	**70**
Miscellaneous	10 % of budget	20	16	16	16	**68**
Total		**212**	**178**	**178**	**178**	**746**
Government		2	8	8	8	**26**
FCPF		**100**	**100**	**100**	**100**	**400**
UN-REDD Program		50	30	30	30	**140**
AFD		20	10	10	10	**50**
CBFF		40	30	30	30	**130**

Component 4b. Other Benefits and Impacts

In addition to forest carbon, the MRV system of Congo will include principles, criteria, indicators, and verifiers on:

(i) Rural income in areas directly affected by REDD+ options and activities;

(ii) Conservation of biodiversity and other environmental benefits (notably water and soils);

(iii) REDD+ strategy governance (operation of national arrangements described under Component 1a and implementation framework described under Component 2c)

(iv) Institutional and economic impacts of the REDD+ strategy in the forest sector.

Development of this MRV system with regards to other benefits and impacts will be based on:

(i) Consultations to be held in accordance with Component 1b plans ;

(ii) The SESA implemented in accordance with Component 2d plans;

(iii) The REDD+ National Registry described under Components 1a and 2c;

(iv) Activities of the independent Forest Observatory, which should be supported under the REDD+ strategy, as explained under Component 2b;

(v) The national forest sector observation structures – including OFAC et FORAF – consistent with any related regional approach to be decided by COMIFAC (with potential economies of scale for the 10 countries).

The complete development of this MRV system will take place as early as the beginning of 2011. Development budget is included in the budget for Component 2d.

Component 5: Schedule and Budget

GRAND TOTAL	**1034**	**3114**	**2105**	**954**	**7207**	**100%**
Government	**29**	**124**	**65**	**44**	**262**	**4%**
FCPF	**530**	**1280**	**970**	**455**	**3235**	**45%**
UN-REDD Program	**290**	**980**	**615**	**290**	**2175**	**30%**
AFD	**60**	**160**	**85**	**50**	**355**	**5%**
CBFF	**125**	**570**	**420**	**115**	**1230**	**17%**

Table 1a - COMPONENT 1A

Main activities	Sub-Activities	2010	2011	2012	2013	Total
Organization and Operation of the REDD+ National Committee	Establishment	2				**2**
	Committee Meetings (5 k$/meeting x 4 meetings/year)	10	20	20	20	**70**
	Equipment and Operation	2	2	2	2	**8**
	Capacity-building and Technical Assistance (10 k$/yr)	5	10	10	10	**35**
Organization and Operation of REDD+ Departmental Committees	Establishment (2k$ x 12CR-REDD+)	24				**24**
	Committees Meetings (2 k$/meeting x 4 meetings / yr x 12 CD-REDD+)	48	96	96	96	**336**
	Equipment and Operation (2 k$/yr x 12 CD-REDD+)	12	24	24	24	**84**
	Capacity-Building / Technical Assistance (4 k$/yr x 12 CD-REDD+)	24	48	48	48	**168**
Organization and Operation of the REDD+ National Coordination	Establishment	2				**2**
	Equipment and Operation (10 k$/month)	60	120	120	120	**420**
	Capacity-Building / Technical Assistance (10 k$/an)	5	10	10	10	**35**
Organization and Operation of the REDD+ Fund (2012-2013) and the REDD+ Registry (2010-2013)	Establishment (2 k$/structure)	2		2		**4**
	Salary 2 people (1 k$/month) + equipment/operation (1 k$/month)		3	3	3	**9**
	Capacity-Building / Technical Assistance (1 k$/yr)	1	1	1	1	**4**
Total		**197**	**334**	**336**	**334**	**1201**
Government		2	9	11	9	**31**
(FCPF)		**100**	**150**	**150**	**150**	**550**
UN-REDD Program		65	100	100	100	**365**
(AFD)			15	15	15	**45**
Congo Basin Forest Fund (CBFF)		30	60	60	60	**210**

Table 1b - COMPONENT 1B

Main Activities	Sub-Activities	2010	2011	2012	2013	Total
Human Resources	Salaries (1 man @ 50% in 2010 et 13, 3 men @ 100% in 2011 et 12, @ 1 k$/month)	6	36	36	6	**84**
	Per diem + travel fees (lump sum 10 k$/yr)	5	10	10	10	**35**
Equipment	Purchase 1 car in 2010 (30 k$) + fuel/maintenance (15 k$/yr)	30	15	15	15	**75**
	Equipment (4 computers, printer, copy machine, scanner, TV/recorder/DVD, movie camera, video projector)	30				**30**
Communication Material	Design	10				**10**
	Copies (Lump sum 10 k$ /Department)		120			**120**
Establishment of Platforms	12 Departments x 3 platforms @ 1k$ /platform		36			**36**
Platforms Capacity-Building and Meetings	12 Departments x 3 platforms @ 2k$ /platform/yr x 3 years	36	72	72	72	**252**
Training of Trainers	Consultants (2 consultants, 1 inter. + 1 nat.)		30			**30**
	Workshops (2 workshops/Department x 12 Departments x 5 k$/workshop)		60	60		**120**
Consultations	Lump sum of 10 k$/Department/yr	60	120	120	120	**420**
Visibility Actions	Radio or TV programs, articles in national or international media, special events (lump sum of 30 k$/yr)	15	30	30	30	**105**
Total		**192**	**529**	**343**	**253**	**1317**
Government		2	14	8	8	**32**
FCPF		**100**	**210**	**150**	**120**	**580**
UN-REDD Program		80	190	120	100	**490**
AFD			15	15	15	**45**
CBFF		10	100	50	10	**170**

Table 2a - COMPONENT 2A

Main activities	Sub-Activities	2010	2011	2012	2013	Total
5.1. Agriculture Study	25 md x 4 men (600 $/md)	60				**60**
	National validation workshop (jointly with fuelwood study)	5				**5**
5.2. Fuelwood Study	25 md x 4 men	60				**60**
	National workshop (jointly with agriculture study)	5				**5**
5.3. Infrastructure Study	15 md x 2 men		30			**30**
	National workshop (jointly with mining/oil studies)		5			**5**
5.4. Mining/Oil Studies	15 md x 3 men		30			**30**
	National workshop (jointly with infrastructure study)		5			**5**
5.5. Support logging monitoring	Annual lump sum for the independent Observatory (20 k$/year)	10	20	20	20	**70**
Total		**140**	**90**	**20**	**20**	**270**
Government		5	5	5	5	**20**
FCPF		**80**	**40**	**10**	**10**	**140**
UN-REDD Program		40	30	5	5	**80**
AFD		5	5			**10**
CBFF		10	10			**20**

Table 2b - COMPONENT 2B

Main Activities	Sub-Activities	2010	2011	2012	2013	Total
Pilot Projects	Definition of needs and opportunities - (national consultants)	10				10
	Definition of procedures - (national consultants)	5				5
	Call for proposals - (national and international)	20				20
	Sub-national pilot projects (100 k$/project)		1,600	800		2400
Specific Studies	Identification of REDD+ priority areas - (International and national experts)	15				15
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 1 (tenure) - (National and international experts)	25				25
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 2 (forest management) - (National and international experts)	30				30
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 3 (agriculture) - (National and international experts)	30				30
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 4 (fuelwood) - (National and international experts)	25				25
	Assessment of costs, benefits, feasibility, sustainability and leakage of Option 5 (other sectors) - (National and international experts)	20				20
Finalization of REDD+ National Strategy	Review of results of specific studies based on strategy options - (National experts)		10			10
	At the level of pilot projects, review of experimentation based on options - (National and international experts)			30		30
	Finalization of the REDD+ national strategy - (National experts, national and departmental workshops)			90		90
	Report-out of the REDD+ national strategy- (National experts, workshop, communication)			35		35
Total		**180**	**1610**	**955**		**2745**
Government		10	60	15		85
FCPF		**100**	**600**	**400**		1100
UN-REDD Program		30	500	300		830
AFD		20	100	30		150
CBFF		20	350	260		630

Table 2c - COMPONENT 2C

Main activities	Sub-Activities	2010	2011	2012	2013	Total
Study 1 - Develop guidance for REDD+ pilot projects	Nat. consultation (1 nat. consultant)	3				3
	National validation workshop (idem)	5				5
	Guide (1 nat.consultant. 1int.)	20				20
	Capacity-building (1 nat.consultant)	5				5
Study 2 - Develop a REDD+ law and enacting regulations	Nat. consultation / Bibliography / review of regulations (1 nat. consultant)		5			5
	Proposals (1 nat. consultant and1 int.)		15			15
	Support to bill development / presentation (nat. consultant + 1 int.)		20			20
	Departmental workshops (pre-validation)		15			15
	National validation workshop		5			5
	Parliam. capacity-building(2 nat.consultants)			10		10
	Adoption of law and enacting regulations					0
	Capacity-building on REDD+ Law (2 national consultants)			5		5
Study 3 - Develop a REDD+ Fund	National consultation (1 nat.consultant)			5		5
	Bibliography study (1 national consultant)			3		3
	Analysis Forest + Env. Fund F+ recomm. for REDD+ Fund (2 nat.consultants + 1 int.)			25		25
	Departmental workshops (pre-validation)			10		10
	National validation workshop			5		5
	Promulgation of creation decree					0
	Training of managers (1 nat.consultant)			10		10
Study 4 - Develop implementation instruments	National consultation (1 nat consultant)			3		3
	Biblio. study (1 national consultant)			3		3
	Departmental workshops (pre-validation)			10		10
	National validation workshop			5		5
	Field awareness (NGOs and assoc.)			10		10
	Training project promoters (1 consulting firm)			10		10
Total		**33**	**60**	**114**	**0**	**207**
Government		3	5	9		17
FCPF		**10**	**30**	**80**		120
UN-REDD Program		10	15	15		40
AFD		5	5	5		15
CBFF		5	5	5		15

