ANNEXE A Projet

PROJECT PROPOSAL TO THE Convention on Trade in Endangered Species (CITES): "Supporting sustainable management of endangered tree species"

Submitted by the Government of: GABON through the CITES Management Authority

TITLE of Proposed Activity: Assessing the state of the art research on ecological dynamic, conservation status, management, harvesting, processing, traceability and trade of Kévazingo tree species in Gabon as the first step for making Non-Detriment Findings (NDF) in Gabon.

SUMMARY (objectives, outcomes, etc.)

Rising concerns about over-utilization of kevazingo timber species has been reported by Gabonese authorities (*Guibourtia tessmannii, G. demeusei, G. pellegriniana*). These species have been considered by the Gabonese Government as vulnerable tree species. This fact has led to its listing in 2016 in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The inclusion of Kévazingo in CITES Appendix II has been a major contribution to the conservation of those species in Gabon.

Two *Guibourtia* tree species found in Gabon are largely known for their use as timber: *Guibourtia tessmannii* and *Guibourtia demeusei* (Kevazingo in Gabon). However, because of the similarities of their morphology, the trees of *Guibourtia tessmanii and Guirbourtia pellegriniana* species are not distinguished in local expressions. This makes it difficult to decide on the trend on Kévazingo tree species. In fact, in such situation, it is difficult to say if the occurency / occupancy areas of Kévazingo tree species are increasing or decreasing. On top of that, no clear assessment has been also made on data from different documents of the management plans of the production forests to understand the trends of distribution; density and regeneration patterns of Kévazingo in Gabon.

Guibourtia species (Fabaceae; Detarioideae) are large trees reaching over 40 m in height distributed in rainforests from Cameroon to Gabon; their seeds are surrounded by a red aril, a typical characteristic of seeds primarily dispersed by primates and large birds. However, knowledge regarding its ecology and more precisely its regeneration is lacking. Their fruit are pods covered by a red aril, and its fruiting period extends from December to March. This submitted project follows the Gabonese Government concerns with the help of the international Community, to tackle the general problematic of sustainable use of Kévazingo. Then, the main objective of this project: is to assess the state of the art research on ecological dynamic, conservation status, management, harvesting, processing, traceability and trade of Kévazingo tree species in Gabon as the first step for making Non-Detriment Findings (NDF).

Two outputs have been defined (1) the state of the art research on ecological dynamic, conservation status, management, harvesting, processing, traceability and trade of Kevazingo tree species in Gabon is well established; (2) a Non-detriment findings report, and a realistic action plan/ road map to ensure international trade is not detrimental to Kévazingo tree species in the Gabon forests are developed and implemented.

EXECUTING / IMPLEMENTING AGENCY(IES): INSTITUT DE RECHERCHE EN ECOLOGIE TROPICALE (**IRET**) – CENTRE NATIONALE DE LA RECHERCHE SCIENTIFIQUE ET TECHNOLOGIQUE (**CENARES**T) – GABON.

COLLABORATING AGENCY: Ministère de l'Economie Forestière du Gabon ; **A**gence **N**ationale des **P**arcs **N**ationaux (ANPN) ; **A**groforesterie, **E**nvironnement **et D**éveloppement **D**urable (AGROFED).

DURATION (months): 30 months

PROPOSED START DATE: 1 Avril 2019

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PART I: CONTEXT

Origin/Background

Despite the economical role played by the Kévazingo species at both local and international levels, there is a poor base line data to understand the ecological dynamic and state of conservation of Kévazingo timber species (in particular) for its sustainable management, and especially in Gabon. No clear information is given for Kévazingo species for what concerns their global distribution and conservation status in Gabon. Commercially known in Gabon as kevazingo, the wood has a very high commercial value; in addition, its bark is used by local communities for its medicinal properties (Tosso *et al*., 2015). However, rising concerns about over-utilization of Kévazingo timber species has been reported by Gabonese authorities (*Guibourtia tessmannii*, *G. pellegriniana*) (KoumbaPambo et al., 2016). *Guibourtia tessmannii* (Fabaceae; Detarioideae) is a large tree reaching 40 m in height (Doucet, 2003) distributed in rainforests from Cameroon to Gabon (Tosso *et al*., 2015), its seeds are surrounded by a red aril, a typical characteristic of seeds primarily dispersed by primates and large birds (Tosso et al., 2017). However, knowledge regarding its complete ecology and more precisely regeneration is lacking. Its fruit is a pod covered by a red aril, and its fruiting period it's known to extend from December to March (Meunier*et al*., 2015; Tosso et al., 2016).

