

RÉPUBLIQUE DÉMOCRATIQUE DU CONGO  
**Ministère de l'Environnement,  
Conservation de la Nature  
et Tourisme**

Kinshasa, le 12 6 MAY 2008



*cl*  
Le MINISTRE

N° *128* CAB/MIN/ECN-T/15/JEB/2008

Copie pour information à :

- Son Excellence Monsieur le Premier Ministre  
(Avec l'expression de ma haute considération)
- Monsieur le Directeur du Cabinet du Président de la République
- Monsieur le Secrétaire Général à l'Environnement et Conservation de la Nature
- Monsieur le Gouverneur de la Banque Centrale du Congo et Président du G24

Tous à KINSHASA / GOMBE

- Monsieur Werner Kornex  
E-mail : [wkornex@worldbank.org](mailto:wkornex@worldbank.org)
  - Monsieur Kenneth Andrasko  
E-mail : [kandrasko@worldbank.org](mailto:kandrasko@worldbank.org)
- Tous à WASHINGTON / DC

Objet : Transmission R-PIN de la République Démocratique du Congo

- ✓ A Madame Marie-Françoise Marie-Nelly Directrice des Opérations de la Banque Mondiale pour le Congo et la République Démocratique du Congo de et à KINSHASA / GOMBE

Madame la Directrice des Opérations,

J'ai l'honneur de vous transmettre en annexe de la présente, la R-PIN de la République Démocratique du Congo à remettre au Fonds de Partenariat pour le Carbone Forestier (FPCF).

*f*

Avec cette soumission, Mon Ministère estime que le processus d'estimation des gaz à effet de serre résultant de la déforestation et de la dégradation nécessite la mise à sa disposition des moyens importants appuyé par un programme cohérent et efficace de renforcement des capacités de ses services afin de mieux s'approprier les méthodologies et les exigences y relatives.

De plus, je rappelle que la République Démocratique du Congo souhaiterait abriter pour le compte de la région, un site pilote où des activités en rapport avec la Réduction des Emissions provenant de la Déforestation et de la Dégradation (REDD) y seront développées et pour lequel une assistance technique et un apport en matériel (station de réception, etc....) est requis.

Qu'il plaise à votre institution d'examiner cette double requête et d'y réserver une suite favorable et cela dans le cadre dudit Fonds.

Veillez agréer, Madame la Directrice des Opérations, l'assurance de ma parfaite considération.

José ENDUNDO BONONGE



## The Forest Carbon Partnership Facility (FCPF) Readiness Plan Idea Note (R-PIN) Template

March 8, 2008

### Guidelines:

1. The purpose of this document is to: a) request an overview of your country's interest in the FCPF program, and b) provide an overview of land use patterns, causes of deforestation, stakeholder consultation process, and potential institutional arrangements in addressing REDD (Reducing Emissions from Deforestation and Forest degradation). This R-PIN will be used as a basis for the selection of countries into the FCPF by the Participants Committee. Information about the FCPF is available at: [www.carbonfinance.org/fcpf](http://www.carbonfinance.org/fcpf)
2. Please keep the length of your response under 20 pages. You may consider using the optional Annex 1 Questionnaire (at the end of this template) to help organize some answers or provide other information.
3. You may also attach at most 15 additional pages of technical material (e.g., maps, data tables, etc.), but this is optional. If additional information is required, the FCPF will request it.
4. The text can be prepared in Word or other software and then pasted into this format.
5. For the purpose of this template, "Deforestation" is defined as the change in land cover status from forest to non-forest (i.e., when harvest or the gradual degrading of forest land reduces tree cover per hectare below your country's definition of "forest." "Forest degradation" is the reduction of tree cover and forest biomass per hectare, via selective harvest, fuel wood cutting or other practices, but where the land still meets your country's definition of "forest" land.
6. When complete, please forward the R-PIN to: 1) the Director of World Bank programs in your country; and 2) Werner Kornexl ([wkornexl@worldbank.org](mailto:wkornexl@worldbank.org)) and Kenneth Andrasko ([kandrasko@worldbank.org](mailto:kandrasko@worldbank.org)) of the FCPF team.

**Country submitting the R-PIN: Democratic Republic of Congo**

**Date submitted:** 23 May 2008

**1. General description:**

**a) Name of submitting person or institution:**

**Title:** Ministry of Environment, Nature Conservation and Tourism

**Contact information:**

General Secretariat of Environment and Nature Conservation  
Sustainable Development Directorate

**Address:** 35, Avenue Pumbu, c. Gombe

**Telephone:** +243814510594

**Fax:** +2438843675

**Email:** kaseyamak@yahoo.fr

**Website, if any:**

**Affiliation and contact information of Government focal point for the FCPF (if known):**

Mr Vincent KASULU SEYA MAKONGA: MECNT, Ministry of Environment, Nature Conservation and Tourism

**b) List authors of and contributors to the R-PIN, and their organizations:**

M. Vincent KASULU SEYA MAKONGA: focal point climate change, Director of Sustainable Development

Honourable IPALAKA YOBWA Joseph, Consultant

FRM team : A. MUGNIER, B. CASSAGNE, N. BAYOL, GIS expert, legality/governance expert, forest specialists

**c) Who was consulted in the process of R-PIN preparation, and their affiliation?**

Mme Nadine LAPORTE : WOODS HOLE RESEARCH CENTER (USA)

M. MBUYI KALOMBO Aimé, Head of Division in of climate change, Directorate for Sustainable Development, MECNT

M. ZASY NGISAKO Germain, Head of Department, Permanent Inventory and Forest Management Department (SPIAF), MECNT

M. MUSAMPA KAMUNGANDU Christophe, Head of Department, SPIAF, MECNT

Consultation workshop have been organised between the authors and the consulted personalities (18 April 2008, cf [Appendix 4](#) and 19 May 2008).

**2. Which institutions are responsible in your country for:**

**a) forest monitoring and forest inventories:**

SPIAF : Permanent Service for Forest Inventory and Management

DCI : Directorate Body of Inspectors

INS : National Institute of Statistics

Forest Management Directorate, MECNT

---

**b) Forest Law Enforcement:**

Ministry of Environment, Nature Conservation and Tourism

DCI : Body of Inspectors Directorate, MECNT

Forest Management Directorate

Mettelsat : National Agency of Meteorology and Satellite Remote Sensing

---

**c) forestry and forest conservation:**

Ministry of Environment, Nature Conservation and Tourism

SPIAF : Permanent Service for Inventory and Forest Management

ICCN : Congolese Institute for Nature Conservation

SNR : National Reforestation Service

---

**d) coordination across forest and agriculture sectors, and rural development:**

Ministry of Planning

Ministry of Public Works and Infrastructure

Sustainable Development Direction, Ministry of Environment, Nature Conservation and Tourism

---

**3. Current country situation (consider the use of Annex 1 to help answer these questions):**

**a) Where do forest deforestation and forest degradation occur in your country, and how extensive are they? (i.e., location, type of forest ecosystem and number of hectares deforested per year, differences across land tenure (e.g., national forest land, private land, community forest, etc.):**

Forest Deforestation/Degradation (DD) occurs mainly around human settlements, without any consideration of size. Areas of higher pressure are located around the main towns of the country, namely Kinshasa, Kisangani, Kindu, Matadi, Kananga, Lubumbashi... (see [Annex 1](#), part 1). The populations are concentrated along the penetration axes (roads and railway) and localized next to the Congo river. There is a very dense rural road network (often degraded and disused), linking numerous villages. The population density can be very high in some parts of the forest area, even in rural areas, as compared to other Congo basin countries<sup>1</sup>.