Table 2d - COMPONENT 2D						
Main activities	**Sub-Activities**	**2010**	**2011**	**2012**	**2013**	**Total**
Creation and implementation of a SESA management framework	At MDDEFE level (1 international consultant + 2 local consultants)	5				**5**
	At ANE level (2 ANE local consultants @ 100% x 1 k$/month)		24			**24**
Capacity-building of players	Develop appropriate training tools (1 international consultant + 1 local consultant)	5				**5**
	Capacity-building workshops at central level (1 international consultant , 2 training sessions)	5				**5**
	Capacity-building workshops at departmental level (national consultants, 5 training sessions)	25				**25**
Implementation of the SESA	Development of intervention program (1 international consultant , national consulting firm)		5			**5**
	Establish the initial situation without REDD+ (1 international consultant, national consulting firm)		10			**10**
	Analysis of the legal/institutional framework to develop the SESA (1 international consultant ,national consulting firm)		5			**5**
	Assessment of env. and. soc. impacts of REDD+ strategy options (1 international consultant , national consulting firm)		15			**15**
	Assessment of env. and. soc. impacts of implementation framework (consulting firms, National Coordination)		10			**10**
	Prioritize/ spatialize potential environmental and social impacts (1 international consultant ,national consulting firm)		10			**10**
	Socio-environmental management framework with mitigation/compensation measures (1 international consultant , national consulting firm)		10			**10**
SESA evaluation	Evaluation by the MDDEFE and the ANE (MDDEFE and ANE executives, REDD+ National Coordination)		5	5		**10**
	Presentation of the SESA and evaluation by stakeholders (REDD+ National Committee and Coordination)		5	5		**10**
	Communication on the evaluation of the SESA		5	5		**10**
Sustainable monitoring of impacts and benefits (MRV 4b)	Creation of monitoring system for impacts/benefits. - MRV 4b (national and international experts)		40			**40**
	Implementation of MRV 4b (2 ANE consultants @ 50% x 1 k$/month)			12	12	**24**
	Design/implementation of corrective actions (2 ANE consultants @ 50% x 1 k$/month)			12	12	**24**
Total		**40**	**144**	**39**	**24**	**247**
Government		5	9	4	4	**22**
FCPF		**20**	**70**	**20**	**5**	**115**
UN-REDD Program		**5**	**55**	**5**	**5**	**70**
AFD		**5**	**5**	**5**	**5**	**20**
CBFF		**5**	**5**	**5**	**5**	**20**

Table 3 - COMPONENT 3

Main activities	Sub-Activities	2010	2011	2012	2013	Total
Identification of variables following analysis of causes	10 md on quantitative component	6				**6**
	10 md on spatial component	6				**6**
	1 national workshop	5				**5**
Collection of existing data	Operation of CNSEE and stat. services of ministries at central and devolved level (5 k$/yr)		10	10	10	**30**
Support to the REDD+ team at CNIAFF	2 m at 100% (50% in 2010), 1 eng. + 1 tech. @ 1 k$/month	12	24	24	24	**84**
	2 computers, software, reprography	4				**4**
	Equipment maintenance (1 k$/yr)		1	1	1	**3**
	Travel expenses for field validation (2 k$/yr x 2 people)	2	4	4	4	**14**
	Initial staff training	5				**5**
Implementation of approaches 1 and 2	30 md to adjust /validate models @ 600 $/md		18			**18**
	1 workshop to present quantitative results and define simulations		5			**5**
	20 md for simulations and related reports @ 600 $/md			12		**12**
	1 workshop for results presentation			5		**5**
	Travel expenses		5	5		**10**
	10 md for changes after workshops @ 600 $/md				6	**6**
	Thesis scholarship @ 0.5 k$/month		6	6	6	**18**
Getting the results of the IIASA study in Congo	20 md IIASA for Congo version		16			**16**
	Travel expenses		2			**2**
	Results presentation workshop		5			**5**
Design of the spatial model	30 md (design + update protocol) @ 600 $/md		6	12		**18**
	Travel expenses (for training)		5	5		**10**
	10 md for changes after workshops				6	**6**
Nat. and dep. validation of scenario	3 workshops (North, South, South-West) @ 5 k$/workshop				15	**15**
	1 national workshop				5	**5**
External validation of scenario	10 md of outside international expertise				8	**8**
	Travel expenses				4	**4**
Design of Master's Program*	2 men at 50% (settlement January 2011 for training starting Sep. 1)		12	12	12	**36**
Implementation of Master's Program* (logistical costs paid by Rep. of the Congo, remaining costs divided by the 6 neighboring countries)	Core curriculum (20 students x 6 months x 0.5 k$/student/month / 6 countries)		10	10	10	**30**
	Specialization (20 students x 6 months x 0.5 k$/student/month/ 6 countries)			10	10	**20**
	Internship grants (20 students x 0.2 k$/student/month)			4	4	**8**
	Office equipment, room with 20 computers and software		40		20	**60**
Total		**40**	**169**	**120**	**145**	**474**
Government			14	5	10	**29**
FCPF		**20**	**80**	**60**	**70**	**230**
UN-REDD Program		10	60	40	50	**160**
AFD		5	5	5	5	**20**
CBFF		5	10	10	10	**35**

Table 4 - COMPONENT 4

Main activities	Sub-Activities	2010	2011	2012	2013	Total
Recruitment	Unit Coordinator (1 man@ 100% @ 1k$/month)	6	12	12	12	**42**
	Development of methodology, data processing (3 engineers @ 1 k$/month)	18	36	36	36	**126**
	Computer management, database and archives (1 technician @ 0,5 k$/month)	3	6	6	6	**21**
	Field control of forest surveys (2 drivers @ 0,3 k$/month)	4	8	8	8	**28**
Equipment	Office, electricity, Internet	1	1	1	1	**4**
	Purchase and maintenance of field equipment	30	3	3	3	**39**
	4 computers+software, printers, supplies	10	1	1	1	**13**
	Purchase 1 car in 2010 (30 k$) + fuel/maintenance (15 k$/yr)	30	15	15	15	**75**
MRV Training	Travel expenses (plane tickets, per diem, visa) - lump sum 10 k$/yr	5	10	10	10	**35**
International TA	Fees, international flights, travel expenses - lump sum 10 k$/yr	5	10	10	10	**35**
Additional studies	Field missions, analyses soil, litter, wood density, etc.	50				**50**
Field	IFN, thematic and mapping control. - lump sum 40 k$/yr	20	40	40	40	**140**
QA/QC	External audit - lump sum 10 k$/yr	10	20	20	20	**70**
Miscellaneous	10 % of budget	20	16	16	16	**68**
Total		**212**	**178**	**178**	**178**	**746**
Government		2	8	8	8	**26**
FCPF		**100**	**100**	**100**	**100**	**400**
UN-REDD Program		50	30	30	30	**140**
AFD		20	10	10	10	**50**
CBFF		40	30	30	30	**130**

Component 6: Design a Monitoring and Evaluation Framework

Table 1a - COMPONENT 1A

Main activities	Sub-activities	2010	2011	2012	2013	Process or product indicator
Organization and Operation of the REDD+ National Committee	Establishment					Signed Ministerial Decree
	Committee Meetings					At least 1 quarterly report with decision monitoring
	Equipment and Operation					Equipment purchased and operational
	Capacity-building and Technical Assistance					Gradual training of representatives
Organization and Operation of REDD+ Departmental Committees	Establishment					Signed prefectural decision (if relevant!)
	Committees Meetings					At least 1 quarterly report by CD-REDD+
	Equipment and Operation					Equipment purchased and operational
	Capacity-Building / Technical Assistance					Gradual training of representatives
Organization and Operation of the REDD+ National Coordination	Establishment					signed MDDEFE decision (appointment of agents)
	Equipment and Operation					Equipment purchased and operational
	Capacity-Building / Technical Assistance					Agents are rapidly trained and receive continuous information
Organization and Operation of the REDD+ Fund (2012-2013) and the REDD+ Registry (2010-2013)	Establishment Registry (2010) and Fund (2011)					Interministerial decisions (2010,then 2012)
	Recruitment 2 people + Equipment and Operation					Recruited and operational agents
	Capacity-Building / Technical Assistance					Gradual training of representatives

Table 1b - COMPONENT 1B

Main activities	Sub-activities	2010	2011	2012	2013	Process or product indicator
Human Resources	Recruitment 1 agent @ 50% in 2010 and 13, 3 agents @ 100% in 2011 and 12					Consultation experts recruited and operational
	Field missions					Mission report with success indicators with green light
Equipment	Purchase 1 car in 2010					Purchased/maintained car, for consultations
	Equipment (4 computers, printer, copy machine, scanner, TV/recorder/DVD, etc.)					Purchased/maintained equipment, for consultations
Communication material	Design					Ready and adapted material
	Reproduction					Reproduced and distributed material in the 12 dpts
Creation of platforms	12 Departments x 3 platforms					First meeting report and regular meeting reports
Capacity-Building	12 Departments x 3 platforms					Gradual training of representatives
Training of trainers	Training design					Defined training plan and schedule for trainers
	Workshops (2 / Department)					Workshop reports and educational report for training
Consultations	Target audience, content and material adapted based on departmental context					Quarterly reports of CR-REDD+ and platforms
Visibility actions	Radio/TV program, articles nat. or internat. media, special events					Produced material and events

