

## **Executive summary of the draft report Evaluation PROGEPP June 2004**

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### 1) Steps followed during the evaluation mission

The following methodology was used:

- Review of project documents (technical reports, scientific publications, activity reports, diverse correspondence, meeting minutes, agreements etc...).
- In depth interviews with heads and personnel of three partner organisations in the field, and with representatives of the Ministry of Forest Economy in Brazzaville.
- Interviews with some stakeholders in the field (village chiefs, villagers, semi-nomads, traders in the market, teachers, etc...).
- Visits of field level activities (components of conservation, monitoring, forest management, timber processing, product substitution activities, awareness building, social activities, etc...).

In accordance with the terms of reference, the evaluation included the following **steps**:

- Description of the current situation
- Analysis of results obtained and constraints experienced
- Analysis of the perception of external actors
- Analysis of the performance of de collaboration between CIB-WCS-MEFE
- Lessons learned and replicability of the various aspects of the collaboration

### 2) PROGEPP

The objectives and expected results of PROGEPP are:

#### **Development Objective**

To contribute to biodiversity conservation, and to the production of valuable timber in a lowland forest concession forming a managed buffer zone adjacent to the Nouabalé-Ndoki national park, northern Congo.

#### **Specific Objective**

To elaborate, implement and monitor ecological management systems based on the timber industry and local communities in the forest concession of Kabo, Pokola and Loundougou, adjacent to the Nouabalé-Ndoki national park.

**Expected results:**

1. Co-ordination of the project and of the established management unit.
2. A plan for the management and the protection of the wildlife has been elaborated, adopted and implemented.
3. Low impact logging strategies and technologies have been elaborated, tested and evaluated.
4. Studies conducted on activities for alternative production, pilot projects and plans have been elaborated and implemented.
5. Applied scientific research/ monitoring programmes elaborated, tested and implemented to produce information for an evaluation and an adapted management

3) Brief reminder of the current situation**Historical aspect**

The Congolese Timber Industry (CIB) was created in 1968.

In 1991, WCS signed a protocol agreement with the Congolese Government, formalising the conditions under which it would work in Congo.

The work undertaken by WCS led to the creation, in 1993, of the Nouabalé-Ndoki National Park (PNNN).

WCS is responsible for the management of the PNNN (formalised by a convention with the State since 1996).

Forest harvesting started in the Ouesso region at the end of the 1940s. CIB has been so far assigned four Forest Management Units (FMU), centred in Kabo, Pokola, Toukoulaka and Loundougou and one Forest Harvesting Unit (FHU), that of North Pikounda Unit. The total area covered by the FMUs is 1'291'244 ha.

**The situation in Congo**

No rural management plan.

Existence of a new forest law, approved in November 2000 (*Loi N° 16-2000 of November 20th 2000 portant Code Forestier*, which is implemented through 6 decrees and 10 orders.

A partitioning in zones and forest management units (FMU) is foreseen, each subjected to management for periods of 10 to 20 years and adhering to the principle of sustainable management. Conservation areas, such as National Parks, are defined.

Wildlife conservation and use are governed by *Law No48/83 dated 21/04/1983, which defines the conditions for conservation and wildlife harvesting*. A proposed new Law concerning wildlife and protected areas is under preparation.

**Other dispositions taken by the private sector.**

Modification of *the internal rules of the CIB* approved on 31<sup>st</sup> December 1999.

In February 2001, a *Code of Practice* for the sustainable management of forest concessions in Africa has been approved and to which CIB was a signatory.

CIB has initiated the process to obtain FSC certification.

*Statement of commitment* by CIB to a continued improvement of socio-economic and environmental performance (May 2003).

Approval since 2001 of new techniques for *low impact forest harvesting* (LIFH).

### **Demographic data**

In total, the population of the area consisted of approximately 26 000 inhabitants in 2001, date of the start of PROGEPP (WCS, 2001).