DD takes place in three types of forest ecosystems<sup>2</sup>: forest savannas in the South of the country (Zambezi area), tropical dense forests in the Northern part and forest galleries. Some areas along the country borders are also under high DD pressure due to the afflux of refugees from Burundi and Rwanda (see [Annex 1](#), map 3). In some regions, the pressure on the forest is intense, as for example around the Bumba and Lisala cities in the *Equateur Province*, in the north Ubangi around Gemena, Budjala, Kungi or in the *Bas-Congo* forest area.

---

<sup>1</sup> CASSAGNE, B., NASI, R., BAYOL, N., FRM, 2008. *Sustainable Management of the DRC's Production Forests, Progress and Prospects*. Not edited. 49p.

<sup>2</sup> FRM, 2003. *Assistance à la revue économique du secteur forestier en RDC. Analyse du potentiel forestier et des pratiques de gestion forestière*. p. 4.

Most of the land in Congo is state-owned even if certain areas (in the Batéké plateaux for example) are under traditional property rights. There is no special land tenure for DD which occurs everywhere within the country.

The DRC is reemerging after a long period of war, from 1998 to 2003.

The post-degradation revegetation is now occurring in places; further studies should be conducted rapidly to acquire a better knowledge of the dynamics.

---

**b) Are there any estimates of greenhouse or carbon dioxide emissions from deforestation and forest degradation in your country? If so, please summarize:**

LAPORTE and AL. (2007)<sup>3</sup> estimated the emissions from Deforestation at 0.22Pg of CO<sub>2</sub>/year, there is no other estimation available.

Annual deforestation rate is however estimated 0,20% / year by CARPE<sup>4</sup> (2008) at 0.26% / year by the CBFP<sup>5</sup> (0.3% / year by the FAO<sup>6</sup>) which also estimated degradation at 0.15%. Massive industrial deforestation has never occurred in the DRC.

Emissions of greenhouse gases from deforestation and degradation are very low.

---

**c) Please describe what data are available for estimating deforestation and/or forest degradation. Are data published? Describe the major types of data, including by deforestation and forest degradation causes and regions if possible (e.g., area covered, resolution of maps or remote sensing data, date, etc.).**

An impressive amount of data could be used in the REDD context.

A soil occupation map was produced by the Global Land Cover 2000; see Annex 1, map 1. Different other land cover maps have been produced: in 1994 by SPIAF and CNIE with satellite imagery from 1980 to 1985, in 2003 by FRM<sup>7</sup>, concerning the forest area, and in 2006 by Université Catholique de Louvain (UCL)<sup>8</sup>.

Data resulting from various types of inventories, more or less recent, could be helpful to obtain a deeper knowledge of the forest, of the tree distribution and of the biomass concerned. Inventories have been conducted in the 70's and 80's by the SPIAF, with the help of the Canadian cooperation, on more than 20 million ha (map available), in order to assess the available harvestable volumes. These inventories are not suitable for biomass evaluation because they did not take into account all tree species as well as small and medium size trees. They are not up to date, and a large part of the data has been lost. Inventories were also conducted during the past 3 years for sustainable forest management purposes (data available on roughly 2 million, soon on 4.2 million of ha), and finally harvesting inventories, less useful in the REDD context. The remaining forest surface under concession statute will gradually be inventoried as well, but some DRC forest areas will remain for a long time without such inventories. Some important forest types, for example the "clear dense forests" are not covered by

---

<sup>3</sup> LAPORTE, N., MERRY, F., BACCINI, A., GOETZ, S., STABACH, J., BOWMAN, M., 2006. *Reducing CO<sub>2</sub> Emissions from Deforestation and Degradation in the Democratic republic of Congo: A First Look*. Woods Hole Research Center. 25p.

<sup>4</sup> CARPE, 2008. *Decadal Forest Change Mapping in the Democratic Republic of Congo – A country Wide Assessment of Forest Cover and Forest Cover Change from 1990 to 2000*. Central African Program for the Environment, NASA, South Dakota State University, University of Maryland, US-AID.

<sup>5</sup> CBFP, 2007. *Etat des Forêts 2006. Les forêts du bassin du Congo*. Carbon Basin Forest Partnership. 257p.

<sup>6</sup> Food and Agricultural Organization, 2006. *Global Forest Resource Assessment*.

<sup>7</sup> FRM, 2003. *Carte des Ressources et Allocations Forestières*.

<sup>8</sup> Université Catholique de Louvain, VANCUTSEN, C., PEKEL, JF., KIBAMBE LUBAMBA, JP., BLAES, X., DE WASSEIGE, C., DEFOURNY, D., 2006. *République Démocratique du Congo – Occupation du sol*.

<sup>9</sup> GEIST, H., LAMBIN, E., 2001. *What Drives Tropical Deforestation? A meta-analysis of proximate and underlying causes of deforestation based on subnational case study evidence*. LUCR Report Series No. 4.

<http://www.geo.ucl.ac.be/LUCR/pdf/LUCR%20Report%20-%20Screen.pdf>

<sup>10</sup> CASSAGNE B., 1987. *Le problème du bois de feu dans les villes d'Afrique Centrale – Le cas de Bangui – Approche d'une solution agroforestière*. Languedoc Science and Technique University Thesis. p.54.

<sup>11</sup> <http://www.rdc-conversionitresforestiers.org>, consulted the 17th of May 2008.

any inventory at the moment.

In the near future, OFAC (the Central Africa Forest Observatory) will provide useful data on several subjects (see [Annex 2](#)) with the help of the FORAF Project. The FORAF Project will produce data on each forest type surface area concerning the year 2006 (probably based on the 2006 UCL work) and deforestation rates from 1990 up to 2000, and from 2000 to 2005.

---

### **d) What are the main causes of deforestation and/or forest degradation?**

Deforestation/Degradation (DD) is mainly occurring because of two major factors, namely agriculture and service-wood harvest. But, as underlined by Geist and Lambin<sup>9</sup>, "causes and drivers of tropical deforestation cannot be reduced to a single variable, or to a few variables even". These authors considered that DD are occurring under a combination of proximate causes (infrastructure extension, agricultural extension, wood extraction) and underlying causes (demographic factors, economic factors, technological factors, policy & institutional factors, cultural factors).

DD in DRC is occurring under two main proximate causes: firstly, the gathering of wood around large human areas as studied by CASSAGNE (1987)<sup>10</sup> and secondly, the extension of agriculture (food-producing and subsistence agriculture) in the forest zone under shifting cultivation practices (cf illustration in [Annex 1](#), map 3). The main underlying causes identified are population distribution, political climate, property rights and traditional practices. Mining activities are also impacting the rhythm of DD, in specific parts of the country.

Deforestation mainly occurs under agriculture as slash-and-burn is a traditional practice in forest galleries and dense forests. The soil is cultivated up to a point of non-reforestation, as most of the mineral elements (related to the soil fertility) have disappeared. Fallow periods following such practices should be as long as 30 years, without recurrent fires, to obtain trees regeneration. The actual demography dynamics observed in DRC does not allow long fallow, resulting in a soil fertility degradation associated with a loss of carbon. In dry forests, recurrent fires (for hunting/poaching) prevent any reforestation and even degrade soil potential by facilitating the erosion of the superior organic layer (humus, high organic content).

Degradation is more related to the gathering of wood for domestic needs. Charcoal is traditionally made in forest galleries. As all the forests surrounding Kinshasa have entirely vanished during the last forty years, charcoal is now made as far as 150km away, increasing the pressure on an always larger area. Charcoal and wood remain in heavy demand, even in large cities. Alternative uses of energy are domestic oil and electricity in Kinshasa and few other places. The rapid increase in oil price will place more pressure on the wood resource, and electricity is not produced in sufficient quantity for the entire town. Electricity savings/power-cuts often occur in the populous areas of Kinshasa, and the Inga dams' extension Project will not provide electricity in the coming years.

Forest galleries are the most sensitive areas due to the interest of the peasants to cultivate on fertile soils and the proximity for charcoal making.

In forest savannas, hunters are chasing the game by lighting fires.