Over the past four years, the value of Kévazingo wood has increased sharply in international markets due to the increased of Chinese demand. The prices of these precious woods, which were already among the highest, have experienced an additional exponential appreciation. The soaring value of Kévazingo wood has led to the development of an illegal trade sector for harvesting and exploiting of the species concerned in all countries were the species occurred, and sometimes without respecting the sustainability requirements of the forest codes in these countries. These illegal channels have further weakened the populations of the species concerned in a risk of rapidly leading to disappearances at the local level. Their populations, which are perceived to be concealed at relatively low densities (generally below 0.05 feet / ha) in narrow, overlapping distribution areas across the three Central African countries (Gabon, Cameroon, And Equatorial Guinea) is now believed to be threatened. Unlike in Cameroun where clear distribution map can be found, in Gabon, no clear distribution map of Kévazingo can be obtained, it is assumed that the species is largely restricted to the North and Northeast regions, with some stands in the Southwest region.

Two *Guibourtia* tree species found in Gabon are largely known for their use as timber: *Guibourtia tessmannii* (Kévazingo in Gabon), *G. demeusei* (Ebana in Gabon). However, because of the similarities of their morphology, the trees of *Guibourtia tessmanii* and *Guirboutia pellegriniana* species are not distinguished in local languages. This makes it difficult to decide on the trend on Kévazingo tree species. In fact, in such situation, it is also difficult to say if the occurency / occupancy areas of Kévazingo tree species are increasing or decreasing. No clear assessment has been also made on data from different document of the management plans of the production forest to understand the trends of distribution; density and regeneration patterns of Kévazingo in Gabon. This submitted project follows the Gabonese Government concerns with the help of the international Community, to tackle the general problematic of sustainable use of Kévazingo species.

PART II: THE PROJECT

1. Project Goal and Objectives

The main objective of this project is to assess the state of the art research on ecological dynamic, conservation status, management, harvesting, processing, traceability and trade of Kevazingo tree species in Gabon as the first step for making Non-Detriment Findings (NDF). Then, assist the Gabonese Government to prepare guidelines or draft report of quality non-detriment findings on the Kévazingo species in Gabon.

2. Justification

The development of this project is justified by poor studies directed towards understanding the ecological dynamic and state of conservation of Kévazingo timber species for its sustainable management in Gabon, despite the economical role played by these species at both local and international level as source of state and private logging companies' returns. In addition, no clear information is given for other Kévazingo tree species regarding their global conservation status.

Similar initiatives have been observed in neighboring countries with regards to sustainable management to valued forest products, that include in Cameroun wherein the administration of forest under the control of International Tropical Timber Organization (ITTO) have recently carried a study to regulate the management of the valued bubinga tree species in few forested areas containing still these species as a result of lack of clear data on the potential and its areas of distribution. This is in line with among others global objectives of gathering statistical data on production and exports of Kévazingo species within the Congo Bassin region as well as identifies problems and proposes measures of sound management (Betti, 2012).

In short, this project is part of Gabonese Government's vision to develop national policies aiming at developing sustainable utilization and conservation approach of its forest resources, especially for Kévazingo trees species valued for its timber. It is in line with the actual forest code of 2001 and national parks law of 2007 advocating sustainable management of forest resources and timber sector as a whole (République Gabonaise, 2001). In addition, since Gabon has signed a number of international conventions and agreements including the Convention on International Trade in Endangered Species, the Convention on Biological Diversity (CBD) and the International Tropical Timber Agreement (ITTA), 2006. Therefore, under these international and legal engagements, Gabon is obliged to engage itself towards sustainable management of its forest resources. IRET's fundamental mission is to study the dynamics of Gabon's ecosystems and the secure contact in humans and animals in the natural environment. This project is a good opportunity for IRET to study this less known species of tree species program of CITES.

2.1 Problems to be addressed

In most countries of the Congo Basin, policies have been putted in place to ensure the conservation of the forests that harvest commercial timber species. However, the problems of governance, control and monitoring persist. The development of clear schemes for the issuance of non-detriment findings (NDFs) remains a priority for most states. In Gabon, the common approach used by forest related institutions to conserve and manage forest resources include protected areas establishment, forest management under selective logging and management plan and suspension measures or ban of resources harvesting instead of regulating them. For example, a network of thirteen (13) national parks has been established as a tool for strict biodiversity protection and conservation since access and use of resources by logging companies and local people are strictly prohibited within their boundaries.Gabon Government committed to become an emergency country by years 2030. This will need to clean important area of the forest for agriculture and development project, with a potential risk of biodiversity disturbance. The settlement of fair management schemes appears to be a solution tree species such as Kévazingo. Through engagement with existing networks on Kévazingo species and local and regional stakeholders across

the spectrum of government bodies, research, industry, civil society organizations and local communities. The project will thus contribute to the conservation and sustainable management of this species in the country, in order to meet the economic, social and environmental demands placed on forests at local, national levels.