The population census carried out by PROGEPP in 2001 reveals the following categories of inhabitants:

- The indigenous people, of which 19 % are Mbenzélé (semi-nomads) and 76 % are villagers
- The immigrants (5% of the total population)

A growing number of foreigners are primarily Rwandans and Congolese from the DRC.

### **Evolution of the collaboration**

A protocol agreement was signed in June 1999 for a 5 year period between the Forest Economy Ministry, CIB, WCS and Congo Safaris for the implementation and management of the conservation component in the FMUs of Pokola, Kabo and Loundoungou (following the cancellation of its licence to hunt bongo, Congo Safaris has left Congo and is therefore no more a partner in the agreement).

Another document, dated May 2001, specifies the project agreement between ITTO, the Government of the Republic of Congo, the General Directorate of Forest Economy, CIB and WCS for the implementation of project PD 4/00 Rev :1 (F) for a duration of 3 years (June 2001 to May 2004).

In September 2001, another protocol signed between the Forest Administration, CIB and WCS specifies the mission and the operational and financial conditions of the Surveillance and Anti Poaching Unit (SAPU).

### **Partner strategies**

#### *CIB*

The CIB industrial operator offers a real/ concrete long term strategy for industrial development, based on the first level of wood processing. It has set up a well adapted and efficient modern sawmill on the two locations of Kabo and Pokala and, on the latter, it has established a wood drying unit and a moulding workshop for value addition of small timber.

CIB is currently considering the utilisation of sawmill waste for energy production through co-generation.

CIB has also committed itself to a clear forest management strategy, with a will to quickly obtain eco-certification of its timber, enabling in particular secondary species from its forest concessions to be marketed in Europe.

## WCS

WCS (Wildlife Conservation Society) is a large American NGO involved in nature conservation. According to an agreement with the Congolese Government, it is responsible for the management of the NNNP and for the implementation of PROGEPP. In a context of conservation largely influenced by the ways in which forest enterprises function, it is to WCS's substantial credit that it has strongly promoted a collaborative approach to multiple use forest management in the inter-tropical zone and has led to a real dialogue being established between the different partners. WCS has stated that it is able to evaluate progress in wildlife and forest management using its ecological, socio-economic and law enforcement monitoring mechanisms. These studies and research result in objective and verifiable information. But WCS role remains limited to its operational mandate and to its role as the representative of a specific interest lobby.

### *The Congolese Administration*

The Congolese Administration is represented only by the Ministry responsible for forests and environment and by its field offices (Ouesso and Imfondo inspectorates). This set up is explained by the fact that the region is primarily forested and also by the historically influential position of the concerned Ministry within the Congolese Administration. It is regrettable that other Ministries (finance, agriculture and animal husbandry, rural planning, « social » Ministries, health and education) are not involved in the management of a concession of the size of CIB (1.3 million hectares). Nevertheless despite a disturbed post-conflict social and security context, the FEM has involved itself in the management activities by supplying the agreed deputation of staff, by ensuring the support for SAPU and through the facilitation of Anti Poaching (AP) operations in the field.

#### 4) Achieved versus expected results

##### **Project co-ordination and management unit:**

- WCS ensures the control of the project and good technical, administrative and financial management.
- The central co-ordination structure of PROGEPP, which meets twice a year, is the Monitoring and steering Committee (MSC) composed of the representatives of the 3 partners as well as the donors.
- A management cell, established by CIB for the monitoring of forest management, consists also of CBI and the FEEM and enables transparency in the monitoring and planning of the forest management activities. WCS participates in the Steering Committee set up to oversee the management plan process.
- At the field level, the partners interact regularly to monitor the implementation of the activities. A permanent dialogue is also maintained with the field level actors (CIB workers' union, village chiefs, hunters' committee, etc...).

