

International Tropical Timber Organization ITTO Pre-Project Proposal									
Title	Preparation of a project proposal <i>“Development and implementation of a species identification and timber tracking system in Africa with DNA fingerprints and stable isotopes”</i>								
Serial Number	<u>TFL-PPD 023/10 Rev.1 (F)</u>								
Committee									
Submitted by	Government of the Federal Republic of Germany								
Original Language	English								
Summary									
<p>Illegal logging and trade with illegal timber and wood products are the cause of many economic and ecological problems both in producer and in consumer countries. Although legal instruments have been established to control logging and trade with illegally-sourced timber, practical control mechanisms to identify the species and the origin of timber and wood products are lacking. As a solution new methods are on the threshold of usability - DNA fingerprints and stable isotopes. These methods and their applications for timber tracking have advanced a lot during recent years. Based on experiences from pilot-studies in Cameroon and Latin-America we want to prepare an ITTO project proposal on the “Development and implementation of a species identification and timber tracking system in Africa with DNA fingerprints and stable isotopes”. The project fits well to the “ITTO Thematic Programme on Forest Law Enforcement, Governance and Trade (TFLET)”, which explicitly states that projects focused on the “implementation of timber-tracking systems” could be supported. The plan is to develop a regional project focussing on the timber producing countries Cameroon, Central African Republic, Congo Dem. Rep, Congo Rep. and Gabon, Ghana, and Kenya as an important timber transit country. The expected outputs of the final project are: (a) a timber tracking system with DNA and stable isotopes working for 5 important timber species in Africa, (b) reference databases on genetic and isotopic spatial patterns ready for control uses, and (c) facilities for DNA-fingerprinting and stable isotopes with trained staff in timber producer and timber consumer countries.</p> <p>The preparation of such a multi-national project proposal is challenging. Thus a seven month pre-project phase is needed for (a) to define the role and contribution of collaborating agencies (b) to seek support and agreements with the governments of African countries involved in the project; (c) to draw conclusions from former pilot studies and to define the technical work plan, (d) for the identification of stakeholders and definition of their roles in the project; and (f) to seek additional financial support for the project.</p>									
Executing agency	Johann Heinrich von Thünen Institute (vTI) Federal Research Institute for Rural Areas, Forestry and Fisheries Bundesallee 50, 38116 Braunschweig, Germany								
Collaborating Agencies	The Forest Trust (TFT) Chemin des Brumes 4, 1263 Crassier, Switzerland								
Duration	01.10.2010 – 30.04.2011								
Proposed budget and other funding sources:	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Source</th> <th style="text-align: right;">Contribution (in US\$)</th> </tr> </thead> <tbody> <tr> <td>ITTO (incl. BMELV)</td> <td style="text-align: right;">175,742</td> </tr> <tr> <td>vTI</td> <td style="text-align: right;">22,500</td> </tr> <tr> <td>Total</td> <td style="text-align: right;">198,242</td> </tr> </tbody> </table>	Source	Contribution (in US\$)	ITTO (incl. BMELV)	175,742	vTI	22,500	Total	198,242
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ITTO (incl. BMELV)	175,742								
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Part Heading