Illegal forest harvesting (without harvesting title) plays also an important role in terms of degradation, especially near rivers and roads. Even if the amount of illegal wood harvested is unknown, illegal harvesting is considered as an important issue.

In the near future, we could identify several other causes of DD, such as mines and the relaunch of the agricultural sector, due to the increase of food prices on world markets. These trends should be taken into consideration in the baseline design.

DRC recently signed an agreement with a Chinese company for the implementation of a large oil palm area (up to 3 million ha).

**e) What are the key issues in the area of forest law enforcement and forest sector governance (e.g., concession policies and enforcement, land tenure, forest policies, capacity to enforce laws, etc.?)**

After the war period, DRC made a strong commitment towards forest management. A large Project targets the conversion of Forest Permits into Forest Concessions with stronger obligations for private operators. The process is funded by IDA (International Development Agency) and started in the end of 2005. Results are expected within 2-3 months. 70% of the current titles were delivered during the moratory period<sup>11</sup>.

Illegal harvest of wood is not clearly identified.

The Ministry of Environment, Nature Conservation and Tourism created the Directorate for Law and Stragical Implication of the Environment to reinforce the sector governance.

**4) What data are available on forest dwellers in lands potentially targeted for REDD activities (including indigenous peoples and other forest dwellers)? (e.g., number, land tenure or land classification, role in forest management, etc.):**

Data on forest dwellers is incomplete and heterogeneous depending on the area. This data is collected by the State through census. The United Nations are another source of information.

The State of the Forest 2006<sup>12</sup> provides a population density map covering the entire Congo basin.

NGOs also offer data, more or less precise, but which include data on social aspects. Socio-economic studies are also carried out on forest concessions on a compulsory basis in the forest management process. This data is passed on to the administration when the management plans are registered.

DRC forests are traditionally inhabited by Pygmees, who live on picking and hunting. Due to the extension of some ethnic groups, there is an increasing occupation of the savannas and others zones close to the forest by farmers, putting a higher pressure on the resource but also modifying the balance. The State of the Forest counts 150 ethnic groups living in the Congo Basin Forest.

In a near future, OFAC will also offer a data collection on these issues (see [Annex 2](#)).

**5. Summarize key elements of the *current* strategy or programs that your government or other groups have put in place to address deforestation and forest degradation, if any:**

**a) What government, stakeholder or other process was used to arrive at the current strategy or programs?**

To get to the current REDD strategy (explained in part 6), numerous stages were necessary. We give below the major stages of the appropriation of REDD by the government, while everything about local populations is in Part 7b.

In the DRC, the discussions on REDD are regular and were held at several national and international workshops and seminars. The country has really showed a great interest to take part to the new mechanism of positive incentives for the REDD. The recent analysis work prepared by Woods Hole Research Center funded by the Ministry of Environment, Nature Conservation and Tourism made it possible to define the causes and the dynamics of deforestation in the DRC. A consultation workshop was organized from 14 to 17 April 2008 in Kinshasa in order to finalize the R-PIN; this workshop gathered officials from the Ministries of Environment Nature Conservation and Tourism, Agriculture and Rural Development, Mines, Landhold Affairs, Interior, Finance, the environmental platforms of numerous national and international non governmental organizations (WWF, WCS,

<sup>12</sup> Etat des Forêts 2006. Les forêts du bassin du Congo. Congo Basin Forest Partnership. p.15

OSFAC) and the National Satellite Remote Sensing Agency (METTELSAT).

Finally, the Chatam House meeting on finance mechanisms of alternative management models for the sustainable use of the DRC's forests, organized in collaboration with the Ministry of Environment, Nature Conservation and Tourism on 23 and 24 June in Kinshasa, devoted an important part of its agenda to the REDD, especially with the presentation by WHRC of the document on the bases of REDD in the DRC.

The involvement of the Members of Parliament in the REDD process by the reinforcement of their capacities through the organization of training workshops must also be underlined. These workshops are organized for the benefit of the national MPs and Senators in collaboration with the Environment Ministry. We must also mention the Members of Parliament Network for the sustainable management of the forest ecosystems of Central Africa (REPAC) of which the Parliament of the DRC is an active member. This network deals with forest governance, including problems inherent to deforestation.

Much earlier than these initiatives, the DRC was already addressing the deforestation issue through the FRA/1990 project, which established the annual rate of deforestation at 0,6% for the period going from 1980 to 1990.

### **b) What major programs or policies are in place at the national, and the state or other subnational level?**

Considering the very recent character of the decision taken concerning the REDD, questions linked with the strategies to adopt and incentive measures to take to reduce the emissions due to deforestation, have not progressed beyond the reflexion stage.

However, an important national commitment was taken against deforestation and degradation through the sustainable management of the forest and the development of protected areas, even if the decision is anterior to the REDD debate under Climate Change consideration. The process was launched in 2005 in DRC and formalized by the ratification of the "Yaounde declaration" with the neighbouring countries under the COMIFAC (Central Africa Forest Commission). Some results are already available: management plans preparation is under process on more than 4 million ha, and the first two management plans are discussed between SPIAF and the concessions' holders.

DRC is currently elaborating a National Forest Plan with 6 priority axes, intending to address the main causes of forest degradation:

- Elaboration of a land-use plan of the entire territory
- Production Forest Management to guarantee forest perenniality
- Rural development with special attention paid to community forests, fire wood and forest plantation
- Definition of a nature conservation strategy
- Improvement and strengthening of the forest resources governance
- Capacity building through trainings

The DRC included several chapters in the Forest Code on the Forest Protection under the Title IV: *de la Protection des Forêts*. The Article 52 indicates that any deforestation should be compensated by an afforestation of the same quality and same surface. Moreover, any deforestation is regulated by administrative authorization (Article 53 and 54). Forest and savannas fires are also regulated under the Chapter III of the same Title: *du Contrôle des Feux de Forêts et de Brousse*. The administrative authorities are considered responsible for the reconstitution of the forests as stated in Article 77.

DRC implemented a public service for reforestation. The "Service National de Reboisement" (SNR, National Reforestation Service) already planted 7.200 ha, mainly on the Batéké Plateaux. DRC also elaborated ambitious programs for reserve and protected areas: the Belgian royal family offered a financial help to create conservation areas and a US\$ 16 million program was launched by ICCN on FEM funds to rehabilitate protected areas.

DRC also opened discussions for an engagement in FLEGT (Forest Law Enforcement, Governance and Trade),

an ambitious European funded program targeting an improvement in the forest governance.

Further thought was given to REDD in the past few months, as testified by the common struggle with the other Central African countries to obtain that degradation also be taken into account in the REDD process in last December in Bali as deforestation is only occurring slightly in DRC, reducing the need and the urgency of the REDD deforestation debate.

**6. What is the current thinking on what would be needed to reduce deforestation and forest degradation in your country? (e.g., potential programs, policies, capacity building, etc., at national or subnational level):**

In order to fight deforestation and the forest degradation process, to reduce the pressure exerted on natural forest stands, the Democratic republic of Congo wishes to develop its national strategy through five distinct, but simultaneous approaches. Each one will result in concrete policies and projects:

- (i) Developing a land use plan at a national scale;
- (ii) Managing the energy sector, giving a special attention to the sustainability and the carbon balance aspects;
- (iii) Modernizing agriculture to reduce the impact of traditional practices on forest carbon stocks;
- (iv) Encouraging the emergence of a strong and modern private sector by appropriate measures;
- (v) Addressing the demographic impacts (natural increase of the population and immigration).

(i) Land Use Plan

The Land Use Plan will divide the country into territories in relation with elements linked to good carbon stock management. Dense Forest and forested areas (dry forest, forest savannas...) will be especially taken into consideration.

The Land Use Plan is a very important tool for global carbon stock management at the national scale. It should facilitate the modernization of agriculture by locating the best adapted territories, and the same applies for forest reconstitution or plantation dedicated to the energy sector.