With regards to timber companies, selective logging has been stated by the Forest Code of 2001 (guiding the management of forest sector in Gabon) as a norm for logging activities and that all logging activities have to be based on agreed management plan by the ministry of forest. However, in Gabon, species protection and conservation have received insufficient attention, especially based on real field studies. A decree nº 0137/PR/MEFEPA of 2009 has banned the harvesting and commercialisation of five (5) multiple use timber species including *Poga oleosa* (Afo*), Irvingia gabonensis* (Andock), *Tieghemella Africana* (Douka), *Baillonella toxisperma* (Moabi) and *Dacriodes buettneri* (Ozigo) for a period of twenty five (25) years (République Gabonaise, 2009). Unsustainable harvesting and human wildlife-conflict have been stressed as main reasons justifying such a banned. However, no strong data exist to validate such claims and that most decisions appear not to be based on real field case studies (Nyare Essima, *et al*., 2012; Ipong*aet al*., 2016). It is important to mention that the Government of Gabon, after the Cabinet meeting of 16 February 2016, has declared that the following species will be banned from exportation, but can be exploited and transformed locally (third transformation): Kévazingo (*Guibourtia tessmannii* and *Guirboutia pellegriniana*), Moabi (*Baillonella toxisperma*), Douka (*Tieghemalla africana*). This means that the process of revision of the decree has already been considered and has started as suggested in this study, because Moabi and Douka were among the banned species under the decree.

In the Congo Basin countries, current progress achieved in CITES listing species in the Appendix II have occurred in Cameroon, Congo and DRC wherein *Pericopsis elata* (afrormosia) has been listed in the Appendix II of CITES. For example, *Prunus africana* (pygeum) is listed in the Appendix II of CITES by the countries such as Cameroon and DRC. However, in country such as Gabon, approaches towards the control of management of valuable timber species (to be listed in the CITES list) has been poorly achieved since no timber species has been up to date listed as being under the threat and pressure of international trade, and this could be due to the lack of data. In addition, most available conservatory measures to limit timber species exploitation are based on off field study (i.e. declared decrees) but not on real field studies. Thus, guaranteeing the survival of natural species call for carrying out studies to reveal their threat if possible include these species under CITES listing.

Kévazingo (*Guibourtia* species) has been considered by the Gabonese Government as a vulnerable species. This fact has led to its classification in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 2016. The listing of Kévazingo in CITES Appendix II has been a major contribution to the conservation of these species in Gabon.

This act has drawn the attention of the national and international communities to the dangers of uncontrolled exploitation and export of Kévazingo species. Then, one of the fundamental obligations of CITES member countries, and Gabon in particular is the production, prior to any export of a product listed in Appendix II of this Convention, of a non-detriment finding. This opinion must be issued by a credible scientific authority, which certifies that the export volume requested by the country is not detrimental to the conservation of this species in forests. This notice is a document, requires quality information on the location, distribution, stock, growth, and ecology of the indicated species. This kind of information is often difficult to obtain, thus making the production of this opinion tedious. Another obligation is that the CITES Management Authority must certify that the volumes exported have been legally obtained; but often there are problems of technical capacity to better ensure control and monitoring.

Literature revue on phenology, defoliation and fructification diameter of tropical timber species is particularly scarce in many tropical African countries, especially for management purposes. In our knowledge in Gabon, just one study has focused on phenology and seasonality of some important forest timber as a baseline data for knowledge improvement on functioning of tropical rainforests in terms of seasonality of flowering, fruiting, foliation and defoliation, in the region of M'Passa (Northeastern of Gabon) (See Hecketsweiler, 1992). Since tropical rainforests are increasingly sold at international markets and contribute substantially to the economy of

some tropical timber producing countries, therefore, knowledge about forest functioning (i.e. exploited timber species) are cornerstones for their sustainable management (Blanc, 2002). This is particularly true in the case of Gabon where poor/ insufficient knowledge on forest functioning represents an obstacle for its sustainable management.

Systematic inventories are usually conducted by some forest concession in Gabon, but these results remain inaccessible. The status of regeneration of the Kévazingo species for the already exploited species is unknown, no management plan for this species has been drafted, no monitoring and traceability system for Kévazingo products has been developed. The present Activity aims overall to strengthen the capacities of the Gabon for the management of CITES Kévazingo species and to fill the gaps of information on the ecology of Kévazingo in natural forest in order to produce the scientific basis for the preparation of a non-detriment finding of this species in Gabon.