List of Abbreviations and Acronyms

AFLEG	Africa Forest Law Enforcement and Governance
BMELV	German Federal Ministry for Food, Agriculture and Consumer Protection
CBD	Convention on Biological Diversity
CIFOR	Center for International Forestry Research
CITES	Convention on International Trade in Endangered Species
COMOFAC	Central African Forests Commission
DNA	Deoxyribonucleic acid is a nucleic acid
EFI	European Forest Institute
EIA	Environmental Investigation Agency
FAO	Food and Agriculture Organization of the United Nations
FERN	Tracking EU policies, focusing on forests
FLEGT	European Commission Action Plan on Forest Law Enforcement, Governance and Trade
FSC	Forest Stewardship Council
GD Holz	German Timber Trade Federation
ITTA	International Tropical Timber Agreement
IUCN	International Union for Conservation of Nature
LCB	French Timber Trade Federation
MTCC	Malaysian Timber Certification Council
PAGEF	Projet fort he suistanable management of the forest in Congo
PAPPGF	Project for managing small Gabonese forest licenses
PARPAF	Reinforcement project to the establishment of forest management plan in the Central Africa Republic
PEFC	Programme for the Endorsement of Forest Certification
SGS	Inspection, verification, testing and certification company
SNV	Netherlands Development Organisation
TFLET	ITTO Thematic Programme on Forest Law Enforcement, Governance and Trade
TFT	The Forest Trust
TPD	Thematic Programme Document
UK DFID	United Kingdom - Department for International Development
UK-TTF	UK Timber Trade Federation
vTI	Johann Heinrich von Thünen-Institute – German Federal Research Institute for Rural Areas, Forestry and Fisheries
VVNH	Dutch Timber Trade Federation
WWF	World Wide Fund For Nature

Part 1 Pre-Project context

1.1 Origin and justification

Illegal logging and trade with illegal timber and wood products are the cause of many economic and ecological problems in both producer and consumer countries. Although legal instruments have been established to control logging and trade in illegally-sourced timber, at both national and regional level, practical control mechanisms to identify the origin of timber and wood products are lacking. Such methods of identifying types of wood and timber origins are fundamental prerequisites for efficient import controls or corresponding origin testing by industry and trade. Existing timber tracking systems use paper-based documentation of timber origin at all levels from harvest, through processing, transit and import to end-use. The tests currently used, for example under the auspices of CITES, meet their limits in many tropical tree species. However, new methods are on the threshold of usability - DNA fingerprinting and stable isotopes. The innovative character of these new methods stems from the fact that they use characteristics inherent to the timber instead of externally applied marks. This eliminates the possibility of falsifying chain-of-custody-documents or marks and reduces the possibility of laundering timber from illegal harvest. It allows for independent controls at any point of the complex timber trade network.

The combination of both methods, DNA fingerprinting and stable isotopes, has the advantage that a higher cost efficiency, higher spatial resolution and stronger statistical power for the control system can be expected. The methods and their applications for timber tracking have advanced a lot during the recent years. The state-of-the-art has been regularly discussed in international workshops (e.g. Königswinter October 2007) and pilot studies have been initiated in Latin-America, Africa and Asia. Their results, particularly for Mahogany (*Swietenia macrophylla*) in Latin-America and Iroko (*Milicia excelsa*) and Sapeli (*Entandrophragma cylindricum*) in Cameroon, give strong support for the feasibility of the methods.

The pilot studies have demonstrated that it is now feasible to develop and implement timber tracking system based on with DNA fingerprints and stable isotopes at a multinational scale. Therefore we propose to develop a project focussing on the following 7 African timber producing countries: Cameroon*, Central African Republic*, Congo Dem. Rep.*, Congo Rep.*, Gabon* Ghana* and Kenya. The countries marked with the star have finalised or are negotiating a “Voluntary Partnership Agreement” with the EU FLEGT initiative and share home ranges for a number of relevant tree species. All of the partner countries are participants in the AFLEG process aimed at better governance of African forest resources. With the caveat that we may revise the final work programme in the light of the conclusions of the pre-project, we propose the following activities in the final project:

- Systematic sampling of plant material over the distribution area of each target species
- Further development of tools for genetic species identification
- Development of species specific genetic tools for verification of geographic origin
- Genotyping and creation of a database with spatial genetic data for each tree species
- Isotope analysis and creation of a database on geographic pattern of stable isotopes
- Introduction of the method into praxis, policy and politics

The expected outputs of the final project are:

- Timber tracking system with DNA and stable isotopes in Africa for 5 important timber species
- Reference databases on genetic and isotopic spatial patterns for control purposes accessible via Internet
- Facilities for DNA-fingerprinting and stable isotopes with trained staff in timber producer and timber consumer countries