The population needs for new arable land obtained by conversion of the land will also be taken into consideration. As regards the natural increase of the local population and the current population density in forested areas, especially in the northern part of the country and in an eastern strip bordering Burundi, Rwanda and Uganda (up to 50 inhabitant/km<sup>2</sup>)<sup>5</sup>, targeting absolute zero deforestation seems rather unrealistic.

Moreover, DRC is not self-sufficient for its food supply. REDD should not oppose self-sufficiency and deforestation, with an arbitration between receiving a reward for protecting the forest or stopping to spend currency for food supplies. The problem is the same regarding the energy sector, however, the harvest of fuel wood could be organized on a sustainable basis.

(ii) Energy sector

The approach of the energy sector is based on three elements: first, the improvement of traditional practices for cooking as regards the energy used, second, the valorization of the tremendous potential of the hydroelectric power in DRC, as well as other types of energy and finally, the development of sustainably managed forests dedicated to energy production.

Concerning traditional energy use, the distribution of improved hearths to the users and in the improvement of the carbonization output should help protecting the forest surrounding the main settlements by decreasing the equivalent quantity of wood consumption per user capita (households and craftsmen).

The second line was already started a few decades ago with the building of the Inga dam. DRC still has enormous

possibilities for improving the hydroelectricity supply and could also valorize flare gases. The Ministry for Energy plans to improve the distribution coverage of this energy and the promotion of electric hearths. This diversification can also benefit from carbon credits in the CDM framework.

The last line consists in creating clean and sustainable timber production systems, with plantations with energy production objectives and the development of managed natural forests with a wood energy objective. In this approach, it will be a matter of developing in particular plantations with rapid growth species (Eucalyptus and Acacia) on herbaceous savannas or degraded savannas.

DRC has a good experience in this field through the project of 7.000 ha plantation for energy purposes on the Batéké plateau (pines, eucalyptus and acacias). These plantations could also be mobilized for the needs of service wood (for building house, for handicrafts...). It is necessary for that to take two types of measures:

- Ensure that all natural forests (degraded or not) located in the supply basin are managed.
- Set up a tax system to rebalance the competition and economically favour the plantations to the detriment of the logging of non-sustainably managed natural forest stands.

(iii) Modernization of the agriculture

As highlighted in section 3, agriculture is one of the main causes of deforestation. To tackle this issue, a large modernization plan of agriculture should be progressively set in place. This program will include the training of farmers (education of the young rural people, reinforcement of the technical service at a local level).

Both slash and burn and rotating agriculture are identified in the question 3 as sources of Green House Gas Emissions sources. Improvement of the practices can allow a reduction of these emissions.. A better understanding of the soil fertility dynamics could encourage peasants to improve the management of their lands, to avoid erosion (by maintaining a soil cover during the rainy season, the improvement in using fire...) and increase the yields (selection of adapted plant types...). Make people aware of agroforestry and afforestation could also help tackling the carbon stock issue in rural communities.

(iv) Private Sector

The private sector should be reinforced by appropriate measures such as an adapted taxation for projects with a positive carbon impact. A part of the REDD finance could even be mobilized to offer grants for particularly meaningful projects. The private sector demonstrated its capacity to manage large forest areas with sustainable forest management. Moreover, the private sector is essential for the local economy.

(v) Demographic changes impacts

Adressing demographic changes impacts imply a long term policy. Adapted family planning programs already proved their efficiency in other parts of the world and could be successfully implemented in DRC. Special attention should also be given to the specific impact of immigration on carbon stock (different practices).

---

**a) How would those programs address the main causes of deforestation?**

---

**b) Would any cross-sectoral programs or policies also play a role in your REDD strategy (e.g., rural development policies, transportation or land use planning programs, etc.)?**

The organization of the REDD strategy is exposed above. However, we would like to stress the importance of the multi-sector task group the DRC would like to put in place to define, implement and assess the national REDD strategy.

We considered REDD as a transversal issue covering the fields of agriculture, education, water, labour, economy

and more generally speaking rural development. The strategy to put in place should cover a very large area. Special attention will be given to the coordination between all field teams and the follow-up of the REDD initiatives. A large consultation of all stakeholders, including all levels of information, from small forest dwellers up to Ministers, should be designed.

For the coordination and the cohesion needs, a multi-sectorial task group should be implemented under the initiative of the government, combining national/international experts (including each Ministry potentially involved in the REDD context: Mining, Infrastructures, Forest, Environment, Agriculture and Rural development, Land Tenure Issues...) and NGOs under the initiative of the government. Seized by the President or the Prime Minister to reinforce its importance, this task group will be placed under the direct authority of the Ministry of Environment, Nature Conservation and Tourism. This multi-sector task group will be in charge of defining the main axes of the national REDD strategy, of distributing the tasks between the different Ministries and of assessing the decisions taken.

Part of this group will act as a “steering unit” to coordinate REDD policies research/activities, to develop and extend the circulation of information, to facilitate the consulting process with national and international NGOs engaged in the Environment and Natural Resources Management field. NGOs will, themselves, pass on the information to their own network to provoke a debate.

The group will have to support the “steering” unit in coordination research/activities to implement REDD policies, to develop and extend information circulation, to facilitate the consulting process with national and international NGOs engaged in the Environment and Natural Resources Management field. NGOs will, themselves, forward the information to their own network to provoke a debate.

The “steering” unit could be placed within the Directorate of Sustainable Development (Ministry of Environment, Nature Conservation and Tourism). The unit will be in charge of developing, informing and harmonizing the new REDD policy with the existing forest and rural policies (including the financial aspects of redistribution with the collaboration of the Finance Ministry). This unit will work closely with other Ministries, in consultation with the parliamentary group and the provinces governors to create a REDD consensus. This unit will also inform and facilitate the implementation of the REDD policies involving the different actors in the management and conservation of natural resources.

Another type of multi-sector task group has already been installed and is known as the “National consultative council of Forests”. The section 7e gave details about this existing task group, which is also reproduced at decentralized levels.

---

**c) Have you considered the potential relationship between your potential REDD strategies and your country’s broader development agenda in the forest and other relevant sectors? (e.g., agriculture, water, energy, transportation). If you have not considered this yet, you may want to identify it as an objective for your REDD planning process.**

REDD should be considered as a complementary action of our national development agenda. In fact, DRC made a strong commitment to maintain forest integrity under the forest law through the process of sustainable management, REDD will help us go further in this direction and in the monitoring of the forest exploitation.

The transportation network remains deficient in DRC, and REDD should not be an obstacle to develop this network. Human settlements are always occurring along the road, thus road building will for ever be a major cause of deforestation/degradation.

As recognized by the United Nations Convention on Climate Change, “responses to climate change should be coordinated with social and economic development in an integrated manner with a view to avoiding adverse impacts on the latter, taking into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty”.

The access to the stakeholders data collection should be improved. This task could also be conducted by the “steering” unit.

**d) Has any technical assistance already been received, or is planned on REDD? (e.g., technical consulting, analysis of deforestation or forest degradation in country, etc., and by whom):**

COMIFAC, AFD and GTZ organized a meeting, in March 2008 in Paris, in order to present the technical aspects of the monitoring. DRC was represented by Mr. Vincent KASULU.

FORET RESSOURCES MANAGEMENT provided technical consulting for drafting the R-PIN through a WWF-US (Fonds Mondial pour la Nature) grant. The technical consulting received covers most aspects of the R-PIN: methodology, requirements to curb emissions, mobilization for fund raising ...

The WOODS HOLE RESEARCH CENTER, and especially LAPORTE's team carried a research work in DRC to quantify the Emissions from DD<sup>3</sup>.

However, technical assistance will be helpful for DRC to reinforce local capacity in the REDD process, which links different aspects the administration is more or less familiar with.