Table 2a - COMPONENT 2A

Main activities	Sub-activities	2010	2011	2012	2013	Process or product indicator
5.1. Agriculture Study	Study itself					Draft report
	National validation workshop (jointly with fuelwood study)					Approved report
5.2. Fuelwood Study	Study itself					Draft report
	National workshop (jointly with agriculture study)					Approved report
5.3. Infrastructure Study	Study itself					Draft report
	National workshop (jointly with mining/oil studies)					Approved report
5.4. Mining/Oil Studies	Study itself					Draft report
	National workshop (jointly with infrastructure study)					Approved report
5.5. Support logging monitoring	Support to the independent Observatory (20 k$/yr)					Published independent reports

Table 2b - COMPONENT 2B

Main activities	Sub-activities	2010	2011	2012	2013	Process or product indicator
Pilot projects	Definition of call for proposals procedures					Procedures decided by CN-REDD+
	Call for proposals					Large dissemination of call for proposals
	Sub-national pilot projects					Large number of proposals and 16 projects in 2011, 8 in 2012
Specific studies	Definition of REDD+ priority areas					Approved study report
	Assessment of costs, benefits, feasibility, sustainability and leakage: tenure option					Approved study report
	Assessment of costs, benefits, feasibility, sustainability and leakage: forest option					Approved study report
	Assessment of costs, benefits, feasibility, sustainability and leakage: agriculture option					Approved study report
	Assessment of costs, benefits, feasibility, sustainability and leakage: fuelwood option					Approved study report
	Assessment of costs, benefits, feasibility, sustainability and leakage: other sectors option					Approved study report
Finalization of REDD+ National Strategy	Review of results of specific studies based on strategy options					Approved study report
	At the level of pilot projects, review of experimentation based on options					Approved study report
	Finalization of the REDD+ national strategy					Draft REDD+ strategy updated
	Report-out of the REDD+ national strategy					Report/minutes proving that REDD+ strategy approved in workshop

Table 2c - COMPONENT 2C

Main activities	Sub-activities	2010	2011	2012	2013	Process or product indicator
Study 1 - Develop guidance for REDD+ pilot projects	Nat. consultation					Bibliography report
	National validation workshop					Workshop report
	Guide					Finalized guide
	Capacity-building					Educational material guide training
Study 2 - Develop a REDD+ law and enacting regulations	Nat. consultation / Bibliography / review of regulations					Report on consultations held
	Proposals					Written proposals
	Support to bill development / presentation					Bill
	Departmental workshops (pre-validation)					Regional workshops reports
	National validation workshop					National workshop report
	Parliam. capacity-building					Reports of Senate and National Assembly hearings
	Adoption of law and enacting regulations					Bill and enacting regulations
	Capacity-building on REDD+ Law					Educational report for training on REDD+ law
Study 3 - Develop a REDD+ Fund	National consultation					Reports on consultations held
	Bibliography					Bibliography report
	Analysis Forest + Env. Fund F+ recomm. for REDD+ Fund					Recommendations report for the REDD+ Fund
	Departmental workshops (pre-validation)					Regional workshops reports
	National validation workshop					National workshop report
	Promulgation of creation decree					Decree
	Training of managers					Educational report for training on REDD+ Fund
Study 4 - Develop implementation instruments	National consultation					Reports on consultations held
	Bibliography study					Bibliography report
	Departmental workshops					Regional workshops reports
	National validation workshop					National workshop report
	Field awareness					Report on consultations held
	Training project developers					Educational report for training on incentives

Table 2d - COMPONENT 2D

Main activities	Sub-activities	2010	2011	2012	2013	Process or product indicator
Creation and implementation of a SESA management framework	At MDDEFE level					SESA experts identified and operational
	At ANE level					SESA experts identified and operational
Capacity-building of players	Develop appropriate training tools					Available training tools
	Capacity-building workshops at central level					National workshop report
	Capacity-building workshops at departmental level					Department workshops reports
SESA Implementation	Development of intervention program					Program defined and approved by the CN-REDD+
	Establish the initial situation without REDD+					SESA draft report before REDD+
	Analysis of the legal/institutional framework to develop the SESA					SESA draft report-legal/institutional framework component
	Assessment of env. and. soc. impacts of REDD+ strategy options					SESA draft report -strategy options component
	Assessment of env. and. soc. impacts of implementation framework					SESA draft report - socio-environmental impacts component
	Prioritize/ spatialize potential environmental and social impacts					SESA draft report - quantification/spatialization component
	Socio-environmental management framework with mitigation/compensation measures					SESA draft report -mitigation measures component
SESA Evaluation	Evaluation by the MDDEFE and the ANE					Review report by MDDEFE and ANE
	Presentation of the SESA and evaluation by stakeholders					Review report by CN-REDD+ and REDD+ Coordination
	Communication on the evaluation of the SESA					Review report
Sustainable monitoring of impacts and benefits (MRV 4b)	Creation of monitoring system for impacts/benefits. - MRV 4b					Report presenting the MRV on impacts/benefits
	Implementation of MRV 4b					MRV implementation on impacts/benefits
	Design/implementation of corrective actions					Mitigation measures proposed/approved by CN-REDD+

Table 3 - COMPONENT 3

Main activities	Sub-activities	2010	2011	2012	2013	Process or product indicator
Identification of variables following analysis of causes	10 md on quantitative component					Study report
	10 md on spatial component					Study report
	1 national workshop					National workshop report
Collection of existing data	Operation of CNSEE and stat. services of ministries at central and devolved level					Data sets available
Support to the REDD+ team at CNIAFF	2 m at 100% (50% in 2010)					Scenario experts hired and operational
	2 computers, software, reprography					REDD+ team equipped and operational
	Travel expenses for field validation					Field missions report
	Initial staff training					Educational report for reference scenario training
Implementation of approaches 1 and 2	30 md to adjust /validate models					Adjusted models
	1 workshop to present quantitative results and define simulations					National workshop report
	20 md for simulations and related reports					Modelling draft report
	1 workshop for results presentation					National workshop report
	10 md for changes after workshops					Approved modelling report
	1 thesis scholarship					PhD student operational
Getting the results of the IIASA study in Congo	0 md IIASA for Congo version					Regional model disaggregated at national level
	Results presentation workshop					National workshop report
Design of the spatial model	30 md (design + update protocol)					Spatial modelling draft report
	10 md for changes after workshops					Spatial modelling report validated
Nat. and dep. validation of scenario	3 workshops (North, South, South-West)					Department workshops reports
	1 national workshop					National workshop report
External validation of scenario	10 md of outside international expertise					External validation report
Design of Master's Program*	2 men at 50% (settlement January 2011 for training starting Sep. 1)					Finalized training program
Implementation of Master's Program* (logistical costs paid by Rep. of the Congo, remaining costs divided by the 6 neighboring countries)	Core curriculum					20 students in the core curriculum
	Specialization					20 students in the specialty program
	Internship grants					20 students do an internship
	Office equipment, room with 20 computers and software					20 students with adequate equipment

Table 4 - COMPONENT 4

Main activities	Sub-activities	2010	2011	2012	2013	Process or product indicator
Recruitment	Unit Coordinator					Unit Head hired and operational
	Development of methodology, data processing					Experts hired and data processed
	Computer management, database and archives					Experts hired and data archived
	Field control of forest surveys					Field verification mission report
Equipment	Purchase and maintenance of field equipment					Equipment purchased
	4 computers+software, printers, supplies					Equipment purchased and maintained
	Purchase 1 car in 2010					Car purchased/maintained, for consultations
MRV training	Travel expenses (plane tickets, per diem, visa)					Mission report on MRV international workshops
International TA	Fees, international flights, travel expenses					Technical assistance report
Additional studies	Field missions, analyses soil, litter, wood density, etc.					Reports on the different studies
Field	IFN, thematic and mapping control					Field missions reports
QA/QC	External audit					QA/QC report

Annexes

Annexe 1b-1 : Consultations des parties prenantes tenues à ce jour sur la RPP

Type de rencontre, date et lieu	Sujets abordés et points saillants
Consultations faites sur la REDD+ et le RPP en général	
Atelier de lancement du processus d'élaboration du RPP, le 20 janvier 2010 à Brazzaville **(voir compte rendu écrit infra)**	**information des parties prenantes sur l'engagement du pays dans le processus REDD+** **Sensibilisation sur les enjeux du processus REDD+ au niveau international** **Collecte des attentes des parties prenantes dans le cadre du processus REDD+**
Atelier départemental à Kinkala dans le Département du Pool, les 12 et 13 mars 2010 **(voir compte rendu écrit infra)**	**Information sur le processus REDD+ au niveau international et ses enjeux** **Information sur le niveau de préparation du RPP de la République du Congo** **Consultation en sous groupes des parties prenantes sur :** o **le cadre institutionnel de la REDD+ en préparation** o **le plan de consultation et de gestion participative** o **les causes apparentes et sous jacente de la dégradation et de la déforestation au niveau local**
Atelier départemental des 16 et 17 mars 2010 à Ouesso dans le Département de la Sangha **(voir compte rendu écrit infra)**	**Information sur le processus REDD+ au niveau international et ses enjeux** **Information sur le niveau de préparation du RPP de la République du Congo** **Consultation en sous groupes des parties prenantes sur :** o **le cadre institutionnel de la REDD+ en préparation** o **le plan de consultation et de gestion participative** o **les causes apparentes et sous jacente de la dégradation et de la déforestation au niveau local**
Atelier départemental à Pointe Noire dans le Département de Pointe Noire, les 29 et 30 mars 2010 **(voir compte rendu écrit infra)**	**Présentation des résultats préliminaires du plan de préparation de la République du Congo à la REDD+** **Expérience de la REDD+ dans d'autres pays (Madagascar, RDC, Suriname)** **Importance du reboisement dans la REDD+** **Consultation des parties prenantes sur toutes les drafts de composantes du RPP** **Cadre de la mise en œuvre de la REDD+ en République du Congo** **Causes actuelles et futures de la déforestation et stratégie nationale REDD+** **Plan de consultations**
Visioconférence avec la BM, le 9 avril 2010	**Appréciation du niveau de préparation des différentes composantes de la RPP**