The preparation of such a multi-national project proposal is challenging. A pre-project phase is needed to develop the following aspects of the project proposal:

- Defining the role and contribution of collaborating agencies
- Seeking support and agreements with the governments of African countries involved in the project
- Drawing conclusions from pilot studies and clarifying technical aspects: selection of target timber species, sampling design, protocols for DNA and isotope fingerprinting
- Identification of stakeholders and definition of their roles in the project
- Seeking additional financial support for the project

1.2 Relevance

1.2.1 Conformity with ITTO's objectives and priorities

The planned project on timber tracking is in complete compliance with objective *n* of the ITTA 2006 “*Strengthening the capacity of members to improve forest law enforcement and governance, and address illegal logging and related trade in tropical timber*”. Further it corresponds to the objective *p* of the ITTA “*Promoting access to, and transfer of, technologies and technical cooperation to implement the objectives of this Agreement, including on concessional and preferential terms and conditions, as mutually agreed*”. Corresponding to these objectives the ITTO action plan 2008-2011 listed as a possible action by ITTO members: to “*develop, test, apply and disseminate functional timber-tracking systems*”.

The planned project directly addresses the call for proposals on TFLET. The Programme strategy recognizes that strengthening forest governance and elimination of illegal logging and illegal trade are a shared responsibility between producer and consumer countries. The strategy comprises four main areas of intervention. Our project falls in the second area of intervention: “*support to production and marketing of legally produced tropical timber and effective management of supply chains*”. Here the TPD explicitly states that projects focused on the “*implementation of timber-tracking systems*” could be supported. In addition, the planned project addresses issues under the fourth area of intervention of TFLET, namely: “*strengthening of international and regional cooperation*”.

1.2.2 Relevance to the submitting country's policies

The project is directly linked to the national German policies in support of the European Union's FLEGT Action Plan. While the EU FLEGT Action Plan provides measures to support developing countries to achieve improved forest governance, it also provides for Voluntary Partnership Agreements between timber-producing developing countries and the EU. The project concentrates on African countries that have finalised or are negotiating a “Voluntary Partnership Agreement” with the EU. The latter requires partner countries to implement a timber licensing scheme and EU border control agencies to allow imports from these countries only if they are

accompanied by FLEGT licenses. Within the implementation of the timber licensing scheme, partner countries in the Congo Basin are expected to develop computerized national tracking systems aimed to serve as a source of information and a real time control tool for government agencies such as ministries of forests, taxation and customs departments. According to the EC, the tracking systems should be reliable, cost efficient and forgery proof, something that can only be achieved if physical controls at critical points are intensified. This is where robust methods to verify the origin of timber such as DNA and isotopic analyses of timber would complement existing methods and help demonstrate the exact origin of wood.

Moreover and most recently, the EU intends to implement further legislation concerning due diligence of operators placing timber on the EU internal market.

Several initiatives of Central African countries providing support to logging companies in the development of management plans are also linked to the project insofar as they are aimed at improving legality of timber trade and better forest management. In Gabon, one could mention the PAPPFG project, an initiative funded through a mechanism of debt for nature swap by France. In the Central African Republic, there is PARPAF, a joint SNV - UK DFID programme focussing on supporting non-state actor's engagement with the state to implement Cameroon's Forest & Environment sector programme, and in Congo-Brazzaville, the PAGEF project comes to mind. By helping forestry companies to fulfil the baseline criteria of having an approved management plan which is a first step in improving forest management and is also key in the process of accessing FLEGT legality licences and legality verification in general, the fingerprinting project could support and complement these initiatives as both, FLEGT licensing requirements and legality verification require a good degree of traceability.

Furthermore, the project should help improve the submitting countries' monitoring and control of the CITES species that have been selected for the project. Forest policies in all submitting countries are dealing with the monitoring and control of these species and most of them have only had limited success so far. Better traceability methods such as the ones to be developed by the fingerprinting project are expected to improve the monitoring and identification of CITES species by customs authorities.