Further consulting work will be requested to have a global approach of the social aspects in the REDD issues. A field research should be conducted in order to define a global development strategy to discourage intentional fires and encourage more advanced agriculture techniques in order to avoid slash and burn.

A great need for technical and scientific research is also present, as some obstacles must be overcome, both on the technical aspects of the monitoring and carbon accounting and on the social, political and financial aspects.

Scientific research must be conducted to provide reliable data and ratio in order to calculate variations of the annual carbon stock. There is a need for precision on the Biomass Expansion Factor and the Roots to Shoots Ratio, see Annex 1, part 4.6.

OFAC could also play a central role in collecting information required by the monitoring of GHG emissions. Countries should rely on OFAC to concentrate the efforts for the technical aspects of monitoring and calculation of GHG emissions. The DRC authorities would like to see OFAC playing a central role in the monitoring.

**7. What are your thoughts on the type of stakeholder consultation process you would use to: a) create a dialogue with stakeholders about their viewpoints, and b) evaluate the role various stakeholders can play in developing and implementing strategies or programs under FCPF support?**

**a) How are stakeholders normally consulted and involved in the forest sector about new programs or policies?**

Consulting stakeholders improved greatly with the launch of the Forest Management obligations under the new 2002 Forest Code: dialogue with the forest operators is permanent, and the socio-economic diagnoses are compulsory.

An interministerial committee was put in place to assess the former forest title conversion, with the implication of all stakeholders and a national results seminar was held at Kinshasa during the third week of July 2008.

**b) Have any stakeholder consultations on REDD or reducing deforestation been held in the past several years? If so, what groups were involved, when and where, and what were the major findings?:**

After the organization of the workshop in Kinshasa in April 2008, a tripartite delegation (WHRC, Ministry of Environment and Parliament) went to Bikoro in the Equateur province to evaluate in the field the appropriation of the REDD by the stakeholders. A document entitled the foundations of REDD in the DRC was subsequently prepared by the same parties on 14 June 2008.

A local forum aims at raising awareness among the populations on problems linked to the management of biological resources in general and more specifically to the fight against deforestation: the forest governance dialogue committee, which brings together public authorities, private operators, NGOs, native populations (Pygmies), the churches and the intellectual elite.

Two delegates of the Pygmies league represented the DRC at a Latin-American workshop on Climate Change, which was held in Manaus (Brazil) on 4 April 2008 and brought together native peoples and traditional communities from the three large forest blocks of the Amazon and Congo basins as well as from Borneo and Papua New Guinea. The same Pygmies League intends to organize, in October 2008, a workshop on the carbon market and the forests for the native peoples of Africa, with a particular emphasis on the REDD mechanism.

A traditional national day of the tree is held every year throughout the country, in order to raise the local people awareness of forest richness. Each year, on this occasion, a special cloth is designed and distributed to the local population. The impacts of this day are difficult to measure precisely.

Planting trees is regarded as a civic duty of each citizen.

Punctual awareness raising actions are conducted by NGOs. UICN conducted that way awareness raising actions about deforestation and climate change, encouraging a better governance of the forest resources.

---

**c) What stakeholder consultation and implementation role discussion process might be used for discussions across federal government agencies, institutes, etc.?**

**c) Quel type de consultation et quel processus de discussion pourraient être utilisés pour les échanges entre les agences gouvernementales, les institutions, etc. ?**

Ideally, sectoral policies should be the object, within the framework of their development process, of reflexions and of exchanges between representatives of the groups of partners concerned (administrations, local councilors, traditional authorities, local populations, civil society, private sector...) on the definition of the objectives and the development of the strategies best adapted to reach them, the policy orientations being beforehand given by the Government.

In practice, one of the difficulties encountered within the framework of the development of these sectoral policies is due to the fact that certain stakeholders are not or insufficiently associated to the process. It is often the case of the rural populations who do not have a structured representation. The creation of "National Consultative Councils" and "Provincial Consultative Councils" should help to improve the representation of the stakeholders to the decisions in natural resources management (see below). One of the consequences is that the interests of these populations are only taken into account through the idea that the local administrative authorities have of it and the interest they bring to it.

There are recent positive experiences in terms of consultation: for the drafting of the application texts of the forest code, and during the harvesting titles conversion process, local population representatives were integrated in the Inter-Ministerial commission in charge of examining the titles. Other consultation processes are planned also for the land use planning and the forest management and by official texts defining the procedures for "classification" and "declassification" of the forests. We give below two examples of official texts showing that the consultation process is now systematically planned in the forestry decisions.

"In order to adapt the national forest policy to each Province particularism, a provincial forest management plan is elaborated by each Province governor involved taking into account provincial consulting council advices. The Governor must involve the public as well as private actors of forest sector" (from Forest Code, Article 6)

« All along the Management Plan preparation, the concession holder reports to the administration in charge of the forest, the local authorities and the neighbouring population on the work process. It consults the neighbouring population targeting agreements, ... » (Ministerial order N°036CAB/MIN/ECN-EF/2006 of the 5 October 2006 fixing the elaboration, approbation and implementation procedures for the forest concession Management Plans, Article 17.

**d) Across state or other subnational governments or institutions?**

An effort of harmonization is made between all Congo Basin countries through COMIFAC<sup>13</sup>. COMIFAC was set up by the Yaounde agreement in 2000, defining different levels of work between Congo Basin countries, namely Cameroon, Central African Republic, Chad, Congo, DRC, Equatorial Guinea, Gabon, Rwanda, Burundi et Sao Tomé. Several sub-organizations exist, i.e. RAPAC (Protected areas management), OAB (Forest economy, certification, and legality), OSFAC (biodiversity assessment and transboundary protected areas), ADIE (information collection), CEFDHAC (consultation process)...

The six forest-rich countries (Cameroon, CAR, Congo, DRC, Eq. Guinea, and Gabon) of the COMIFAC have clearly indicated that they want to position themselves at a regional level in the international debate on climate change and have already done so, by regularly submitting joint proposals to UNFCCC.

The establishment of a regional platform is requested by these countries as a coordination instrument. This platform could be an extension of the already existing CDM-platform, but an effort should be made to avoid confusion between REDD and CDM. A request is currently under formalization to raise funds. This platform could be a strong incentive for national capacity building, relying on workshops, training, public consultation and disclosure of information<sup>14</sup>.

A convergence plan was built under COMIFAC which includes this kind of activity as a priority.

An important specificity was developed by the DRC: a heavy decentralization of the authority decided under the Constitution. More place is given to the Provinces with the creation of Provincial Environment Ministries. However, the articulation between the central services and the provincial ones, as the responsibility sharing, remains deficient.

**e) For other stakeholders on forest and agriculture lands and sectors, (e.g., NGOs, private sector, etc.)?**

The Forest Code provides for the implementation of "a Provincial consultative council of Forests" and of a "National consultative council of Forests" (Articles 29 and 30) The Ministerial decree n°034/CAB/MIN/ECN-EF/2006 and the decree n°08/03 of 26 January 2008 fix the composition, the organization and the operational conditions of both new councils. The different administrations, Universities, Professional Associations, NGOs and local populations will be represented in these councils. The National Consultative Council will give preliminary views, especially on planning projects, forests classification and declassification gazetting? , and on any decisions in relation with the forests. The Provincial consultative council could also seize the "Province Governor" for any questions, considered as important in relation with the forest sector, namely the management of the reallocated funds from forest revenues" (Article 2 of the Ministerial Decree n°034/CAB/MIN/ECN-EF/2006). Both councils are not operational yet but it is clear that their major role regarding consultation, and even fund management, could be build on in the framework of the REDD process.

A socio-economic study is included in the forest management planning process; including a consultation/validation step by the local population. The local communities will be especially involved in the definition of the concession limits, excluding areas reserved for agriculture, but also in the negotiation of the "specifications" (cf. Article 17, Arrêté ministériel N°036CAB/MIN/ECN-EF/2006 of 5 October 2006).