This project reflects a response to the 2016 CITES questions on the management of Kévazingo in Gabon; issues relating to the clarification of standing potential, distribution, the definition of quotas on a scientific basis, the deepening of biological and ecological knowledge, and capacity building for better control and monitoring of harvests. Finally, the activities propose here is in line with the actions foreseen by the Gabonese Government who has decided with the help of the international Community, to tackle the general problematic of sustainable use of kevazingo. In 2016, the conference of parties putted the *Guibourtia tessmannii* and *Guibourtia pellegriniana* on Appendix II of CITES list endangered species in accordance with Article 2 (a) of the Convention and Resolution Conf. 9.24 (Rev.CoP 16), Annex 2 (a), paragraph B, that stated: "It is established, or it is possible to deduce or foresee, that a regulation of the trade in the species is necessary to ensure that the levy of specimens in nature do not reduce the wild population to a level at which its survival could be threatened by the continuation of the harvest or other influences".

The methodological approach used successfully to produce a non-detriment finding for *Pericopsis elata* (Assamela) under this program in Cameroon can be usefull and could be also very well transposed to Kévazingo in Gabon. The work will be conducted in such a way as to rapidly get the country closer to produce a non-detriment finding. The idea is to move progressively, province by province, based primarily on inventory data and strengthening control. This NDF report will progressively be refined based on the biological or ecological data that exists (Meunier*et al*., 2015; Tosso*et al*., 2015; Tosso*et al*., 2016) and also that will be provided by this research project.

2.2 Intended situation after Project completion

At the end of this project, the Government of Gabon, CITES scientific authority and CITES management authority in the country, as well as all producing forest concessions in the Permanent Forest domain of Gabon, will have complete data set on the current on the production, distribution and abundance of Kévazingo in Gabon.

The information produced would be used to draft guidelines for comprehensive non-detriment finding report (NDF). With reliable data on the potential distribution, the exploitable volume, the CITES Management Authority will be able to better regulate the exploitation of this species in Gabon. Minimum exploitability diameter (MED), rotation, will benefit scientists and provide a basis for ensuring sustainable management of Kévazingo o in forest concession in Gabon.

2.3 Target beneficiaries

Management Authorities for improving the conservation status and sustainable management of Kévazingo tree species, Scientific Authorities for making NDF. In Gabon, the development and implementation of this project would contribute to support the ministry of Forestry programs and logging concessioners with regards to forest resources conservation and its sustainable management of Kévazingo tree species.

The target beneficiaries of this activity include:

(i) The Government of Gabon that will gain international recognition for prudent implementation of CITES;
(ii) The Forest companies association will have reliable and sound data on the distribution, density, MED, conversion ratio, and silviculture of Kévazingo;
(iii) The timber concessionaires that have a stake in the sustainable production of Kévazingo in their forests concessions;
(iv) Scientists, conservationists and non-governmental organizations (NGOs) interested in the sustainable management of Kévazingo. The information from this activity would be disseminated through various types of publications, workshops/seminars and communication media.

2.4 Risks

There is no potential risk that may seriously affect the implementation of the activity. The Government of Gabon, research institutions, timber companies and the civil society are all committed to promote the sustainable harvest and conservation of forest resources (including Kévazingo) in Gabon and the region at large. The overall project coordination will be undertaken at national level by IRET who will act as the Project Coordination Agency (PCA). The PCA will appoint a Project Coordinator (PC) to oversee the day-to-day running of the project. IRET will be the only responsible for this project with regard to the Contracting Authority and responsible for overseeing the actual implementation of project activities in the country.The PCA will provide general administrative and financial oversight of project implementation, backstopping Project Coordinator ensure scientific coherence and pertinence of project activities, and consolidate annual progress reports for the CITES.

3. Outputs

The main objective of this project: is to assess the state of the art research on ecological dynamic, conservation status, management, harvesting, processing, traceability and trade of Kévazingo tree species in Gabon as the first step for making Non-Detriment Findings (NDF).

A total of two outputs have been defined including:

Output 1: a state of the art on Kewazingo species in Gabon well established;

Output 2: ***A Non detriment findings*** **and** a realistic action plan/ road map to ensure international trade is not detrimental to Kewazingo tree species in the Gabon forests are developed and implemented.

4. Activities

4.1 Output 1: State of the art on kevazingo well dressed.

Method: The state of the art will be done mainly through the literature review (articles, thesis, reports of activities of the forest concessions, activity reports of the structures in charge of forest management such as forestry departments, documents of management plan of forest concessions, inventories reports ect..). This state of the art will be conducted on the following axes namely: research, forest development issues, exploitation issues, monitoring and control. The details of the tasks will be specified in the Terms of references (ToRs) that will be formulated for each study and by IRET experts and validated by the ad-hoc Scientific Committee to be settled as decribed here after.