The Congo Basin Forest Partnership in close cooperation with the COMIFAC is also aimed at promoting the conservation and sustainable management of the Congo Basin's forest ecosystems. It was launched at the 2002 World Summit on Sustainable Development in Johannesburg and represents a voluntary multi-stakeholder initiative contributing to the implementation of an intergovernmental commitment, i.e. the Yaoundé Declaration.

In addition the project will focus on important transit countries, through which illegally logged timber can reach ports and international markets. For all of these ends, which require the strengthening of certification, tools to facilitate the proper identification of timber origins and identity gain increasing importance. Not least, these tools would also provide substantial benefits for consumers in verification of product quality and standards of production.

Part 2 Justification of the Pre-Project

2.1 Objectives

2.1.1 Development objectives

IMPROVE TRANSPARENCY AND EFFECTIVE MANAGEMENT OF SUPPLY CHAINS AND INCREASED DOMESTIC AND INTERNATIONAL TRADE IN LEGALLY PRODUCED TROPICAL TIMBER

The main objective of the project is the development and implementation of a species identification and timber tracking system with DNA fingerprints and stable isotopes for important timber tree species in Africa to support trade in legally produced tropical timber.

Existing timber tracking systems use paper-based documentation of timber origin and use at all levels of processing. The advance represented by DNA and stable isotope fingerprinting stems from the use of characteristics which are inherent to the timber instead of externally applied marks, which will eliminate the possibility of falsifying chain-of-custody-documents and marks and reduce the possibility of laundering timber from illegal harvest. It will allow for independent controls at any point of the complex timber trade network. The combination of both methods, DNA-fingerprints and stable isotopes, has the advantage that we expect a higher cost efficiency, higher spatial resolution and stronger statistical power for the control system.

Thus the overall objective of the project is to increase the transparency of timber trade flows to allow the detection (and ultimately reduce volumes of) timber from illicit, protected or otherwise unwanted sources. Transparency is indispensable for good governance and law enforcement in the forest sector as elsewhere, since it repels illegal activities and empowers authorities and private institutions to detect and punish those who profit from this unwanted activity. The action, therefore, contributes both to the reduction of deforestation and the accompanying loss of forest biodiversity. In addition, it helps to increase the credibility of sustainable forest management and related trade and thus supports the implementation of the ITTO TFLET programme.

2.1.2 Specific objectives

PREPARATION OF A FULL PROJECT PROPOSAL “DEVELOPMENT AND IMPLEMENTATION OF A SPECIES IDENTIFICATION AND TIMBER TRACKING SYSTEM WITH DNA FINGERPRINTS AND STABLE ISOTOPES IN AFRICA” CONSIDERING THE INTERESTS AND CAPACITIES FROM THE AFRICAN TARGET COUNTRIES

2.2 Preliminary problem identification

At this stage the main problem or challenge is to organize an intensive dialog with the involved timber producing countries in order to:

- Organize outreach and full information sharing on the envisaged project and its intended objectives
- Seek or consolidate official support and agreements with the governments of the potential African partner countries

- Clarify the contributions and roles of identified potential collaborating agencies (Potential partner to be directly involved in sampling and DNA and isotope fingerprinting are Universities, National Forest Agencies and research centres, forest concessions)
- Identify stakeholders and define their roles in the project

Over the past few months we have developed a concept note through intense exchange among research institutes and other relevant institutions, outlining the design of a large scale timber tracking project in Africa. All consulted European partners have experience with the fingerprinting methods from pilot studies and contributed to the international scientific workshop on this topic convened in Königswinter, Germany, 2007. What is still needed is a deeper exchange on standardised methodical protocols and a further clarifying of technical aspects, namely: selection of target timber species, sampling design, methods for DNA- and isotope fingerprinting.