Type de rencontre, date et lieu	Sujets abordés et points saillants
Consultations faites sur la composante 1a	
Lambert IMBALO, Directeur de Cabinet au MDDEFE	Organisation et fonctionnement des organes de gestion REDD+ en République du Congo
Rosalie MATONDO, Directrice du Service national du reboisement au MDDEFE	Idem
Simon MABIKA, Ministère des affaires foncières et du domaine public	Idem
Bernard GOULOU, Conseiller à la politique agricole et à l'innovation technologique au Ministère de l'agriculture et de l'élevage	Idem
Lorenzo ORIOLI, ENI Congo	Idem
Roch Euloge NZOBO, Observatoire congolais des droits de l'Homme (OCDH)	Idem
Sylvie Nadège MFOUTOU BANGA, Organisation pour le développement et les droits humains au Congo (ODDHC)	Idem
Christian LOUBAKI, Présidence de la République	Idem
Jean-Pierre MACKITA, CONADEC	Idem
Havene Peut-être QUERET-MOUSSOUNDA, Chef du bureau de la prévention au Ministère des hydrocarbures	Idem
André SENGUELA, Ministère des mines et de la géologie	Idem
Donatien N'ZALA, Directeur général de l'économie forestière au MDDEFE	Idem
Alexis MINGA, Directeur général de l'environnement au MDDEFE	Idem
Léonard MOUBOUNDOU, Cabinet de la Présidence de la République	Idem
Joël LOUMETA, Université Marien NGOUABI	Idem
Bouya IBEAO, Vice-président de CARESCO	Idem
Anaclet M'VILA, ENI Congo	Idem
Orioli Lorenzo, ENI Congo	Idem

Antoinette NKABI, Cabinet du MDDEFE	**Idem**
Marguerite HOMB, Espace créateurs	**Idem**
Gervais LOUTINA, Société TRABEC	**Idem**
Adelaïde ITOUA, Attachée au Cabinet MDDEFE	**Idem**
Jean-Pierre KAMPE, Directeur du Centre régional de recherche agroforestière d'Oyo	**Idem**
Marie-Joseph SAMBA-KIMBATA, Université Marien N'gouabi	**Idem**

Type de rencontre, date et lieu	**Sujets abordés et points saillants**
Consultations faites sur la composante 1b	
Plate forme de la société civile sur la gestion durable des forêts, mis en place à la faveur de l'APV FLEGT, le 23 janvier 2010 à Brazzaville	**Sensibilisation sur la REDD+ et ses enjeux et la nécessité de l'implication de la Société Civile**
Réunion avec le Réseau national des peuples autochtones du Congo (RENAPAC), le 11 mars 2010 à Brazzaville au siège du RENAPAC	**Sensibilisation sur la REDD et ses enjeux et la nécessité de l'implication de la Société Civile**
Les trois ateliers départementaux ci-dessus dans le cadre des consultations générales	**Validation de l'approche du plan de consultation pour les peupless autochtones. Ll'Administration publique, les Communauté, les Elus, les représentants du secteur privé ont tous approuvé le plan de consultation proposé**

Type de rencontre, date et lieu	**Sujets abordés et points saillants**
Consultations faites sur la composante 2c	
Gilbert MASSOUEMA, Directeur de la coopération aux affaires foncières, Ministère des affaires foncières et du domaine public	**L'immatriculation des terres rurales, le conflit droit foncier écrit et coutumier, la nature des crédits carbone, le rôle de l'Etat, l'approche intégrée dans la REDD+**
Francis BEMBA, Conseiller au domaine public, Ministère des affaires foncières et du domaine public	**idem**
N. WATHA-NDOUDY, Enseignant chercheur, Faculté des sciences, Université Marien NGOUABI	**Le foncier au Congo, droit écrit et droit coutumier, risques liés au foncier en République du Congo**

Marcel LEOUOBO, Député national et Conseiller départemental du Niari	**Statut des crédits carbone, distribution des revenus, rôle de l'Etat dans les transactions**
Marcel MOUTOU, Magistrat, Attaché administratif et juridique du MDDEFE	**idem**
Bienvenu Parfait MATSALA, juriste, Président de l'Observatoire congolais du droit de l'envt	**idem**
Virgile SAFOULA Responsable NGO EDIC	**idem**
Guy Roger BAMBI, Directeur des études au Lycée technique agricole	**Impact environnementaux des systèmes agricoles-changement climatiques**
Héliodore MASSAMBA, Directeur de la commercialisation, Ministère de l'agriculture	**Impacts de la déforestation pour la mise en place des palmeraies**
Gaspard NGOMA et Bernard OTIA, Direction de l'architecture, Ministère de l'urbanisme	**Impacts environnementaux des grands travaux sur les écosystèmes**
Emile KAMI, Chef de l'Herbarum national	**Traitement de la question de la réduction de la déforestation par la recherche**
Félix NTSIANGANA, Proviseur du Lycée technique agricole	**Impacts environnementaux des systèmes agricoles - changements climatiques**

Type de rencontre, date et lieu	Sujets abordés et points saillants
Consultations faites sur la composante 3	
Raphaël MOKOKO, Directeur général du plan et du développement, Ministère du plan	**Modalités pratiques d'élaboration du PRSP et des autres plans et programmes de développement** **Etudes et analyses prospectives déjà menées au sein de la direction générale**
Dominique KIMPOUNI, Directeur de la coordination et de l'harmonisation des statistiques à la DG-CNSEE	**Analyse critique des modalités de collecte de l'information statistique; institutions responsables, méthodologies de collecte, données collectées** **Présentation du plan national de réforme du système statistique**
Guecko OBAMBI, Directeur central du CNSEE	**Données collectées dans le cadre de l'enquête nationale sur la pauvreté**
Etaki Wa DZON, Chef de service modélisation macroéconomique au Secrétariat du PRSP	**Présentation des modèles RMSX et Macro Congo** **Discussion autour de leur intérêt dans le cadre du REDD+**
Hervé DIATA, Professeur, Doyen de la Faculté des Sciences Economiques, Université Marien NGOUABI	**Identification des capacités nationales en matière de formation et de recherche en matière de modélisation économique et spatiale** **Sources de financement de la recherche en République du Congo** **Comment lier recherche et aide à la décision politique ?**

Evariste NOMBO, Groupe de recherche en sciences exactes et naturelles, anciennement géographe au CERGEC	**Identification des missions et des capacités humaines et matérielles du CERGEC Inventaire des données disponibles Discussion autour des besoins en renforcement de capacités du CERGEC et en matière de production cartographique au Congo**
Xavier BLANCHARD, Directeur de l'agence AFD à Brazzaville	**Comment impliquer le secteur forestier privé dans le mécanisme REDD+ ? Comment garantir l'interministérialité du processus REDD+? Interventions de l'AFD en République du Congo en matière environnementale : étude prévue sur la collecte de bois de feu (mesure et nature du prélèvement, solutions, etc.) Evaluations des projets des bailleurs dans le secteur environnemental**
Jean Noël LOUMETO, Département de biologie et physiologie végétale, Université Marien NGOUABI	**Evaluation des capacités nationales dans les différents champs disciplinaires d'intérêt pour REDD**

Type de rencontre, date et lieu	Sujets abordés et points saillants
Consultations faites sur la composante 4	
Projet d'appui à la gestion forestière (PAGEF)	**Disponibilité des inventaires d'aménagement au Sud (peu avancé, certains inventaires dans qques mois)**
Paul TELFER, Directeur de WCS Congo	**Activités de WCS en matière de conservation**
Lambert IMBALO, Directeur de cabinet au MDDEFE	**Disponibilité des données d'inventaires forestiers au MDDEFE**
François NTSIBA, Directeur du CNIAFF	**Disponibilité des données d'inventaires au CNIAFF**
Donatien NZALA, Directeur général de l'économie forestière au MDDEFE	**Disponibilité des données d'inventaires forestiers au MDDEFE**
Basile MPATI, Service des inventaires au CNIAFF	**Avancement et méthodologie de l'inventaire national**
Chérubins Brice OUISSIKA, Service de catrographie du CNIAFF	**Méthodologies utilisées pour les calculs de déforestation déjà réalisés**
	Cartes disponibles, images satellites disponibles
Patrice GOUANA, Chef du service des inventaires au MDDEFE	**Disponibilité des documents / listing des inventaires d'aménagement déjà réalisés et en cours.**