### **Wildlife management and protection Plan.**

With regards to the implementation of the legislation concerning wildlife, a progressive approach has been necessary to initially secure the priority zones (villages and areas neighbouring the NNNP), before extending the activities to areas further a field from the protected area. The extension of the activity range of the project has evolved on the one hand as a function of the increase in available funding and on the other hand with respect to the sensitivity and context in the areas of intervention. In particular, a progressive approach, necessitating important efforts in extension and negotiation, was necessary in Pokola due to the high social costs associated with the introduction of the new wildlife management measures and to the wildlife law enforcement measures.

An effective organisation has been established by the project for wildlife management, which is illustrated by:

- A very clear reduction in hunting pressure, particularly so for protected species, based on a strict application of the wildlife law (protected species, prohibition of hunting with traps, regulation in the use of firearms, respect for the restrictions in hunting season, etc....).
- A network of eco-guards, recruited exclusively amongst local communities, ensures permanent surveillance (fixed posts and patrols) of the three Forest Management Units in the CIB concession, and benefits from rigorous and efficient support from the project.
- The adoption of Internal Regulations (IR) by CIB aiming at the reduction of bush meat marketing through restrictions on its transport within the concession and the enforcement of penalties in case of non respect of rules and regulations. The IR is implemented in the field and reinforces national legislation.
- The adoption and implementation of zones for hunting enable regulated access to the resource for all local actors, a reduction in access by commercial external hunters and a strengthening of the sense of community ownership of the wildlife.
- An integration of the wildlife zoning within the Management Plan of CIB.

The establishment of new ways of managing wildlife has evolved in parallel with an important effort at environmental awareness building in schools with well adapted extension material. Information campaigns have also been run outside of the school environment (on average 29 meetings per semester). Despite this substantial effort, it is recognized that information campaigns and awareness building activities require a sustained effort over a long period if a complete understanding and acceptance of current rules and regulations relating to wildlife management is to be achieved in the villages and logging camps.

Constraints linked to legal considerations have been identified. According to the Forest Code the forest and its resources belong to the State. Outside classified forests the use rights are recognised but are limited to the personal needs of beneficiaries, and marketing is explicitly forbidden, any commercial use (NTFP, wildlife, fishing) requiring a special permit. All aspects of the rural economy in the region which have a commercial component are therefore currently illegal (hunting, fishing, caterpillars, palm wine, raffia). Furthermore,

the condition for benefiting from use rights is residency and not ethnic origin, while the pilot wildlife management zoning plan aims at the reinforcement of traditional resource use rights through delimitation of zones with respect to indigenous communities.

### **Low impact forest harvesting strategies and techniques (LIFH)**

- A good low impact forest harvesting strategy has been adopted and implemented. In particular one should note the setting up of an efficient geographical information system (GIS), a method for harvesting inventory adapted to GIS (numbering and geo-referencing of trees) and a start with the use of GIS for road and extraction planning. Voluntary measures to limit the number of harvested trees (to reduce damage) have also been adopted as well as other protection measures including the identification of conservation areas. Staff has also been trained in appropriate felling techniques.
- CIB has embarked in the *FSC certification process* and has mobilised the necessary means to achieve it. In parallel CIB has also established procedures and control measures according to ISO 14.000.

### **Pilot substitution activities**

- An efficient system of *supplying animal protein* from domestic animals, based on the importation of live beef and frozen products (chicken, fish) has been established. A network of efficient cold storage (cold rooms and freezers) has been established in the different communities of CIB, which has led to an increase in domestic meat consumption.
- Other *pilot substitution activities* have been tested such as sheep/goat share farming, animal husbandry (poultry, snails, guinea pigs, brush-tailed porcupine), fish farming, support for fishing (supply of fishing equipment at cost price) and support for vegetable production. Within the limits of the project resources devoted to testing these activities it appears that the development of fishing activities shows considerable promise, while the other alternative activities produced only modest results. The non-availability of necessary supplies (supplementary feed, vaccines, chicks...) is a constraint for these activities in the current context of the region.
- The need for more in-depth socio-economic base-line data is underlined in order for an effective socio-economic diagnosis to be developed. In particular an in-depth analysis of the market chains, of the indigenous rules for the management of village lands, and of the social and financial impact of the hunting restrictions is necessary.