Activity 1.1. Settlement of coordination team and relevant Committees of the project;

Specific Activity 1.1.1: Settlement of a national technical committee
Specific Activity 1.1.2: Updating the work plan;
Specific Activity 1.1.3: Drafting the ToRs of experts;
Specific Activity 1.1.4: Settlement of an *ad-hoc* Scientific Committee
Specific Activity 1.1.5: Validation the ToRs of experts
Specific Activity 1.1.6: Recruitments of experts for making state of the art;
Specific Activity 1.1.7 workshop to launch the Kévazingo project in Gabon.

Activity 1. 2. Conducting a detail state of the art on the research activities and conducting specific research on relevant topics related to the biology and ecology of Kévazingo tree species in Gabon.

Specific Activity 1.2.1: Brainstorming on existing gaps on Kévazingo biology and ecological data in Gabon;
Specific Activity 1.2.2: Conducting a detail state of art on research on Kevazingo tree species
Specific activity 1.2.3. proposing a strategy for further research to be conducted with view to improve management scheme of kevazingo species
Specific Activity 1.2.4: based on the strategy formulated, conducting research on relevant topics related to the biology and ecology of Kévazingo tree species;
Specific Activity 1.2.5: (1) Collection of botanical specimens of the two Kévazingo tree species (for morphological description); and (2) collection of leaf or cambium sample for genetic identification; (3) Laboratory work. All of those activities can be done at IRET lab in Libreville

Activity 1. 3. Conducting a detail state of the art on conservation, management, harvesting regimes, transport, and trade regulation (control and traceability) of Kévazingo tree species and products.

Specific Activity 1.3.1: Brainstorming on existing gaps on conservation, management, harvesting regimes, transport, and trade regulation (control and traceability) of Kévazingo data;
Specific Activity 1.3.2: Conducting a detail state of the art research on the forest inventories, management measures, production with a view of establishing harvesting quota;
Specific Activity 1.3.3: Conducting a detail state of the art research on production, processing, transport, trade, control and monitoring of Kévazingo species with a view of establishing a fair tracking/control system.

4.2. Output 2: A Non-detriment findings report and a realistic action plan/ road map to ensure international trade is not detrimental to Kévazingo tree species in the Gabon forests are developed and implemented.

Method: NDF is a dynamic process which will be improved over time, as the management parameters of kévazingo are refined (AAM, DME, DFR, ect...) based on research activities. The information gathered in Expected output 1 will be analysed by a small Scientific Committee, which will be set up under the supervision of the CITES Scientific Authority of Gabon. The tasks of the Scientific Committee will consist of (1) validation the ToRs of experts drafted by the coordination team, (2) validating the reports dressed by experts, and (3) develop the NDF document with available data. Then in parallel with this activity, selected field research activities will be conducted (forest inventories, botanical identification, seed germination, establishment and growth, and others) as to refine management parameters. Botanical survey of kévazingo will be conducted in selected study sites to understand species distribution; natural stands, natural regeneration, and stocks, which represent a serious handicap for the forest administrations who want to, build up strategies for the conservation of these tree species. Collection of botanical specimens of the two tree species (for morphological description); and (2) collection of leaf or cambium sample for genetic identification; (3) Laboratory work. All of those activities can be done at IRET lab in Libreville. Sampling method will be defined later.

The information gathered in Expected output 1 and output 2, with selected forest concessions evaluation of production including natural stand, processing, transport and trade of Kévazingo will be evaluated to understand the chain process of the species

Activity 2.1. Based on the results of the state of the art (Activity 1.2 & 1.3); draft a preliminary NDF and a realistic action plan/roadmap detailing activities to be conducted for making a final NDF;

Specific Activity 2.1.1. Validation of the reports of experts by the ad-hoc scientific committee;
Specific Activity 2.1.2. *Drafting a NDF document and a realistic actions plan and roadmap;*
Specific Activity 2.1.3. *Organizing a national workshop for the validation of the actions plan and roadmap and the way forward;*
Specific Activity 2.1.4. Advocacy of the results of the project and the actions plan and roadmap for NDF drafted;
Specific Activity 2.1.5. Drafting a new project proposal for the way forward work to be conducted toward achieving NDF action;and Proposing a strategy for further research to be conducted with view to improve management scheme of Kévazingo species;