Type de rencontre, date et lieu		Sujets abordés et points saillants
Consultations faites sur les composantes 2a et 2b		
IMBALO Lambert	Directeur de Cabinet du MDDEFE	(i) Vision politique du Congo sur les arrangements institutionnels nationaux pour la REDD+ (ii) Analyse des forces et faiblesses des politiques forestières
AQUINO André	Expert forestier au FCPF - Banque mondiale	(i) Formation des experts (ii) Sensibilisation au processus REDD+ (ii)i Analyse des drafs et conseils de rédaction
BAMANA-DANDOU Georgette	Directrice générale de l'agriculture, Ministère de l'agriculture et de l'élevage	(i) Analyses des forces et faiblesses des politiques agricoles, (ii) Projets en cours d'analyse, (iii) Concertation interministérielle pour l'utilisation du territoire rural
BLANCHARD Xavier	Directeur de l'AFD - Brazza	(i) Plans d'aménagement, acquis et difficultés actuelles (ii) Décentralisation et repartition des revenus REDD+ (iii) Coordination des bailleurs dans le cadre du PRSP
DOLAMA Virginie Euhrasie	NGO ACNL	(i) Société civile et programmes REDD+ : compréhention du processus, situation et perspectives (ii) Représentativité de la société civile dans les Départements
ELOMBILA Jean-Claude	Inspecteur général de l'agriculture	(i) Agriculture : productions, types d'exploitation, plantations industrielles, réduction des jachères, impact sur les forêts, impacts changement climatique sur les cycles agricoles (ii) Problématique du retour des jeunes dans leurs villages d'origine
GOULOU Bernard	Conseiller politique agricole au cabinet du Minstère de l'agriculture et de l'élevage	(i) Analyses des forces et faiblesses des politiques agricoles, (ii) Projets en cours d'analyse, concertation interministérielle pour l'utilisation du territoire rural
GUELELE KOUENE K. Arsène HOMB Marguerite ILOY Davy Sostène ITSOUA Guy Fulgence KITEMO Gaston MACKITA Jean-Pierre MINIKORO César NDZOULA Honorine NSOSSO Dominique SAFOULA Virgile	ONG REJEFAC-Congo/AESI Point focal ONG Espace créateurs (Dpt du Pool) ONG CFC ONG CEDEV ONG ACEIE ONG CONADEC ONG ADUR ONG Amis du Parc d'Odzala ONG AMEA ONG EDIC / RIAT	(i) Société civile et programmes REDD+ : compréhention du processus et échanges sur la situation et les perspectives (ii) Représentativité de la société civile, notamment dans les Départements, suivi des études et force de proposition
KOMBO Germain	Conseiller Dévpt durable, cabinet du MDDEFE	(i) Politique du département et causes déforestation et dégradation (ii) Evolution récente du prélèvement des PFNL et du bois énergie

LOUMETO Joël	**Enseignant-chercheur à l'Université Marien NGOUABI de Brazzaville**	**(i) Représentation de la société civile et représentativité des coordinations, forum et plateformes d'ONG dans REDD+** **(ii) Rôle de l'Université dans la formation des cadres, recherche scientifique et possibilité de former des équipes pour des études**
MAKAYA François	**Point focal REDD+ au Ministère de l'énergie**	**(i) Société civile et programmes REDD+ : compréhention du processus et échanges sur la situation et les perspectives** **(ii) Représentativité de la société civile, notamment dans le départements, suivi des études et force de proposition**
MAKITA-MADZOU Jean-Pierre	**Botaniste**	**Dires d'expert sur les causes de déforestation et dégradation**
MATONDO Rosalie	**Directrice du Service national du reboisement au MDDEFE**	**(i) Situation des programmes de plantations forestières** **(ii) Nouveaux rôles du SNR** **(iii) Problèmes du foncier rural** **(iv) Place du reboisement dans la REDD+** **(iv) Rôle des femmes dans le secteur forestier**
MBILE Peter	**Projet carbonedu WRI**	**(i) Situation actuelle du secteur forestier** **(ii) RPP et premiers projets pilotes à mettre en oeuvre**
MINGA Alexis	**DG de l'environnement du MDDEFE**	**Dires d'expert sur les causes de la déforestation et de la dégradation**
MOKOKO Léon Raphaël	**Directeur général au Ministère du plan**	**(i) Politique du plan : projets en cours et futurs, suivi-évaluation** **(ii) Réformes institutionnelles (budget et dépenses)** **(iii) Collecte des données auprès des Ministères sectoriels** **(iv) Préparation de la planification stratégique 2011-2016, vision prospective 2025 et modèles utilisés pour les études de prospective**
MPATI Basile	**Service inventaires aménagements - CNIAFF**	**Dires d'expert sur les causes de la déforestation et de la dégradation**
N'ZALA Donatien	**DG de l'économie forestière du MDDEFE**	**(i) Causes de déforestation et dégradation** **(i) Evolution récente du rôle des services publics forestiers** **(iii) Prélèvement des PFNL et de bois-énergie**
NGOLIELE Augustin	**Point focal de la Convention sur la diversité biologique**	**(i) Etat des lieux de la CDB et ses liens avec processus REDD+** **(ii) Rôles des ONG et des enseignant pour diffuser des messages sur la biodiversité, les changements climatique, REDD+, etc.**
NGOUELE IBARA Jean	**Représentant des peuples autochtones**	**(i) Peuples autochtones en République du Congo : situation et difficultés** **(ii) Représentation des peuples autochtones et discriminations**
NKABI Antoinette	**Cabine du MDDEFE**	**Dires d'expert sur les causes de la déforestation et de la dégradation**
NTSIBA François	**Directeur du CNIAFF**	**Dires d'expert sur les causes de la déforestation et de la dégradation**
OSSEBI-MBILA Samuel	**Chef du Service de la législation, DG de l'éco. forestière du MDDEFE**	**(i) Situation des forêts, des concessions forestières, de l'aménagement forestier dans le pays** **(ii) dire d'experts sur la déforestation et de la dégradation des forêts**
OYO Pierre	**Point focal climat, MDDEFE**	**(i) Changement climatique et processus REDD+** **(ii) Bilan des exercices passés de planification** **(iii) Impact de la déforestation autour des villes**

PENELON Alain	**Assistant technique régional pour FLEGT**	**(i) FLEGT dans la Région et en République du Congo (ii) Gouvernance forestière (iii) Politiques des bailleurs de fonds dans le domaine forestier**
SAMBA Pierre	**Service droit à la DG de l'envrt du MDDEFE**	**Dires d'expert sur les causes de la déforestation et de la dégradation**
TELFER Paul	**Directeur de WCS Congo**	**Appui à la réalisation de la RPP**
TURUNEN Léa	**Chargée forêts-Commission européenne**	**Possibilité d'appui dans le Plan indicatif national 2008-2013 en cours et intégration dans la préparation du PIN 2014-2019**
VIVIEN Catherine	**Forest ressource management (FRM)**	**(i) Sitution des forêts du Sud du pay (ii) Processus FLEGT (iii) Formation des cadres du Ministère**
NGOUISSANI Adolphe	**Directeur Départemental de l'agriculture dans le Pool**	**(i) Problème de l'agriculture dans le Pool (ii) Promotion et vulgarisation de systèmes agro-sylvo-pastoraux (iii) Mécanisation appropriée de l'agriculture (iv) Aaugmentation des superficies de production**
MOUKISSI Marcel	**Directeur Départemental de l'éco. forestière - Pool**	**Problème de la déforestation et la dégradation dans le département du Pool (le Pool est le principal pourvoyeur du bois énergie pour la ville de Brazzaville)**
NSAKABOUEYA Albertine DIAFOUKA Bambelela	**Conseillère départementale Secrétaire général de la Préfecture du Pool**	**(i) Enjeux du développement du Département du Pool (ii) Implication du Conseil départemental au Comité Départemental REDD**
MPOKOSSO Rodrigue MATINGOU Boniface AKOUELAKOUM Emmanuel KOUMBA Jean-Didier	**Directeur départemental de l'agri. - Sangha Direction départementale de l'EF - Sangha Conseil départemental - Sangha Secrétaire général de Préfecture - Sangha**	**(i) Problème de l'Agriculture dans La Sangha (département très forestier) (ii) Implication du Conseil départemental dans le Comité Départemental REDD+**

➔ Points saillants issus des ateliers de consultation sur le RPP congolais

CONTEXTE

Un atelier national de lancement a eu lieu du 20 au 21 janvier 2010 à Brazzaville. Il a été suivi de 3 ateliers régionaux qui ont eu lieu respectivement dans le Sud les 12 et 13 mars 2010 à Kinkala (pour le Département du Pool), dans le Nord les 16 et 17 mars 2010 à Ouesso (pour le Département de la Sangha) et dans le Sud Ouest les 29 et 30 mars 2010 à Pointe-Noire (pour les Départements de Pointe-Noire et du Kouilou). Enfin, un atelier de pré-validation du RPP a eu lieu à Brazzaville le 15 avril 2010.

Ces ateliers ont connu la participation de représentants congolais des plateformes de la Puissance publique, du Secteur privé et de la Société civile. Y ont également participé des représentants des bailleurs de fonds, (UNDP, Banque mondiale, FAO), de WCS, d'ONFI, de Norvège et de la République Démocratique du Congo.

Trois temps forts ont marqué le déroulement de chacun de ces ateliers, à savoir : la cérémonie d'ouverture, les session plénières et la cérémonie de clôture. Toutes les cérémonies d'ouverture et de clôtures étaient placées sous le patronage des autorités : son Excellence M. Henri DJOMBO - Ministre du MDDEFE - pour l'atelier national de lancement et le pré-atelier de validation du RPP, les Secrétaires généraux des Préfectures pour les ateliers départementaux du Pool, de la Sangha, de Pointe-Noire et du Kouilou.