### **Monitoring and scientific research Programmes**

An ecological monitoring and management system for wildlife has been established and enables access to a good quality database. The main topics which are monitored are relative abundance indices and distribution of animal species and of human activities, the intensity of patrolling by eco-guards (conservation “effort”) and the number of illicit acts recorded, and the characteristics of hunted wildlife (quantity, live weight, species composition, age/sex category etc...). The collected data taken as a whole confirm a good level of protection of animal populations in the intervention zone of the project.

However more detailed studies are necessary to understand the real impact of the different interventions (hunting, forest harvesting) on particular species, particularly on forest duiker for which the interpretation of ecological monitoring data poses a number of problems.

Socio-economic and population monitoring is conducted through surveys in the villages and a census in the CIB sites is carried out annually. In parallel, consumption surveys are undertaken through a household sample in CIB sites to monitor changes in food habits in relation to the introduction of animal protein substitution. However the interpretation of this nutrition monitoring is limited by the fact that only the types of protein eaten during the meals are recorded and not quantities of protein effectively consumed.

#### 5) Collaboration performance

Notwithstanding their differences, a constructive collaboration has been established between CIB, WCS and the FEEM for the implementation of the project leading to concrete results, and especially the elaboration of the management plan for CIB. The CIB industrial company currently offers a concrete strategy for long term forest management and industrial development. WCS has the considerable merit to have committed itself strongly to a concerted approach of multiple use forest management in an intertropical zone, and to have established a concrete dialogue with the different partners. The FEEM is solidly engaged in the forest management operations and in support of the USLAB. However the Ministry's weak financial and technical resources limit its ability to play a more proactive role in the ongoing global reflection on the concept of integrated forest management.

#### 6) Project impacts

##### **Impact on wildlife conservation**

The strategy for wildlife law enforcement and the establishment of hunting zones has led to:

- a decrease in illegal hunting in general, and in particular significantly improved protection for protected species over a very large area
- a change in hunting methods (towards more selective hunting)
- an improvement in protection for special habitats.

In the FMUs of CIB, *the special anti poaching unit* (SAPU), which was set up on a pilot basis with the support of the project and of WCS, largely achieves its objectives with respect to wildlife law enforcement, and this is reflected in the obviously healthy state of large mammal populations in the UFA's. However while recognising that the situation is well controlled thanks to excellent supervision and monitoring of the guard force by the project, the policing nature of this work, by uniformed guards, means that risks exist for abuses to occur if this high level of supervision cannot be maintained. For example:

- The confiscation of non registered hunting weapons, associated with high fees, runs the risk of bribes being requested during controls in the forest and in particular

- against semi nomads. The currently implemented guard monitoring system should limit this risk.
- The establishment of control barriers is an obvious constraint on the free movement of people and goods and can lead to abuses if close supervision is not ensured.

A number of difficulties related to aspects of law enforcement remain:

- For organised hunts it is common practice for CIB staff to lend their hunting permits and their weapons to semi-nomads who do not generally have the means to be in conformity with the law with respect to possession of fire arms and hunting permits.
- Dealing with elephant crop damage (reporting and evaluation of crop damage, compensation, problem animal culling) is a highly complex issue and for which no easy solutions are available. Although the forest law provides for a number measures, these are not compulsory, and as a result the perceived application and/or non-application of these measures leads to tensions with affected villages.
- The legal status of eco-guards, foreseeing their incorporation in the forest service, is not respected (restrictions imposed by the IMF and the lack of funds)

Finally the policy of recruitment of ecoguards from the local communities, who have a traditional interest in managing the resource, is considered a sound conservation principle.