Local populations are involved in all the other consultation processes in the DRC legal framework, as already mentioned at point 7.c).

<sup>13</sup> <http://www.comifac.org>

<sup>14</sup> From "Regional coordination of the Congo Basin countries on Climate change issues" note, not published.

**f) For forest-dwelling indigenous peoples and other forest dwellers?**

From now on, social groups representatives will sit in the Forest National Consultative Committee as well as in the Forest Provincial Consultative Councils.

**8. Implementing REDD strategies:**

**a) What are the potential challenges to introducing effective REDD strategies or programs, and how might they be overcome? (e.g., lack of financing, lack of technical capacity, governance issues like weak law enforcement, lack of consistency between REDD plans and other development plans or programs, etc.):**

A big challenge in the Congo Basin will be to build a fair baseline. An historic baseline is not acceptable for any country of the Central Africa Basin. There is a strong need to consider current economic conditions to determine the baseline. A serious study should be dedicated to this crucial point.

There is a general, strong and striking consolidation need in all the sectors concerned, due a general weakness of the local authorities for the technical aspects. SPIAF services should be consolidated to enable a real national monitoring, performed by already existing administration services. Other institutions should be reinforced, namely the Directorate of Sustainable Development (Direction du Développement Durable DDD), the Directorate of Forest Management (Direction de Gestion Forestière DGF), the National Service of Reforestation (Service National de Reboisement SNR) and certain services of the agricultural sector implicated in the vulgarization of agricultural techniques, fish culture and breeding.

DRC improved greatly the governance since the end of the war but rather requires support for capacity building. Some requirements could be clearly explained (land tenure, forest concession titles, institutions weaknesses...), others will come while implementing the process.

Another very strong requirement at the regional scale should be the construction and development of a satellite imagery reception station in Central Africa. This station would enable to update the data collection, resolve the clouds cover issue and provide high quality satellite data required for the degradation analysis. Funding agencies are quite interested in such a station, including France, England and Germany. A free public access to the satellite imagery could encourage comparative work to be done by third parties (NGOs...) to check accuracy of national carbon balance.

There is a consensus that, because the Congo Basin is an integrated ecological region as well as a more and more integrated economic zone, those challenges could be effectively managed at a regional level, resulting in an economy of scale.

**b) Would performance-based payments through REDD be a major incentive for implementing a more coherent strategy to tackle deforestation? Please, explain why. (i.e., performance-based payments would occur *after* REDD activities reduce deforestation, and monitoring has occurred):**

Performance-based payments should be an incentive only at the administrative level. The population, really at the heart of the REDD strategy, will not be sensitive to performance-based payments before seeing the effects of such payments. However, performance-based payments could be a very good way to develop a cause and effect feeling at a local level, even more if the payment is annual. Every year, the local population should be made aware through a dedicated commission of the carbon accounting and decide through a consultation process on the granting of the funds.

Deforestation and Degradation is highly sensitive to local inhabitants behaviour, we present below the first steps of a reflexion to launch.

The farmers could, beyond other advantages, claim to reap, individually or collectively, a share of the commercial value of the resources exploited on their village territory. They could also complain about the low level of social infrastructures and claim more supports on the part of the State, with or without the intermediary of the private

companies, in compensation of the extracted resources.

This approach relates to all natural resources: forest, environmental, oil, mining resources ...

It should not be surprising that farmers often do not care of the trees which grow in their vicinity since the State owns them and does not grant them the use of them correctly... On the contrary, one could expect that they destroy, sooner or later, these trees, conscious that their maintenance until can be harvested would translate into the passage of forest engines on their territory, causing damages with their plantations.

On the other hand, if the State agreed to grant them, on an individual or collective basis, the property, or at least the usufruct of the trees located in their vicinity that could change their strategy completely. They would then be placed in situation to recover a share of the commercial value of these products and could find an interest to protect, in particular from fire, this natural capital.

“Trees situated in a village or in the close neighbouring or in a collective/individual field are collective ownership of the village or of the field owner. They could be sold to third parties”. (Forest Code, Article 9)

This simple example remains however quite incomplete regarding the value to give to the trees, how to give a value to trees in forest savannas. There is a strong need to improve this axis.

Moreover, failing to grant to the local populations direct monetary benefits in connection with the exploitation of the forest resources which are on their grounds, the forest legislations provide on the other hand that they obtain social benefits from forest companies which hold the concessions there, thus demanding that the forest companies replace the State.

The forest companies holding a management and logging permit must contribute to the development of the communities bordering or located in the permit in accordance with the clauses of the schedules of conditions. Each concession contract must be accompanied by a “schedule of conditions”, defining the obligations of the concessionaire for local infrastructures realizations (cf. Forest Code).

The customary right remains very strong in the DRC forest areas, although the rapid modernization process compromises over the last years... Even if the forest belongs to the State according to the national laws (Forest Code, article 7), there is as strong traditional appropriation by the local population (considered as traditional beneficiaries of natural goods), obliging forest concession holders (as well as any others natural resources operators), to deal for the access to the resources.

Moreover, intellectual and political elites could have a strong influence on the local population of their area of origin, by encouraging them to claim advantages on a traditional customary base

Finally, the Forest Code make provision for the transfer of forest taxation revenues for the benefit of local development:

The “*taxe de superficie*” calculated on the basis of the concession area is distributed as following, according to the forest code: 40% to the local entities (“secteur” and Province) ; 60% to the “Trésor Public” (State account). The 40% allocated to the local entities should be used only for “realizing basic infrastructures of community interest”. This redistribution rule is not applied at the moment and seems to be very hard to apply. In addition, according to the Constitution (article 175), 40% of State Incomes of national nature should be allocated to Provinces.

The routing of these revenues to the poor peasants, often located in remote areas and who would need it most, will however not take place without difficulty:

- The small agricultural or forest producers already struggle to draw a fair remuneration from their productions; indeed, little structured and insufficiently organized, they are generally the victims of many intermediaries, better positioned on the markets and on the assistance and subsidies granting circuits;
- The relatively high complexity of the carbon product, compared with that of more traditional agricultural or forest produce, is not, a priori, an asset to facilitate the access of the most deprived to those markets
- The coupling of the objectives of REDD and PRP (poverty reduction) is not necessarily obvious and requires an awareness exercise from the various actors of the carbon market.

The question of the financial management mode is also to be addressed. Which will be the role entrusted to the various potential partners (administrations, NGOs, private sector, populations) in the installation, the running, the

follow-up and the control of the REDD financing mechanisms?

Packages must be defined according to the characteristics of the local contexts. At this stage, only recommendations of general interest can be made:

- Take into account the existing institutional framework and seek to involve its senior staff at the most decentralized level, which combines proximity with the populations and knowledge of field realities;
- Maximize the role of the people in charge who have been elected by the local populations;
- Entrust the monitoring-assessment and the control of flows to an independent entity.

### **9. REDD strategy monitoring and implementation:**

#### **a) How is forest cover and land use change monitored today, and by whom? (e.g., forest inventory, mapping, remote sensing analysis, etc.):**

The SPIAF plays an important role at national level for the monitoring of the forest cover. The SPIAF holds all the data from old inventories, it monitors and approves the preparation studies for the forest management plans (namely the mapping work and the management inventories). Moreover, the SPIAF benefits from high level staff in remote sensing and cartography matters, with a well equipped laboratory and trained technicians (by various partners). For example, the SPIAF recently realized with WWF funding a cartography work on land use and deforestation analysis on four areas, between 1986 and 2001: Isangi, Bumba, Gemena and the Tumba-Ledima reserve area. This work is available on request.