Tous ces ateliers ont permis d'améliorer de façon substantielle les composantes du RPP présentés par les experts commis à leur formulation. Les ateliers départementaux de Kinkala et Ouesso, ont été marqués par la participation de M. AQUINO de la Banque mondiale, ce qui a permis aux participants de lui soumettre directement leurs préoccupations.

L'atelier du 15 avril, placé sous le haut patronage du Ministre du MDDEFE a permis aux participants de pré-valider le R-PP. Il a été convenu d'attendre les premiers commentaires du panel des experts du FCPF pour organiser l'atelier national qui planchera sur leurs commentaires en vue de les prendre en compte.

ATELIER DE LANCEMENT

Il a permis d'identifier les préoccupations pertinentes suivantes :

(i) Absence d'une définition de la « forêt » spécifique à la République du Congo ;

(ii) Manque d'harmonisation des positions des pays du bassin du Congo sur les questions du carbone, notamment le marché de carbone ;

(iii) Nécessité de bien réfléchir le scénario de référence à retenir pour la République du Congo afin de trouver le meilleur parti dans la comptabilisation du carbone ;

(iv) Nécessité d'impliquer la société civile et les communautés locales et peuples autochtones dans l'élaboration du RPP et la mise en œuvre des actions REDD+ ;

(v) Besoin de renforcer les capacité des pays en développement, non seulement sur le processus d'élaboration et de mise en œuvre du RPP, mais aussi sur les outils REDD+, notamment le scénario de référence et le système MRV.

ATELIERS REGIONAUX

Les ateliers départementaux ont permis de soulever des préoccupations sur :

(vi) L'éducation des populations qui sont engagées dans la déforestation ;

(vii) Le fonctionnement des institutions du processus REDD+ ;

(viii) Le principe du pollueur payeur ;

(ix) La question de la séquestration du carbone par les cultures et l'agroforesterie ;

(x) Le partage des responsabilités qui passent par la résolution du problème du chômage ;

(xi) La taxe sur le reboisement ;

(xii) La difficulté de relayer l'État pour commercialiser la production, comme au temps des offices agricoles ;

(xiii) La plantation des arbres à croissance rapide ;

(xiv) L'évaluation de la pratique de la journée de l'arbre ;

(xv) L'estimation du manque à gagner du Département dans le secteur de l'agro foresterie ;

(xvi) Le problème du manque d'aliment pour le bétail ;

(xvii) La difficile obtention d'attestations de reconnaissance par les groupements pré-coopératifs ;

(xviii) Les appuis financiers aux communautés ;

(xix) Les énergies alternatives et renouvelables, comme le gaz, l'électricité et l'énergie solaire, qui devraient être à la portée de tous ;

(xx) La promotion des foyers améliorés ;

(xxi) La composition des Comités départementaux REDD+ et leur mise en place dés que possible.

Annexe 1b-2 : Plan de consultation et de participation

Rencontres à faire	Sujets à aborder et points saillants
Consultations à faire sur la composante 1a	
Cabinet du Président de la République	Structuration des organes de gestion de la REDD+ et textes organiques
Bureaux de l'Assemblée nationale et du Senat	Structuration des organes de gestion de la REDD+ et textes organiques
Bureau du Conseil Economique et Social	Structuration des organes de gestion de la REDD+ et textes organiques
Ministères	Structuration des organes de gestion de la REDD+ et textes organiques
Bailleurs de fonds	Financement de la REDD+
Commission Européenne	Financement de la REDD+

Rencontres à faire	Sujets à aborder et points saillants
Consultations à faire sur la composante 2c	
Parlementaires et société civile	Principes et contenu à donner à la loi REDD+
Cadres du Trésor public et de des impôts (Brazzaville et certains départements), membres de la commission anticorruption et de l'observatoire anticorruption	Gestion transparente des revenus REDD+ et fiscalité REDD+
Responsables des institutions bancaires	La finance carbone
Cadres des départements directement impliqués par la REDD+	Les principes et les enjeux de la REDD+
Autres pays ayant déjà une expérience en matière de REDD+	L'expérience (atouts, contraintes, et options de mise œuvre du RPP)

Rencontres à faire	Sujets à aborder et points saillants
Consultations à faire sur la composante 3	
Pour valider/approfondir le contenu du plan de travail sur le scénario de référence	
Directeurs généraux :	
de l'Administration des transports terrestres,	**Plan national des transports (développement des corridors, du réseau routier et ferroviaire national dans les prochaines années)**
des voies navigables, ports et transports fluviaux,	**Projets d'interconnexion régionale et continentale en perspective**
du chemin de fer Congo océan	**Type de données collectées sur les infrastructures existantes et planifiées**
Ministère de l'agriculture et de l'élevage - Direction des statistiques agricoles	**Données collectées sur les quantités importées de produits vivriers** **Evolution historique des surfaces de cultures de rente et prévisions**
Ministère du commerce	**Données collectées sur les quantités importées de produits vivriers**
Directeur général du CERGEC et Directeur général du CNIAFF	**Discuter des modalités de création de la cellule REDD au niveau du CERGEC**
RIFFEAC / COMIFAC	**Inscription de la formation post master REDD+ dans le cadre du RIFFEAC**
Coordination nationale REDD de RDC	**Articulation de la formation post master REDD+ avec le Pôle intégré d'excellence climatique**
Pour valider le scénario de référence une fois construit	
Coordination nationale REDD+	**Validation des variables clés suite à l'étude des causes**
Comité national REDD+	**Validation du scénario de référence et des simulations**
Comités départementaux REDD+	**Validation du scénario de référence et des simulations**

Rencontres à faire	Sujets à aborder et points saillants
Consultations à faire sur la composante 4	
CERGEC	**Etablissement de cartes**
Université Marien NGOUABI	**Collaboration pour les calculs de biomasse et traitement des données, mise a disposition de stagiaires**

Rencontre à faire		Sujets à aborder et points saillants
Consultations à faire sur les composantes 2a et 2b		
NKOUNKOU MIENANDI Martin	Attaché au cabinet du MDDEFE	Capitalisation des études et des données disponibles
MOUKILOU Georges	Cellule d'aménagement de TAMAN-INDUSTRIES	Appropriation de la problématique carbone par les entreprises Etat d'avancement des plans d'aménagement et de la certification
NZILA Jean de Dieu	Centre des sols	Carbone du sol en Répu. du Congo : état des lieux des études
TURUNEN Léa	Chargée programmes Forêts-Commission europ. - Brazza	Positionnement de l'Union européenne sur REDD+ Financements de la REDD+ en République du Congo
NTSIBA François	CNIAFF	Etat de réalisation des plans d'aménagement
MOUYANGOU Farel	CNIAFF	Moyens et résultats du suivi des aménagements forestiers
KOMBO Germain	Conseiller au cabinet du MDDEFE	Politique forestière dans le développement durable congolais
MPILLI Ludovic	Conseiller envrt du Chef de l'Etat	Politique forestière, place du Congo dans la dynamique REDD+
LOUBAKI Eugène	Conseiller au Ministère en charge des hydrocarbures	Politique sectorielle, exploration/exploitation on-shore
SAMBA Joseph Léon	Projet restauration des zones dégradées autour de Brazza	Filières bois de feu et charbon : besoins, freins, prospective
MOUMBOUILOU Joseph	Chef de Service études et projets au MDDEFE	Capitalisation des études et des données disponibles
ITOUA NGAPORO X TATY Jean-Pierre	Direction générale de la recherche scientifique, Ministère de la recherche	Recherche scientifique et REDD+ Coopération avec les autres pays du bassin du Congo
TELFER Paul	Directeur de WCS Congo	Activités de WCS sur aires protégées en République du Congo
BLANCHARD Xavier	Directeur AFD Brazzaville	Position de l'AFD sur le secteur et REDD+ Possibilités de financements des études
N'ZALA Donatien	Directeur général de l'économie forestière au MDDEFE	Politique forestière Place du Congo dans la dynamique REDD+
MOKOKO Léon Raphaël	Directeur général au Ministère du plan	Politiques sectorielles et rôle de coordination du Plan Mise en œuvre des méthodes de prospective et scénarios retenus
MINGA Alexis TATY Marcel	Direction générale de l'environnement au MDDEFE	Place de la REDD+ dans les programmes d'amélioration du cadre environnemental, en zones rurales et urbaines.
BAMANA-DANDOU Georgette	Directrice générale de l'agriculture	Politique sectorielle et coordination des politiques foncières
MATONDO Rosalie	Directrice du Service national du reboisement au MDDEFE	Rôle du SNR dans les activités de reboisement pour bois d'œuvre bois de feu et agroforesterie
PENELON Alain	Assistant technique régional pour FLEGT	Evolution de l'application de l'APV-FLEGT Problèmes posés par l'extension de FLEGT au commerce intérieur
AQUINO André	Expert forestier au FCPF	Elaboration du RPP