### **Socio-economic aspects (substitution proteins, wildlife meat commercialisation)**

Concerning one of the project's priorities (that of finding animal protein alternatives in Pokola to reduce hunting pressure), a close scrutiny is required on certain economic aspects linked to subsidies on domestic animal protein imports.

Concerning substitution activities in the villages, we have noted above the necessity to analyse the financial impact of the restrictions to the commercialisation of wildlife meat on the villagers and the semi-nomads (§ 5.2.3.2), as well as the necessity to strengthen the technical capacities of the socio-economic component (§ 5.4.2.2).

### **Project impact on forestry activities**

PROGEPP contributes directly to the elaboration of forest management plans, as foreseen by the new Forest Act. It therefore has an obvious impact on the conception of these plans and first and foremost on those of CIB. A detailed analysis of constraints encountered in the implementation of the CIB Management Plan is presented in the report. These constraints highlight a number of difficulties and incoherencies from the regulatory and political points of view and which have a direct impact on the implementation of PROGEPP activities.

### **Strategies for the control of population growth**

Through its commitment to the process of sustainable forest management, CIB promotes the economic stability of Pokola, at least at its current level. Pokola's situation is not an "artificial" one, but very much a normal socio-economic situation resulting from the establishment of an industry, be it based on forest or any other resources, in a region of low

population density, very poor social infrastructures, and a very poorly developed local economy. It is therefore also necessary to promote sustainable solutions for feeding the town and the lumber camps.

The population growth problem is a regional issue and therefore requires a regional approach.

### **Fiscal impact**

According to the new Forest Act (article 88), the new fiscal system is organised in a classic manner:

- A land tax,
- A felling tax,
- An export tax

Generally the collection of each of these taxes is not a major problem.

### 7) Constraints

Several technical, political and fiscal constraints have been identified and analysed in the report.

A fundamental problem which concerns all the components, is that the forest sector is not integrated in a long term sustainable development vision for the country's resources, since no comprehensive rural land use management plan exists in the Congo which defines the long term objectives for all the sectors concerned with respect to land use and population growth. In particular there appears to be a problem of lack of coherence in the priorities set by policy concerning conservation and development objectives. For example one cannot aim to encourage local wood processing while at the same time being concerned about the creation of industrial sites with significant population increases, and also obliging the industry to establish social structures which are far superior to those available to the population at large.

A new element of concern is the evolution of the taxation system imposed by the government to the logging companies in Congo. The increase of taxes applied by the government since March 2003, combined with other constraints (high cost of transport, depressed market for the sapelli, etc.), have put the companies in a difficult financial situation. Incentives measure should be analysed to encourage the sustainable management of the forest, the certification process and the diversification of species.

### 8) Actors'/stakeholders' perception and external criticisms

The **fundamental criticisms** were analysed in detail. These concern essentially:

- the appropriateness of the use of international funds to finance this project
- and the negative impact of the project on the more marginalized social groups, particularly semi nomads.

The many **factual criticisms** (for example extent of hunting control, non respect of wildlife laws, social conditions in Pokola, corruption....) were also analysed. Many of these were found to be either incorrect or no longer relevant in view of the results achieved by the project.

In future the transparency of the operation should be guaranteed by the FSC certification process to which CIB has committed itself. This process will allow for objectively verifiable information to be checked by independent experts in the field and will address specifically the issues which are included in the criticisms.

**CRITICISM 1 : PUBLIC FINANCE CONTRIBUTIONS FOR THE IMPLEMENTATION OF FOREST MANAGEMENT PLANS.**

Since the Rio conference, biodiversity is considered as a global public good; it is therefore perfectly normal that the international community, through its bilateral and multilateral donors, contributes financially to the identification and management of this good. Furthermore this very financial contribution gives legitimacy to the international community's right to intervene and lobby through its independent observers.