For the preparation of the pre-project proposal we contacted in Africa ministries of timber producing countries and potential partners at research institutes, Universities and forest concessions. So far we got already letters expressing their strong interest from:

1. The Ministry of Durable Development, Forest Economy and Environment of the Republic of Congo (see attached file "*Letter_Congo_MDD_EFE.pdf*")
2. The Ministry for Forest and Wildlife of Cameroon (the letter is in final preparation and will be communicated to ITTO as fast as possible)

From the contacted Research Institutes and Universities in Africa we got a written declaration of interest from:

1. Centre of Regional Education Specialised on Agriculture, Forest and Wood (CRESA) in Cameroon (see attached file "*Letter_Cameroon_CREESA.pdf*")
2. Kenya Forest Research Institute (see attached file "*Letter_Kenya_KEFRI.pdf*")
3. Research Institute of Tropical Ecology (IRET) in Gabon (see attached file "*E-Mail_Gabon_IRET.pdf*")

From none of the contacted ministries of potential partners we got a negative feedback but they expressed the need for further information and personal discussion. Exactly this is an important objective of the pre-project phase.

An important survey and dialog needs to be done on the five tree species selected for the project. One important aspect besides the risk and intensity of illegal logging will be the protection status of the species according to CITES. For the aspect of tree species identification we need to include much more than five species into the final project in order to cover the problematic of mix-up with similar exchange timber species.

For the final project we estimate a total budget between 1.5 and 4 million US Dollars. The German government is ready to support the project with 1.3 million US Dollars through TFLET. Thus, in addition, we need to work to identify further co-funding for the project.

Part 3 Pre-Project Intervention

3.1 Outputs

- a) The roles and contributions of collaborating agencies are clear and correctly documented in the project proposal.
- b) Letters of support from all participating timber producing countries received. Firm commitments from participating members to pursue common objectives and conduct joint activities integrated in the project proposal.
- c) Conclusions drawn from pilot studies and technical aspects integrated in a state-of-the-art work plan (target timber species selected, sampling design developed, agreement on the methods for DNA- and isotope fingerprinting)
- d) Stakeholders and their role in the project identified and integrated in the project proposal
- e) Commitments for co-funding received and project scope adapted accordingly.

3.2 Activities, input and unit costs

Output	Activities	Input	Unit costs (US \$)
1. Role and contribution of collaborating agencies	A1.1) 1 day of a workshop in Yaoundé with potential African partners and representatives of governments	workshop for 15 persons	28,750
	A1.2) 1 day of a workshop with focus on European partners in Hamburg	workshop with 10 persons	8,000
2. Letters of support from timber producing countries	A2.1) Presentation of project concept at regional meetings in Africa	Participation in 3 meetings + 0.7 month senior expert in Africa	11,200
	A2.2) Direct consultation of African partners and governments	3 month senior expert in Africa	21,000
3. Technical state-of-the-art work plan	A3.1) 1 days of a workshop with focus on European partners in Hamburg	workshop with 10 persons	6,500
4. Stakeholders identified and integrated in the proposal	A4.1) 1 day of a workshop in Yaoundé with potential stakeholders in Africa	workshop for 15 persons	24,750
	A4.2) 1 day of a workshop in Hamburg with potential stakeholders in Europe	workshop for 10 persons	6,500
5. Co-funding secured	A5.1) Intergovernmental meetings	3 meetings	7,800
5. Full Proposal edited and submitted	A6.1) Edition of the project proposal	3 month salary of scientist	21,000
		+ 2 month salary of project coordinator	21,000
Total			162,500

Two one-day workshops for activity A1.1 and A4.1 in Yaoundé (Cameroon) will be held in the same place but on consecutive days, each with partly different participants. The same is planned for the three one-day workshops in activity A1.2, A3.1 and A4.2 in Hamburg. The workshop in Hamburg will be focused on European participants and the workshop in Yaoundé will be focused

on African participants. This will reduce the costs for flights a lot in comparison to one big workshop in Yaoundé.

3.3 Approaches and methods

Following the guidelines we will perform a stakeholder analysis in 4 steps.