Specific Activity 2.1.6. *Final workshop of the project.*

5. Work Plan

The Work Plan of this project illustrated in **Annex 1.**

PART III: OPERATIONAL ARRANGEMENTS

1. Management Structure

The project will be implemented by the Institute of Tropical Ecology (IRET),who will conduct and supervised all scientific activities in collaboration with others institution as partners and those are, Agence Nationale des Parcs Nationaux (ANPN) of Gabon, the ministry of forestry through two directions. The General direction of forestry and the General direction of forest industries.
The civil society will be also involved through Agroforestrie Environnement and Developpement Durable (AGROFEDD). Scientific activities in term of choice of experts, priorities will be done in a close collaboration with ANPN and the Ministry of Forestry. Local NGO will be used to identify priority action for local community involvement in the project and results dissemination. The activities will be taking place in Makokou at Ipassa research station own by IRET; and located at about 500 km from Libreville.

A Technical Committee under the auspices of the Ministry of forestry will be established to oversee the execution of the activity. The Technical Committee will provide guidance on technical matters and ensure that the specific activities are carried out according to the Work Plan. The members of the Technical Committee will comprise staff from the CITES local management authorities (scientific authority and CITES focal point in Gabon), the Association of Forest Industries in Gabon, IRET, and the ministry of forestry, as well as logger associations and well identify civil societies.

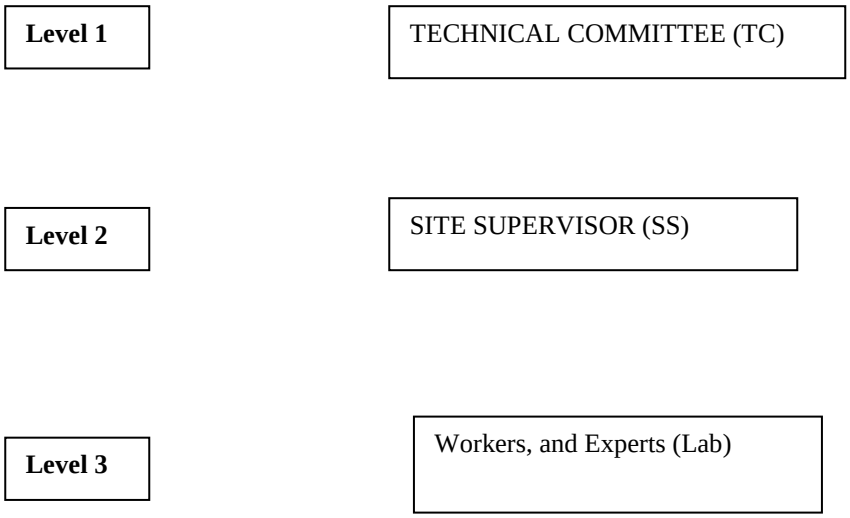

Figure1: Management structure of the Activity of kevazingo project in Gabon

2. Monitoring, Reporting, and Evaluation

The progress of the project will be monitored by the Technical Committee. Quarterly progress reports based on the achievements of outputs/specific activities of the Work Plan and a completion report will be prepared within 4 months of the activity completion for submission to CITES.

National Technical Committee

- Provides guidance on technical matters;
- Ensure that the specific activities are carried out according to the Work Plan.

Site (or activity) Supervisor (SS)

The Institute of Research in Tropical Ecology (IRET) will play this role in his territory. IRET has experienced researchers, they tasks are:

- Supervises the execution of specific activities identified in this global activity;
- Introduce experts for all identified activities;
- Executes regular trips in companies to monitor or ensure gathering of data on biology and ecology as well as on sylvicultural operations;
- Prepares reports for the technical Committee.

Workers

They are composed mainly of researchers, forest technicians and villagers. They execute many jobs including:

- Forest inventories;
- Sylvicultural operations.
- Ecological data collection

Junior experts

Junior experts will be used to conduct research on many themes related to the knowledge of the kevazingo distribution and maping (area of occurrence or currently known range of kevazingo), biology (general biological and life history of the species including reproduction, recruitment, survival rate, migration, regeneration or reproductive strategies), ecology (habitat types, role of Kévazingo in its ecosystem), population (area of occupancy, population size and population trends), utilization and trade (local uses, trade, harvesting regime, management, harvest management/control, legal and illegal use nationally and export with precision in nature). All those information are basic data, useful for a road map for drafting fair Non Detriment-Findings for kevazingo in Gabon base on Cameroon experience (Betti, 2008).