The management of forest stands is normally the responsibility of the forest owner. In central Africa, the State is the legitimate owner of timber resources. For the State to justify its legitimacy it is important that it redistributes a portion of taxes in management activities. In the long term it is therefore undesirable that the State should continue to impose on the logging companies virtually all the costs of elaborating and implementing management activities (eg stand regeneration, wildlife management, socio-economic development,...).

In the specific case of CIB, the pilot character, at least for Congo, of its management plan has entailed an increase in management costs and a risk of unfair competition with other enterprises, who will benefit directly from the methodology developed by CIB. This reinforces the argument for public financing for this management plan.

The questioning of the legality of GTZ's financing should be seen within the context of the chronology of events. The financing was approved in October 2000 while the new Forest Act was introduced on November 20<sup>th</sup> 2000. This document insists on the principles of sustainable forest management; however Art 47 states that inventory and management activities will be undertaken by a public body, namely the CNFAF, which was created at a later date. The arrangements by which the costs of the elaboration and implementation of management plans were to be passed on to the industries were included in decree n° 2002-437 of 31<sup>st</sup> December 2002 (article 31 and article 40), some two years after acquisition of the subsidy.

Finally it should be noted there is an urgent need to examine how the costs of sustainable wildlife management and ecosystem services can be integrated into in forestry fiscality and management plan funding.

## **CRITICISM 2 : INADEQUATE CONSIDERATIONS OF THE LIVING CONDITIONS AND NEEDS OF SEMI-NOMADS.**

This is undoubtedly is one of the most difficult questions to tackle and should be situated in general context of forest people's issues in the Congo Basin. On the one hand the semi-nomads are citizens, on a par with other ethnic groups and therefore, in principle, subject to the same treatment with respect to wildlife law enforcement as all other citizens. On the other hand, they are the most marginalized group in central African societies due to their particular way of life and to their low social status (or example, in the case of hunting, a semi nomad has very little possibility of conforming to the law with respect to possession of fire arms and hunting permits).

The PROGEPP is working towards improving understanding of forest people's issues and is adopting an adaptive approach with respect to semi-nomads, but it is recognized that improving understanding does not necessarily translate into easy solutions, particularly for complex issues like those of forest peoples. Although a considerable body of information on the forest peoples in this area have been collected over the years (eg: studies by Eaves, Lewis, Mukassa) the reports of Pierre (Pierre, JM., 2003) and by Leclerc (Leclerc, C. 2004) highlight that certain gaps in the understanding of the local environment remain. In particular the issues of semi nomad social and territorial organisation, local usage rules and transmission of traditional knowledge would benefit from further study.

The acquisition of in depth knowledge of semi-nomadic communities is a precondition to the development of an intervention strategy ensuring a concrete incorporation of their needs and aspirations, and providing guidance to ways of resolving new constraints, such as the impact of forest harvesting and the important population changes associated with it. In particular the territorial organisation of semi nomad communities is a key element for management planning since, according to Leclerc, the territorial unit is at the same time the sociological unit. In other words the way that the forest is split up and shared between the semi nomad groups is the most effective means of identifying the different social units, and thus the legitimate interlocutors. While recognising that the current zoning plan constitutes an extremely interesting pilot experience, Leclerc's report highlights that further refinements are necessary in order to more fully reflect the full limits of the forest territories used by the semi nomads and the manner in which these territories overlap with those of the villagers.

Finally the project should examine ways in which the legal dispositions concerning wildlife could be adapted to be more coherent with respect to semi-nomads' way of life.