Regional or national monitoring of land-use and land-use changes are new initiatives in Central Africa. The forest stratification in the DRC covers a large surface area. However, some parts are not well known as they are difficult to access (swamps...). OFAC (FORAF), under the COMIFAC guidance, is currently monitoring the forest cover of the whole Congo Basin. The FORAF Project is currently monitoring deforestation rate between 1990 up to 2000 and between 2000 up to 2005. It relays the JRC (Joint Research Center, European Union) and UCL (Catholic University of Louvain) initiative that has estimated recent deforestation and degradation of the forest of the region. This FORAF project analyses Landsat TM and ETM+ images using segmentation at two levels, on a systematic ½ degree sampling grid of 20\*20km (covering 4%), resulting on a good estimate at the country level. It evaluates deforestation / reforestation and tries to monitor the dynamics of degradation / regeneration. Its main limitation for DRC monitoring is the lack of sampling plots in the South of the country.

An interesting work has just been conducted over the period 1990-2000 by CARPE, by automatic processing of satellite imagery MODIS, ETM+ and TM, not applied on sampling plots but on a wall-to-wall basis. Results obtained are coherent with the JRC and UCL work, and confirm that a sampling analysis is efficient to obtain a precise national deforestation rate. The same kind of work will be soon realised by CARPE on the period 2000-2005.

Several private companies (FRM, ONFi, TERE, EK-MA...) work daily in the Congo Basin and inventoried large areas of forest concessions in the region.

As an illustration, FRM, working on a large area of the forest concessions of the region, has been involved on more than 19 million hectares – i.e. around ten percent of the Congo Basin. As a sustainable forest management consulting agency, FRM produces maps and carries out inventories of the forest, daily using GIS and remote sensing tools. Visual delineation of Landsat images and aerial photographs, improved by years of comparison with forest inventories and expert knowledge, provide highly qualitative information. FRM's unique database of field inventories and forest maps covers more than 14 million hectares. This information is the finest and most significant forest data collection on the Congo Basin.

*pm:* A collection of old aerial photographs has been created, mainly in the 50s, but their quality is gradually degrading due to the lack of conservation care. A large part of the films and original photos has been destroyed by a fire. These photos could help to understand the DD dynamics by giving historical information (villages localization, former forest cover, localization of swamps...). In addition, land use maps produced in the framework of national and management inventories are still available, covering 16 million hectares, and are in a good state.

They could be used to analyze the deforestation over quite a long period of time.

---

**b) What are the constraints of the current monitoring system? What constraints for its application to reducing deforestation and forest degradation? (e.g., system cannot detect forest degradation of forest stands, too costly, data only available for 2 years, etc.):**

The main constraint of today's forest monitoring is the cloud cover on the eastern coast of the country and the lack of high resolution imagery for an annual or biennial survey. To suit our needs, the temporal resolution of the FORAF's project should be improved. To monitor forest degradation, high resolution and high cost satellite imagery is required. Techniques must be consolidated.

Private sector data, including FRM's unique database of forest inventories should be used to fine tune the techniques and validate the performed image analysis. The methodology consolidation should be supported by the collection of new high resolution imagery. It should be extended outside forest concessions, especially to monitor forest savannas, dry dense forests, mountain dense forests and plain dense forest of the eastern and southern parts of the *Cuvette* forest area.

---

**c) How would you envision REDD activities and program performance would be monitored? (e.g., changes in forest cover or deforestation or forest degradation rates resulting from programs, using what approaches, etc.)**

Quantification of carbon stock from forest lands is based on a method combining a national scale work with local analysis to validate the results. Firstly, a wall-to-wall mapping of the national land use is done using Geographic Information Systems and remote sensing tools. This mapping uses IPCC strata as defined in their recommendations. These strata will be linked to carbon pools also defined by IPCC.

Estimations of biomass stock are calculated for each identified stratum: forestry science uses forest management inventories results to obtain Volume Over Bark, linked to each kind of forest. The treatment of these data combined with Wood Density and expansion factors (BEF, Biomass Expansion Factor, VEF, Volume Expansion Factor, Roots-to-shoot ratio...) are used to estimate the stock of all biomass "pools" in forest areas.

Another method is suggested to quantify local biomass stock in areas where forest inventories results are not available. This method combines basal area of trees with volume by an allometric equation. This relation needs to be studied in depth for each identified stratum.

Once the volume of these areas has been obtained, Wood Density and expansion ratios are used to determine exactly biomass stock. This method must be improved, but once it will have been developed; it could prove faster and cheaper than to conduct forest inventories and will be really useful to monitoring the national state.

Finally, surfaces of different strata combined with biomass stock of each stratum determine biomass at national scale.

### Methodology summary

1. Selection and definition of the forest strata in accordance with IPCC standards and according to carbon storage variability,
2. Identification of the corresponding forest strata on map,
3. Analysis of the available forest management inventory data for each forest stratum,
4. Quantification of the Volume over bark for each forest strata:
  - a. Based on the analysis of field inventory data when available,
  - b. Based on the use of a quick appraisal field method (see [Annex 1](#), part 4.3) when inventory data is not available (as in protected area, in concessions not involved in management process...),
5. Quantification of the entire Volume over bark,
6. Use of the different coefficients to estimate carbon storage of all the biomass pools.

Refer to [Annex 1](#) for more complete information.

### 10. Additional benefits of potential REDD strategy:

**a) Are there other non-carbon benefits that you expect to realize through implementation of the REDD strategy (e.g., social, environmental, economic, biodiversity)? What are they, where, how much?**

Co-benefits of the implementation of a REDD strategy are numerous. The forest represents a very important economic sector for the national economy but the forest is also very important for environmental conditions (water regulation and microclimate), biodiversity, social aspects (religious, tradition...). Protecting the forest will therefore consolidate these different sectors. As proven in the WB programs for the concessions' conservation, numerous benefits are to be expected from forest protection such as biodiversity, pharmacopoeia, non wood forest products, religious and social utility...

Developing the forest with the implementation of sustainable forest management will bring more co-benefits on environmental aspects. SFM is one of the best compromises DRC could offer for carbon stock protection: a balance between the different uses of the forest: social, economic, poverty reduction, carbon stock protection, wildlife conservation...

A collection of the existing data in concessions and protected areas could help better understand/assess the co-benefits.

As an example, forest concession holders are also in charge of the fauna. The fauna issues are treated in relation with NGOs with the forest management unit. Forest management tends to widen the number of collected species, which allows for a better distribution of the harvesting pressure between species. The most precious species are thus less coveted which allows for a better floristic balance.

At concession level, local and permanent economic activities provide a strong support to the emergence of a small sector developing non-wood forest products (caterpillars, rattan, honey...).

REDD will provide several socio-economic benefits: development support, reserve for non-wood forest resources for the local populations...

**b) Is biodiversity conservation being monitored at present? If so, what kind, where, and how?**

Biodiversity conservation is currently under the responsibility of ICCN, which benefits from the support of international NGOs (UICN, WCS, WWF, AWF...).

**c) Under your early ideas on introducing REDD, would biodiversity conservation also be monitored? How?**

Biodiversity will be assessed in the strategy REDD implementation framework. Assessment modalities will be defined during the Readiness phase.

**d) Are rural livelihood benefits currently monitored? If so, what benefits, where, and how?**

Nowadays, there is no centralized initiative to monitor populations benefits.

**e) Under your early ideas on introducing REDD, would rural livelihood benefits also be monitored? How?**

OFAC will play a central role in centralizing all collected data within the Congo Basin. Most of this data is collected by NGOs, administration and the private sector but there is a strong need for consolidating these collections. OFAC is a tool wished for and designed by countries to improve the regional consolidation (see Annex 2).

Socio-economic impact of REDD should not be ignored and a monitoring of these aspects should be planned.