ELOMBILA Jean-Claude	**Inspecteur général de l'agriculture**	**Politique sectorielle et coordination des politiques foncières**
DJOMBO Henri **IMBALO Lambert**	**Ministre du MDDEFE** **Directeur de Cabinet au MDDEFE**	**Politique forestière** **Place de la République du Congo dans la dynamique REDD+**
MABIKA Simon	**Ministère des affaires foncières et du domaine public**	**Evolution du foncier**
QUERET-MOUSSOUNDA Havene	**Chef de bureau prévention au Ministère des hydrocarbures**	**Prospection et projets de production on-shore**
NKODIA Alfred	**Observatoire indépendant des forêts**	**Actions de l'Observatoire indépendant, acquis et difficultés**
NGOUELE IBARA Jean	**Représentant des peuples autochtones**	**Peuples autochtones et REDD+**
BOUKA-BIONA X	**Expert en physique de l'atmosphère, Ministère de la recherche**	**Emissions de carbone dues à l'abattis-brûlis**
NGOLIELE Augustin	**Point focal de la Convention sur la diversité biologique**	**Convention de la diversité biologique et dégradation des forêts**
OYO Pierre	**Point focal de la Convention sur le climat**	**Changement climatique et relation avec programmes culturaux**
MAKAYA François	**Point focal REDD+ au Ministère de l'énergie**	**Avancement des projets de fourniture d'énergie alternative au bois**
IBRAHIMA Midou	**Représentant de la Banque mondiale à Brazza**	**Appuis de la BM au processus REDD+**
SENGUELA André	**Ministère des mines et de la géologie**	**Avancée du concept de REDD+ dans le secteur minier**
KOGUIYAGDA Dieudonné	**Représentant FAO**	**Position de la FAO sur REDD+**
SAMBA Pierre	**Service droit, Direction générale de l'environnement au MDDEFE**	**Droit et environnement : impact d'un PNAT sur le foncier agricole** **Déforestation périurbaine**
LOUMETO Joël	**Université Marien NGOUABI**	**Organisation de l'enseignement universitaire et de la recherche** **Sensibilisation et formation au REDD+**
Préfet	**Dans chaque département**	**Formation, sensibilisation à la REDD+** **Situation générale spécifique dans le département** **Mesures à prendre, responsabilisation des échelons locaux décisionnaires**
Conseiller économique		
Conseiller en charge du REDD+		
Directeur départ. eaux & forêts		
Directeur départ. agriculture		
Resp. des aires protégées		
ONG locales		
Exploitants forestiers		
Industries minières/pétrolières		

Annexe 2b : Options stratégiques de REDD+

➔ **Termes de référence des études de finalisation de la stratégie nationale REDD+**

L'étude coûts, bénéfices, faisabilité, durabilité, fuites sera réalisée sous forme unique, balayant toutes les option stratégiques retenues et les thématiques REDD+. Elle sera réalisée par des consultants nationaux appuyés par un consultant international, en collaboration étroite avec les institutions gouvernementales et non gouvernementales. Le MDDEFE assurerait le pilotage du processus. Les résultats attendus sont :

(i) Des bilans concrets des coûts, des bénéfices, de la faisabilité, de la durabilité et des fuites potentielles des scénarii de la stratégie REDD+ ou des politiques en lien avec la REDD+ ;

(ii) Un outil d'aide à la décision incluant un résumé non technique.

Méthodologie

(i) Etablir un plan de travail contenant un plan de consultation pour les évaluations demandées en se basant sur les composantes 2a et 2b du RPP et un plan de renforcement de capacités des différents acteurs impliqués dans l'étude.

(ii) Evaluer les coûts pour la réalisation des différents scénarii basés sur les options stratégiques définies dans ce document : les coûts d'opportunité, d'investissement et de transaction seront estimés avec précision, pour toutes les variantes des scénarios et pour chaque partie prenante impliquée dans le processus.

(iii) Evaluer les bénéfices carbone et autres (économiques, sociaux et en terme de politique régionale) générés par la réalisation des différents scénarii basés sur les options stratégiques définies de ce document, pour toutes les variantes et toutes les parties prenantes impliquées dans le processus.

(iv) Evaluer la faisabilité politique, sociale, économique et institutionnelle de chaque scénario en tenant compte des freins et des opportunités pour chaque partie prenante. La lutte contre la pauvreté sera au centre de cette évaluation, notamment pour éviter que les mesures prises dans le processus REDD+ crée des difficultés aux plus pauvres et aux peuples autochtones.

(v) Evaluer de la durabilité des mesures proposées dans les différents scénarii dans le cadre de son intégration de la REDD+ dans les politiques du pays, dans tous les secteurs et dans tous les départements du pays.

(vi) Evaluer les fuites potentielles : la mise en œuvre des stratégies REDD+ va permettre de réduire les émissions liées à la déforestation et à la dégradation, mais il y un risque que déforestation et dégradation se déplaceront, ce qui réduira bien entendu l'efficacité de la stratégie. Ces risques seront évalués par rapport à chaque option stratégique retenue et des mesures de diminution de ces risques seront en même temps proposées.

(vii) Etablir une simulation des éléments analysés au cours du temps, selon plusieurs scénarii en se basant sur le RPP, les études et analyses existantes ou à initier et les observations faites au cours des travaux. Présenter l'évolution probable en absence de la REDD+.

Conclusions et recommandations : Cette partie résumera les principaux enjeux, les contraintes (politiques, institutionnelles), les défis à relever et les principales recommandations. Mettre en exergue les renforcements de capacités institutionnelles nécessaires.

Annexe 2c : Cadre de mise en œuvre de REDD+

➔ **Termes de référence des études de finalisation du cadre de mise en œuvre de REDD+**

Etude 1 : Guide de bonnes pratiques pour les projets pilotes REDD+

Cette étude a pour objectif la préparation, la rédaction et la validation d'un tel guide. La République du Congo entend ainsi faciliter la mise œuvre des activités REDD+ en attendant l'adoption et la publication de la Loi REDD+. Cette étude fournira aux décideurs administratifs et politiques des standards et indicateurs pour la réussite des projets pilotes.

L'étude se déroulera en 3 temps : (i) revue des standards légaux pratiqués au Congo, (ii) analyse des standards légaux pratiqués dans les pays voisins impliqués dans processus REDD+, (iii) analyse de la cohérence des standards par rapport au droit interne (en construction) et au droit international.

Cette étude, qui prolonge un processus interne en cours en République du Congo, utilisera les compétences nationales. Les standards ou indicateurs seront élaborés sur la base d'un processus intégrateur impliquant toutes les parties prenantes à la REDD+.

Etude 2 : Préparation de la Loi REDD+ en République du Congo

Cette étude a pour objectif d'assurer une assistance juridique au Comité national REDD+ dans la préparation, la rédaction et la validation de la Loi REDD+.

Dans sa première phase de formulation de propositions, l'étude consistera en l'identification et la rencontre de toutes les parties prenantes concernées et de l'analyse bibliographique.

Dans sa deuxième phase de consolidation des résultats et de validation des propositions, seront organisés des ateliers départementaux et d'un atelier national impliquant toutes les parties prenantes. Les conclusions de ces ateliers permettront d'appuyer le Comité national REDD+ dans la rédaction de l'avant projet de loi au Secrétariat général du Gouvernement.

Dans sa troisième phase, un appui sera apporté au Comité national REDD+ pour la rédaction et la présentation du projet de Loi aux parlementaires (Assemblée nationale et Sénat), en vue de faciliter l'adoption et la publication de la Loi. Dans le même temps, des renforcements des capacités seront apportés aux parlementaires, via des auditions d'experts et des exposés de cas.

Etude 3 : Gouvernance du fonds REDD+

Cette étude a pour objectif de déterminer (i) les modalités de financement des activités REDD+ en application de la stratégie REDD+, (ii) la structuration et la gouvernance du Fonds REDD+ et (iii) les modalités de décaissement et de distribution des revenus REDD+ par le Fonds.

La méthode sera similaire à celle suivi pour l'étude 2 : dans sa première phase de formulation de propositions, l'étude consistera en l'identification et la rencontre de toutes les parties prenantes concernées et de l'analyse bibliographique.

Dans sa deuxième phase de consolidation des résultats et de validation des propositions, seront organisés des ateliers départementaux et d'un atelier national. Les conclusions des ateliers permettront d'appuyer le Comité national REDD+ dans la sélection des solutions prometteuses.

Etude 4 : Outils fiscaux et économiques d'incitation pour la REDD+

Cette étude a pour objectif d'identifier les instruments pertinents de mise en œuvre de la REDD+ : incitations fiscales (exonération ou crédit d'impôts), paiement pour services environnementaux, marchés du carbone volontaires ou réglementés, etc. La méthode sera similaire à celle des études 2 et 3 : dans sa première phase de formulation de propositions, l'étude consistera en l'identification et la rencontre de toutes les parties prenantes concernées et de l'analyse bibliographique.

Dans sa deuxième phase de consolidation des résultats et de validation des propositions, seront organisés des ateliers départementaux et d'un atelier national. Les conclusions des ateliers permettront d'appuyer le Comité national REDD+ dans la sélection des solutions prometteuses.

Annexe 2d : Evaluation environnementale et sociale stratégique

➔ Termes de référence de l'évaluation environnementale et sociale stratégique (SESA)

L'SESA permet d'intégrer les considérations environnementales et sociales dans le processus de préparation à REDD à deux niveaux :

(i) le niveau stratégique qui permet de faire les évaluations des insuffisances et les lacunes à combler ;

(ii) la mise en place du cadre de gestion environnementale et social, après évaluation des impacts environnementaux et sociaux des actions spécifiques de l mise en œuvre de la stratégie REDD+ en établissant les liens avec les clauses de sauvegarde de la banque mondiale.

Sur la base de ces deux niveaux de préparation, l'SESA doit se faire avec des termes de références qui vont aider à ressortir les éléments environnementaux et sociaux découlant des activités de la mise en oeuvre de la REDD. Les structures impliquées ont la charge de préparer et de valider les TDR, de commun accord avec la coordination REDD.