### **CRITICISMS relating factual details:**

The mission has noted that most of the criticisms concerning procedure are based on information that is either out of date, poorly understood, or simply erroneous. The content of the video (financed by Greenpeace and submitted to the team at the start of the mission) provides some examples (not exhaustive):

- Misuse of data on quantities of protected species being hunted in the zone as a whole, without specifying that the data originate from a document provided to the World Bank by WCS referring only to Kabo and to a period prior to PROGEPP (June to June 99). It must also be noted that the eco-guards have only been operational in Pokola, the most sensitive poaching area, since the end of 2000.
- Erroneous data (and particularly exaggerated) on the population size in Pokola. The figure of 15.000 people is presented for 2001, while the correct figure for that year was 7.000 (§ 4.4).
- Poor understanding of the opening date of the hunting season. For example J. Melloh's last mission was planned for the month of May in order to film examples of "out of season" hunting, while this is in fact the month that the hunting season opens.
- Inaccurate or distorted information on the social conditions in Pokola (criteria for access to the hospital, drinking water, follow up of files concerning pensions and social security (CNSS) for semi-nomad employees).
- Outdated information on the zoning plan and on the regulations concerning the management (meat transport, badge system).

Aside from the question of the accuracy of information used, the appropriateness of "undercover" operations to obtain footage of illegal operations should also be considered. The payment of cash to one of the most notorious elephant poachers in the zone (from whom several guns have already been confiscated by the project) to purchase a big game rifle is delicate to say the least, and certainly cannot be used to "prove" that the surveillance system is not functioning properly (one could equally well conclude that the person wishes to sell his gun because law enforcement activities have resulted in big game hunting being less profitable for him...). Nobody contests that there is corruption, nor that illegal hunting occurs, but care must be taken as to the conclusions that can be drawn from such a partial and biased type of documentation, because it provides no objective assessment on the scale of the activity.

If the project has attracted a impressive number of visitors (journalists, film crews, evaluation missions...), the critics of the project deplore the fact that they have not had free access to the site to undertake their own investigations. This is one of the reasons given for resorting to undercover methods and may also explain why much of the information used are outdated. In addition to the above-mentioned limitations with respect to the interpretation of the information obtained, this kind of approach is almost bound to be in contravention of national rules and regulations (absence of a filming permit for example) and thus will almost inevitably lead to tensions with the national administrations in the case of detection. Furthermore, in the particular context of Northern Congo, any visitor to the project is more or less dependent on the logistics and support provided by the project. It is therefore understandable that a certain level of exasperation is felt in the field by the teams, who are all too often solicited by visitors with varying motivations and interests, and whose behaviour and attitudes have not always been irreproachable.

In the future the transparency of the operation should be guaranteed by the FSC certification process to which CBI has committed itself. This process will enable the production by experts of objectively verifiable information from the field, and will specifically address the issues which upon which criticisms are based (social conditions on the sites, smuggling of timber, considerations for semi-nomads, hunting control, etc....).

9) Lessons learned and replicability

The success factors concerning the collaboration were analysed with respect to institutional, geographical/spatial, political, technical and financial aspects.

*Institutional :*

- the presence of three partners (the FEM, CIB since 1960, and WCS since 1991 with a country agreement and a mandate for the management of the NNNP), who share a long term vision and who each have an interest in the success of the project.
- the three partners already had excellent field knowledge at the outset, enabling each to be operational immediately.
- the presence of competent and highly motivated technicians.
- a particular focus given to training of technicians.
- the WCS is a credible witness for the international scientific community.
- the presence of a third party reduces the usual “face to face” situations, which when conflictual, are difficult to manage.
- the quality of personal relations between the representatives of the organisations. An important investment has been necessary to ensure an open dialogue (despite evident differences of opinion), with a mutual respect and transparency between the parties.

*Geographical/ spatial :*

- the proximity of the protected area which ensures added motivation from the three partners.
- a low population density zone with few villages inside the concession.
- the possibility to control access to roads enabling an easier application of the rules and regulations of the Management Plan and of the Internal Regulations of the Company.
- the presence of a good level of wildlife (not too degraded situation).

*Technical:*

- a comprehensive and integrated approach (information, protection, substitution activities, research/ monitoring).
- The innovative character (pilot) of the project justifying an experimental, evolving and adaptive approach.
- A high quality of supervision of the guard force, with adequate financing.

*Policy :*

- A political and institutional will to succeed, in particular good support by the Congolese administration for an activity which has high social costs (eg: social disturbances following the strict enforcement of the wildlife law).