**11. What type of assistance are you likely to request from the FCPF Readiness Mechanism?**

- **Identify your early ideas on the technical or financial support you would request from FCPF to build capacity for addressing REDD, if you are ready to do so. (Preliminary; this also could be discussed later.)**
- **Include an initial estimate of the amount of support for each category, if you know.**
- **Please refer to the Information Memorandum and other on-line information about the FCPF for more details on each category:**

**a) Setting up a transparent stakeholder consultation on REDD (e.g., outreach, workshops, publications, etc.):**

The "steering" unit described in the question 6. above will be in charge of organizing the stakeholder consultation. Once the unit constituted, it will start drafting consultation methodology. Stakeholder consultation is a crucial point to define REDD policies. Rushing on the consultation process without having first clarified the methodology would be a mistake. Drafting the methodology will be a difficult and quite unique task. Sufficient time should be reserved for this operation.

This consultation must use technical capacities and we advise to have an important program of capacity reinforcement that we estimate at US\$ 2.5 million.

**b) Developing a reference case of deforestation trends: Assessment of historical emissions from deforestation and/or forest degradation, or projections into the future.**

Projections into the future of historical trends can not be considered as a reasonable baseline for Congo Basin countries, and moreover for the DRC. As above mentioned, pressure is increasing on forest resources for several reasons and data is lacking to have a clear comprehension of the evolution of the forest savannas. Funds should

be raised to help developing an alternative baseline, not only based on historical trends but also on large prospective work.

Considering these various factors, the context is favorable to a strong resumption of the agricultural activities :

The world context is characterized by a current shortage in raw materials, deemed to increase, in particular of food stuff, and, pushes toward the potential revival of agricultural productions, which is currently programmed and organized in DRC;

The DRC has recently known a difficult period of war, which caused a downturn in many economic sectors, including agriculture.

The drafting of a realistic baseline which takes into account the specificities of the country is estimated at US\$ 1 million.

---

**c) Developing a national REDD Strategy: Identification of programs to reduce deforestation and design of a system for providing targeted financial incentives for REDD to land users and organizations (e.g., delivery of payments, governance issues, etc.):**

The strategies to build to succeed will combine suggestions for technical (adaptation to difficult climatic conditions by supporting a greater availability of adapted seeds; improvement of the grounds conservation practices; better water stock management; clarification of land legal systems; ...) and financial solutions (adapted financing mechanisms, of which those of the REDD, and motivating for the producers; installation of an attractive investment framework; ...)

From this point of view, one can consider that part of the financial flows which will be associated with the REDD (and which could, according to first estimates, annually amount to billions of US dollars) will be able, while tackling the climatic change issues, to bring a complementary income to the small producers of the poor rural areas and/or finance social investments.

The national approach which can be considered within the framework of the financings of the REDD offers broader and permanent prospects and, consequently, more significant prospects than that of a project type approach. It can facilitate the intersector dimension of the programs to be implemented, by integrating rural and local development problems and poverty reduction issues, themselves already interdependent in a large part of the Central African countries.

This point remains unclear. We are sure that a strategy of this importance should be build seriously and particularly the setting up of "steering"/pilot projects on the different ecosystems encountered in DRC (Dense Moist Forest, Mountain Forest and Clear Forest). Any kind of haste must be avoided even under great pression.. A strong commitment should be made to find the best way of mobilizing the funds.

As regards finance, a support of US\$ 2 million is expected for this issue.

---

**d) Design of a system to monitor emissions and emission reductions from deforestation and/or forest degradation:**

An important effort is still to be made to clarify several aspects of the proposed methodology. The most important point concerns the degradation monitoring. There is a striking lack of consolidated and reliable methodology on the subject, we propose in [Annex 1](#), part 4.2 a program of work to achieve rapidly this goal.

Another priority is to increase sharply the knowledge of forest savannas. These zones are of a low interest for economic return, are placed under pressure by local population and are actually included in the REDD issue as they are included in the forest definition. We provide some reflexion leads in [Annex 1](#), part 4.1.

Funds should also be raised to obtain a better idea of the impact of wood harvest on carbon stock. Some articles were published but data is still sparse considering the dynamics of revegetation in the gaps left by harvested trees, we precise some ideas in [Annex 1](#), part 4.4.

Finally, the proposed methodologies suffer of a lack of applicable ratio regarding equations to calculate biomass

stock, both Above and Belowground. These ratios should be consolidated based on African forest sampling. Details are also given in Annex 1, part 4.5 and 4.6.

US\$ 0.5 million should enable great advance as regards methodologies adaptation to specific cases in DRC, and this without including the acquisition of satellite imagery.

See Annex 1, part 4.

**e) Other?:**

The above mentioned REDD platform (7.d) could be consolidated by a scientific committee, providing coordination between the scientific community and the program. The capitalization of the existing data, as well as the coordination of the scientific work projects under preparation are essential: this should help the Congo Basin countries to fully take advantage of the scientific work projects (existing and forthcoming) and use them in the definition of their negotiating position<sup>8</sup>.

This section sums up the amount of money required for DRC to prepare to become a party to REDD and for the implementation of a REDD strategy. Precisions will be given along the way. Additional work should moreover be conducted at regional level, and an upcoming regional meeting will clarify these needs, which are complementary to the requirements set out below:

(i) Pilot Activities (4 sites)	US \$ 2 M
Dense Moist Forest (2 sites)	
Mountain Forest (1 site)	
Clear Forest (1 site)	
(ii) Inventory and knowledge of the biomass	US \$ 0.5 M
<i>Not including satellite imagery purchase</i>	
(iii) Baseline / reference case	US \$ 1 M
(iv) REDD strategy design	US \$ 0,5 M
<i>Complementary of the REDD pilot activities</i>	
(v) Capacity reinforcement	US \$ 2.5 M
<b>TOTAL</b>	<b>US \$ 6,5 M</b>

**12. Please state donors and other international partners that are already cooperating with you on the preparation of relevant analytical work on REDD. Do you anticipate these or other donors will cooperate with you on REDD strategies and FCPF, and if so, then how?:**

The WWF-US (World Wildlife Foundation, USA, Washington) offered assistance to design this R-PIN through a consultation. France, (through the AFD), the European Union, Germany, Belgium, United Kingdom, Norway and the USA could also be identified as potential donors in the REDD implementation.

DRC appreciated the contribution of WHRC, FRM and NGOs to draft this R-PIN. DRC would appreciate to have the possibility to carry on with different partners, having a deep local forest knowledge.

**13. Potential Next Steps and Schedule:**

**Have you identified your priority first steps to move toward Readiness for REDD activities? Do you have an estimated timeframe for them yet, or not?**

The last submission of the Congo Basin countries (Cameroon, Congo, Gabon, Equatorial Guinea, Centrafrican Republic, Democratic Republic of Congo) in March 2008 included a schedule on political decision:

We would like to quickly receive a financial help to create the “steering” unit exposed in question 6. above. We consider the unit constitution as a preliminary step in the REDD process.

We estimate that precisising the methodology through the above mentioned recommended studies (see Annex 1, part 4) is a true emergency. By 2012, methodologies should be consolidated and reliable to integrate easily the REDD issue in the Convention on Climate Change Framework. Methodology should be applied, tested and gradually corrected, this work should be scheduled all along the available period, from now up to 2012. Regarding the complexity of such a methodology, the remaining three years should be employed to build and structure a strong methodology. A delay to start the consolidation would be extremely detrimental to the project.

The urgency is also real for the economic study on the effects and causes of the payments, on enforcing legal aspects, on building national and regional capacity as mentioned above with the establishment of a regional scientific panel...

To sum up, there is an urgent need to start and awareness should be raised on the short time left for such a wide ranging work. We do not want complaints or concern form the society at large, we want the World Bank to help us build a strong REDD vision on all the aspects covered by providing financial help so that we can meet the international demands on climate change mitigation.

**14. List any Attachments included  
(Optional: 15 pages maximum.)**

Appendix 1 : Methodology proposal to monitor African Forest Carbon Stock

Appendix 2 : Indicators monitored bu OFAC (extracts)

Appendix 3 : Priority actions for the REDD Readiness

Appendix 4 : List of attendees of REDD consultation meeting of the 18th of April 2008