Experts:

A total of 5 experts will be used to produce reports on target specific activities, as follow:

Expert n°1:

- State-of-the-art on research on relevant topics related to biology and ecology of Kévazingo;
- Proposing strategy for further research to be conducted with view to improve management scheme of kévazingo species.
- gathers and analyses data from research institutions, forest administration and forest concessions (management plans) and others sources of available data;

Expert n°2:

- State of the art on conservation, management, harvesting regimes, processing, transport, trade, control and monitoring, regulation (control and traceability) of kévazingo species and products with the view to develop a tracking/control system
- gathers and analyses data from research institutions, forest administration and forest concessions (management plans) and others sources of available data;
- gathers and analyses data from the annual inventories;

Expert n°3

- Drafting a realistic action plan/road map detailing activities to be conducted for making a definitive NDF;
- Drafting a NDF and realistic actions

Annex 1: Management of Kévazingo (*Guibourtiasp in Gabon*) in forest concessions in Gabon (2.5 years)

WORK PLAN

OUTPUTS/ACTIVITIES	RESPONSIBLE PARTY	Schedule (in quarter of year): 1 = three first months											
		1	2	3	4	5	6	7	8	9	10	11	12
Output 1: State of the art on Kévazingo well dressed.													
Activity 1.1. Settlement of the coordination team of the project	IRET												
Specific Activity 1.1.1: Settlement of a national technical committee	Coordination team (IRET) and Parteners												
Specific Activity 1.1.2: Updating the work plan	Coordination team (IRET) and Parteners												
Specific Activity 1.1.3: drafting the ToRs of experts	Coordination team (IRET) and Parteners												
Specific Activity 1.1.4: Settlement of an *ad-hoc* scientific committee	Coordination team (IRET) and Parteners												
Specific Activity 1.1.5: validation of the ToRs of experts	The *Ad-hoc* Scientific Comittee												
Specific activity 1.1.6: recruitment of experts for making state –of – the art;	Coordination team (IRET) and Parteners												
Specific activity 1.1.7: Launch of the Kévazingo project in Gabon	Coordination												

OUTPUTS/ACTIVITIES	RESPONSIBLE PARTY	Schedule (in quarter of year): 1 = three first months											
		1	2	3	4	5	6	7	8	9	10	11	12
	team (IRET)												
Activity 1. 2. Conducting a detail state of the art and conducting specific research on relevant topics related to the biology and ecology of Kévazingo tree species in Gabon.	Coordination team (IRET) – **Expert 1 and 2**												
Specific activity 1.2.1. Brainstorming on existing gap on Kévazingo biology and ecological data in Gabon.	Coordination team (IRET) – Partenrs and **Expert 1**												
Specific Activity 1.2.2: Conducting a detail state of the art on research on Kévazingo tree species (biology and ecology)	Coordination team (IRET) and **Expert 1**												
Specific activity 1.2.3. proposing a strategy for further research to be conducted with view to improve management scheme of kevazingo species	Coordination team (IRET) – **Expert 1**												
Specific activity 1.2.4. based on the strategy formulated, conducting research on relevant topics related to the biology and ecology of Kévazingo tree species (field work studies)	Junior experts												
Specific Activity 1.2.5: (1) Collection of botanical specimens of the two Kévazingo tree species (for morphological description); and (2) collection of leaf or cambium sample for genetic identification; (3) Laboratory work.	Junior experts												
Activity 1.3. Conducting a detail state of the art	Coordination												

OUTPUTS/ACTIVITIES	RESPONSIBLE PARTY	Schedule (in quarter of year): 1 = three first months											
		1	2	3	4	5	6	7	8	9	10	11	12
on conservation, management, harvesting regimes, transport, and trade regulation (control and traceability) of Kévazingo tree species and products	team (IRET) – **Expert 2**												
Specific activity 1.3.1. Brainstorming on existing gap on conservation, management, harvesting regimes, transport, and trade regulation (control and traceability) Kévazingo biology and ecological data in Gabon	Coordination team (IRET) – Partenrs and **Expert 2**												
Specific activity 1.3.2. Conducting a detail state of the art on the forest inventories, management measures, production with a view of establishing harvesting quota	Coordination team (IRET) – **Expert 2**												
Specific activity 1.3.3. Conducting a detail state of the art on production, processing, transport, trade, control and monitoring of Kévazingo with the view to develop a tracking/control system	Coordination team (IRET) – **Expert 3**												
Output 2: a realistic action plan/ road map and preliminary NDF to ensure international trade is not detrimental to Kévazingo tree species in the Gabon forests is developed and implemented.													
Activity 2.1. Based on the results of the state of the art (**Activity 1. 2 & 1. 3**), draft a preliminary NDF and a realistic action plan/roadmap detailing activities to be conducted for making a definitive NDF;	Coordination team (IRET) and national committee meeting												
Specific Activity 2.1.1. *Validation of the reports of experts by the ad-hoc scientific committee*	CITES *SA, Ad-hoc* Scientific Committee												