Les prestations de services sont faites par des consultants nationaux qui peuvent être des cabinets, des bureaux d'études, des associations ayant un agrément en cours de validité ou des consultants individuels ayant une expérience bien reconnue dans le domaine. Le tout sur la double coordination du Ministère du Développement Durable et de la REDD.

Objectifs

(i) Analyse des conséquences potentielles des options stratégiques et du cadre de mise en œuvre de REDD+ sur les milieux environnemental et social.

(ii) Propositions par rapport de la prise en considération des impacts potentiels lors de la finalisation de la stratégie nationale de REDD+ et du cadre de mise en œuvre y relatif

(iii) Développement d'un cadre réaliste de gestion et d'atténuation des impacts environnementaux et sociaux potentiels de la mise en œuvre de la stratégie REDD+.

Résultats attendus

(i) Les impacts et le degré d'atteinte des objectifs assignés du point de vue du rétablissement des activités économiques et de l'amélioration des conditions de vie des populations sont établis.

(ii) Les recommandations pour approfondir et pérenniser les impacts du projet et améliorer la conception des projets à venir dans la mise en œuvre de la REDD+ sont formulées.

(iii) Un programme de renforcement des capacités de l'Agence Nationale de l'Environnement, du Ministère du Développement Durable et des autres parties prenantes pour l'intégration des mesures dans la stratégie REDD+ sont renforcées.

(iv) Des actions simples et efficaces économiquement permettant d'atténuer les impacts environnementaux négatifs et de renforcer les impacts positifs sont proposées.

Activités indicatives

(i) Développer le plan de travail pour l'élaboration de l'SESA, incluant un plan de consultation des parties prenantes, ainsi qu'un programme pour le renforcement des capacités des principales parties prenantes.

(ii) Etablir la situation de départ des domaines environnemental et social potentiellement affectés par la mise en œuvre de la stratégie REDD+, incluant notamment une analyse des efforts entrepris auparavant pour adresser les principales causes de la déforestation et de la dégradation des ressources forestières.

(iii) Analyser la cadre légal et institutionnel en relation avec lutte contre la déforestation et la dégradation des forêts, incluant les réglementations internationales et des organisations internationales, ainsi qu'une analyse de l'adéquation des outils juridiques et des structures actuels.

(iv) Déterminer les impacts potentiels des différentes options stratégiques provisoires mentionnées dans la composante 2b et sur l'environnement et le milieu social par rapport à des critères nationaux et, le cas échéant, internationaux, plus particulièrement les politiques de sauvegarde environnementale et sociale de la Banque Mondiale.

(v) Analyser l'importance des impacts potentiels de la stratégie REDD+ et leur disposition dans l'espace , afin de permettre une hiérarchisation et une spatialisation des effets de REDD+ sur l'environnement et le milieu humain.

(vi) Proposer un cadre de gestion des impacts environnementaux et sociaux de la stratégie nationale REDD, intégrant des mesures concrètes pour éviter, atténuer et si possible compenser les impacts négatifs et de renforcement des impacts positifs.

(vii) Développer des propositions concrètes par rapport à l'échange et la communication des informations et des conclusions issues des évaluations environnementales auprès des différentes parties prenantes et ainsi d'assurer leur prise en compte dans la finlisation de la stratégie nationale REDD+.

Annexe 3 : Scénario de référence

➔ Variables à prendre en compte dans l'option 2 de construction du scénario de référence

Causes de déforestation / dégradation actuelles et futures	Analyse qualitative	Variables détaillées potentielles et données sur ces variables
Agriculture itinérante (vivrière et commerciale) Ex : manioc, maïs, arachide, etc	OFFRE -productivité agricole (accès aux intrants, pratiques culturales, facteurs biophysiques) et coûts de transport internes -importations de produits vivriers (productivité dans les pays exportateurs, coûts de transport internationaux et internes, prix des denrées importées sur le marché national) DEMANDE -besoins d'autoconsommation au niveau de la famille du producteur, qui dépend du bilan natalité/mortalité en zone rurale, et des opportunités d'emploi en zone urbaine -demande des villes les plus proches qui dépend des infrastructures de communication, du bilan natalité/mortalité en zone urbaine, du régime alimentaire (besoins en kcal, habitudes), de l'accès à un revenu salarié (indice de pauvreté)	Taille de la population en zone rurale et urbaine (Recensements de la population et de l'habitat, CNSEE, 1974-1984-1996-2006) Besoins alimentaires en kcal/personne en fonction des indices de pauvreté (enquête de pauvreté, CNSEE, statistiques internationales sur les besoins alimentaires) Rendements vivriers (enquête agricole, CNSEE, 2005) Projections sur les quantités importées de produits vivriers (Ministères du commerce, de l'agriculture - Direction des statistiques agricoles, bases de données internationales **➔ Consultation pour vérifier existence / fiabilité des données**
Agriculture permanente de rente (cacao, café, palmier à huile, fruitiers, etc.) ou vivrières (fruitiers, etc.)	OFFRE -productivité agricole (intrants, terroir) et coûts de transport -compétitivité des autres pays (productivité dans les autres pays et coûts de transport dans ces pays) DEMANDE -demande internationale : croissance démographique internationale, augmentation du PIB international (Cf. pays émergents), développement des biocarburants, etc. -demande nationale : dépendant du bilan natalité/mortalité en zone urbaine, du régime alimentaire (besoins en kcal, habitudes), de l'accès à un revenu salarié (taux de chômage)	Evolution historique des surfaces de café, cacao et palmier (Direction de la statistique agricole) à corréler avec les variables ci-dessous, pour pouvoir établir des projections Indices d'évolution du prix mondial du café, du cacao et du palmier à huile en moyenne sur un cycle d'évolution du prix des matières premières considérées (bases de données internationales) Nombre de km de routes goudronnées, de chemins de fers, et de voies navigables (DGPD – Ministère des Transports, CFCO, Direction de la Navigation Fluviale) **➔ Consultation pour vérifier existence / fiabilité des données**
Bois de feu	OFFRE -Coûts de transport (dépendant de la localisation des forêts par rapport aux villes – par ex : utilisation de rémanents d'exploitation ou de connexes de scierie comme bois de feu à Ouesso) -accès des populations à des techniques d'amélioration de l'efficacité énergétique (revenus, éducation) DEMANDE *NB : variable suivant zones urbaines vs rurales* -croissance démographique en ville, accès à un revenu salarié	Taille de la population en zone rurale et urbaine (Recensements de la population et de l'habitat, CNSEE, 1974-1984-1996-2006) Volumes demandés de bois de feu en fonction du profil énergétique des villes (ex : 3 profils de conso. énergétique : déterminer annuellement le % de population par profil) Déterminer la part de bois de feu qui est conjoint à l'exploitation agricole et celui qui ne l'est pas *(pour éviter tout double comptage),* à la fois en zone rurale et urbaine

	accès à d'autres sources d'énergie en ville (qui dépend de la capacité de fournitures d'énergie à un prix raisonnable) -part de bois de feu/charbon dans la consommation des ménages	Déterminer la part du bois de feu qui provient des rémanents d'exploitation et connexes de scieries ➔ **3 études à réaliser sur le bois de feu**
Exploitation forestière	OFFRE -productivité liée à l'exploitation et aux infrastructures de transport ; -augmentation de la valeur ajoutée à travers la politique de transformation locale des produits ligneux -existence et efficacité du contrôle mené par l'Etat (VPA/FLEGT) DEMANDE -prix du bois sur les marchés internationaux (qui dépend de la compétitivité avec les autres pays, et des coûts de transport) ; -demandes nationale et transfrontalière	Scénario de dégradation : calcul des émissions liées à l'exploitation forestière dans le massif du Sud et dans celui du Nord (et estimation des émissions si poursuite du taux de dégradation). Estimation des volumes exploités illégalement *(*données éparses recueillies dans le cadre du programme FLEGT et de la revue mondiale de l'exploitation illégale réalisée par WWF) ➔**2 études à réaliser sur l'exploitation forestière**
Mines et pétrole sur terre ferme (futur : pour l'instant, surtout prospecti° et peu d'exploitat°)	OFFRE -rendement d'exploitation (coût d'exploitation vs prix. Pour pétrole offshore, coût est élevé en mer très profonde) DEMANDE -prix internationaux -compétitivité internationale suivant coûts de transport) Pas d'historique d'exploitation : utilisation des prévisions du Ministère des mines et des hydrocarbures en matière d'exploitation (considération des concessions d'exploitation déjà accordées).	A terme si historique d'exploitation : établir une corrélation entre la surface d'exploitation avec les prix des minerais et les km de routes goudronnées, de chemins de fers, et de voies navigables)
Infrastructures (dans le futur)	Investissements étrangers Planification nationale (moyens, priorités)	Nombre de km de routes goudronnées, de chemins de fers, et de voies navigables prévues (DGPD – Ministère des Transports, CFCO, Direction de la Navigation Fluviale)
Barrages hydroélectriques	OFFRE : Efficacité coût du barrage DEMANDE Coût des autres énergies et démographie	Utilisation des prévisions du Ministère de l'énergie en ce qui concerne le nombre de barrages (plan de développement sectoriel) et la surface inondée par barrage (résultats des études d'impact environnementales)
Expansion urbaine	Migration vers les zones urbaines : -Augmentation démographique -Opportunités d'emploi -productivité en milieu rural	Taux de croissance des villes (CNSEE) Surface moyenne d'une habitation (Direction de la construction, de l'urbanisme et de l'habitat ou Direction générale du cadastre)