*Financial :*

- Seed money enabling the start-up of activities as the company progressively bought in to the process.
- The possibility of mobilising other financial resources (especially through the WCS)
- A promising timber market for the operating company enabling a clear industrial investment strategy and a substantial investment for the certification process.

As a concluding remark, and within respect to replicability of this management model, it is important to underline the following points:

The management model developed by PROGEPP presents the major advantage that the biodiversity conservation costs in forestry concessions can be passed on to the consumer (the timber buyer), which is not possible in the case of protected area management.. However it is essential to impose the same conditions (constraints) for everybody in the different FMUs (principle of a “level playing field”). The difficulty of achieving financial sustainability for an approach requiring such a high level of support and supervision for the guard force is raised. Where logging is taking place the solutions are likely to link to the revenue generated. However there is also a need to evolve, in the medium term, towards greater responsibility for management by the local communities.

Although PROGEPP has tested, on a pilot basis, a number of « alternative » activities, the project considers that its socio-economic component should focus mainly on supporting the project’s principal goal of sustainable wildlife use. It is therefore important that the project ensures that this strategy choice is clearly defined and articulated. Certain aspects of the socio-economic context require further study (eg; traditional structures, economic chains, household economies) in order to consolidate this strategy choice. It is also recommended that the project strengthens and professionalizes its socio-economic component by involving other relevant technical experts and/or institutions.

In conclusion, and with respect to the replicability of this management model, it is important to underline the following points:

- An advantage of this model is that the biodiversity conservation costs can be borne by the user (the timber buyer), unlike protected area management. Nevertheless the constraints and the costs of the model are substantial (the forecasted costs for the USLAB are between \$ 1,25 and 1,5 per hectare, or an equivalent amount to the surface area tax). The model can therefore only be sustainable if the restrictions are applied to all companies. The staff and the running costs are an important proportion of the overall costs but these can be lowered by reducing the access roads, avoiding ecologically sensitive zones and by reducing the number of lumber camps. These elements must be incorporated in the cost benefit analysis.
- The management of a paramilitary eco-guard force requires a high level and quality supervision to avoid possible excesses. Such an input must be guaranteed before

considering replicating the model. Central African timber is currently undervalued as it does not yet incorporate the costs of sound wildlife management and ecosystem services. Solutions for sustainable financing mechanisms for wildlife management are therefore likely to be linked to the revenue generated by the forestry activities. In the medium term however village communities also need to start evolving towards greater responsibility for wildlife management, The conditions for increased community participation need to be created in a progressive manner and will only succeed if villages are genuinely convinced of the real advantages of a hunting management system which imposes limits to “free access” to the wildlife resource. This will not be an easy task since experience shows that humans only tend to start understanding the need for sound management of natural once a crisis situation has been reached. The underlying hypotheses of the project must therefore be based on a clear strategy for local development for the semi-nomadic populations, and which takes into account the constraints which this kind of management model imposes on them and which gives them the possibility of benefiting in a more equitable way from the economic opportunities created by timber resource harvesting. With respect to regional development as a whole, it is evident that development poles should be concentrated in Ouesso and other major towns rather than around the industrial logging camps. , This is clearly the responsibility of the government.

- It is recommended to pursue in-depth studies on questions relating to the management of the common bushmeat species, particularly duiker (evolution of levels in household consumption and the informal economy, responses of these species to different hunting pressures). They are essential elements for an intervention strategy which proposes alternative protein and revenue sources. However employment related to the timber industry will undoubtedly remain the principle the source of revenue for local populations.
- With respect to the socio-economic component, a strengthening of the capacity for conceptualisation, analysis and technical implementation/supervision is necessary. It is recommended that the project incorporates into the team a specialist (institution/technical adviser) with proven field experience in socio-economic diagnosis and rural extension, and prepared to invest for the long term within the project area.