OUTPUTS/ACTIVITIES	RESPONSIBLE PARTY	Schedule (in quarter of year): 1 = three first months											
		1	2	3	4	5	6	7	8	9	10	11	12
Specific Activity 2.1.2. drafting a NDF and realistic action plan	CITES *SA, Ad-hoc* Scientific Committee, Coordination team (IRET)												
Specific Activity 2.1.3 Organizing a national workshop for validation of the actions plan and roadmap and the way forward;	Coordination team (IRET), national committee and partners												
Specific Activity 2.1.4. Advocacy of the results of the project and the actions plan and roadmap for NDF drafted	CITES SA												
Specific Activity 2.1.5. Drafting a new project proposal for the way forward work to be conducted toward achieving NDF action;	Expert and Coordination team (IRET)												
Specific Activity 2.1.6 final workshop of the project	Coordination team (IRET)												

References

Betti J.L 2008 Non-Detriment Findings report on *Prunus africana* (Rosaceae) in Cameroon. Report prepared for the International Expert Worksshop on Non-Detriment Findings, Mexico, November 17th – 22th, 2008. 53p.

Betti, J.L. 2012. Back ground information on the conservation status of bubinga and wenge tree species in African countries. Report prepared for the International Tropical Timber Organization (ITTO), Douala.

Blanc, P. 2002. Être plante à l'ombre des forêts tropicales. Paris, France, Nathan, 428 p.

Doucet, J.-L. (2003). L'alliance d elicate de la gestion forestiere et de la biodiversite dans les forêts du centre du Gabon. Doctorat, Faculté Universitaire des Sciences agronomiques de Gembloux.

Hecketsweiler, P. 1992. Phénologie et saisonnalité en forêt gabonaise. L'exemple de quelques espèces ligneuses. Thèse de doctorat, Université de Montpellier II, France, 266 p.

Iponga, M.D., Mikolo-Yobo, C., Lescuyer, G., MbaAssoumou , F., Levang, P., Tieguhong, J.C., Ngoye, A. 2016. The contribution of NTFP-gathering to rural people's livelihoods around two timber concessions in Gabon. Agroforestry Systems, DOI 10.1007/s10457-016-0022-0.

ITTO – CTES 2006. Ensuring international trade in CITES –listed timber species is consistent with their substainable management and conservation. Grant application.

KoumbaPambo, A. F., Carroll, T., Lelanchon, L., Ehi-Ebewele, E., Sonko, A., & White, L. (2016). International trade in endangered species: The challenges and successes of the 17th conference of parties to the convention on international trade in endangered species of wild fauna and flora (CITES). African Journal of Ecology, 54 (4), 399–401.

Meunier, Q., Moumbogou, C., & Doucet, J.-L. (2015). Les arbres utiles du Gabon. Gembloux, Belgium: Presses Agronomiques de Gembloux.

Nyare Essima, N. 2007. Etude de cas sur les tendances en matière de propriété forestière, de modes de faire-valoir des ressources forestières et d'arrangements institutionnels :ces systèmes contribuentils à l'amélioration de la gestion des forêts et à la lutte contre la pauvreté ? Cas du Gabon. Rome, FAO.

RÉPUBLIQUE GABONAISE. 2001. Loi n°016/01 du 31 décembre 2001 portant code forestier en République Gabonaise.

RÉPUBLIQUE GABONAISE. 2009. Décret n°0137/PR/MEFEPA du 04 février 2009, portant mise en réserve de certaines espèces végétales à usages multiples de la forêt gabonaise.

Tosso, F., Daınou, K., Hardy, O. J., Sinsin, B., &Doucet, J.-L. (2015). Le genre Guibourtia Benn., un taxon à haute valeur commerciale et societale (synthese bibliographique). Biotechnologie, agronomie, société et environnement, 19(1), 71–88.

Tosso, F., Cherchye, G., Hardy, O.H., Daınou, K., Lognay, G., Tagg, N., Haurez, B., Souza, A., Heuskin, S., Doucet, J.L. 2017. Characterization of animal communities involved in seed dispersal and predation of Guibourtiatessmannii (Harms) J.Leonard, a species newly listed on Appendix II of CITES. African Journal of Ecololgy 1–9.

Tosso, F., Doucet, J.-L., Kaymak, E., Daınou, K., Duminil, J., & Hardy, O. J. (2016). Microsatellite development for the genus Guibourtia (Fabaceae, Caesalpinioideae) reveals diploid and polyploid species. Applications in Plant Sciences, 4(7), apps.1600029.