Step 1: Identifying and listing major stakeholder groups

Here we have experiences from the EuropeAid-project “*Innovative timber tracking using genetic and isotopic fingerprints*” in Cameroon. In this project the following potential stakeholders were identified:

International Organisations: ITTO, CITES, CIFOR, EFI-FLEGT-Facility, CBD-Secretariat, Barcode of Life Secretariat, Interpol Environmental Crime Unit, FAO, World Resource Institute
Authorities from involved countries

Private Companies and certification bodies: FSC, PEFC, MTCC, Precious Woods, SGS

Timber Trade Federations: GDHolz, VVNH, UK-TTF, LCB

Non Government Organisations: WWF, TRAFFIC, Greenpeace, EIA, IUCN, Rainforest Alliance, FERN, Transparency International, Global Witness,

We need to adapt the list according to the broader area covered in the planned project and we need to add forest concessions and community forest enterprises.

Step 2: Determining interests. We will draw out the key interests of each stakeholder group in the initial list. This will be done by individual consultations and during the two planned workshops (one in Hamburg and one in Yaoundé)

Step 3: Determining importance and influence. The influence and importance of each stakeholder will be assessed.

Step 4: Establishing strategies for involvement. Strategies will be devised for approaching and involving each stakeholder in the project.

3.4 Work plan

Output / Activities	Responsible Party	2010			2011			
		10	11	12	1	2	3	4
Output 1: Collaborating agencies identified								
Activity A1.1 Organisation and execution of a workshop in Yaoundé	TFT							
Activity A1.2 Organisation and execution of a workshop in Hamburg	vTI							
Output 2: Letters of support from timber producing countries								
Activity 2.1 Presentation of project concept at regional meetings in Africa	TFT							
Activity 2.2 Direct consultation of African partners and governments	TFT							
Output 3: Technical state-of-the-art work plan								
Activity 3.1 Organisation and execution of a workshop in Hamburg	vTI							
Output 4: Stakeholders identified and integrated in the proposal								
Activity 4.1 Organisation and execution of a workshop in Yaoundé	TFT							
Activity 4.2 Organisation and execution of a workshop in Hamburg	vTI							
Output 5: Co-funding secured								
Activity 5.1: Intergovernmental meetings	BMELV							
Output 6: Full proposal edited and submitted								
Activity 6.1 Edition of the proposal	vTI							

3.5 Budget (*ITTO & BMELV budget will be provided through ITTO)

Output/ activities	Description	Budget component	Quantity		Units	Units costs US\$	Total costs US\$	ITTO		BMELV		vTI	
			Year 2010	Year 2011				Year 2010	Year 2011	Year 2010	Year 2011	Year 2011	Year 2011
Output 1	Contribution of collaborating agencies cleared												
A1.1	Organisation and execution of a workshop in Yaoundé												
	Daily subsistence allowance	31		15	participant	150	2250	0	1125	0	1125		
	Conference facilities, catering	31			2 day	500	1000	0	500		500		
	International travel	32		15	participant	1500	22500	0	11250	0	11250		
	Administrator	11	15	15	day	100	3000	750	750	750	750		
A1.2	Organisation and execution of a workshop in Hamburg												
	Daily subsistence allowance	31	10		participant	150	1500	750	0	750	0		
	Conference facilities, catering	31	3		day	500	1500	750		750			
	International travel	32	10		participant	500	5000	2500	0	2500	0		
Output 2	Letters of support from timber producing countries												
A2.1	Presentation of project concept at regional meetings in Africa												
	Daily subsistence allowance	31	8	4	day	150	1800	600	300	600	300		
	International travel	32	2	1	flight	1500	4500	1500	750	1500	750		
	Senior expert	11	0.5	0.2	month	7000	4900	1750	700	1750	700		
A2.2	Direct consultation of African partners and governments												
	Senior expert	11	2	1	month	7000	21000	7000	3500	7000	3500		
	International travel	32	2	2	flight	1500	6000	1500	1500	1500	1500		
Output 3	Technical state of the art work plan												
A3.1	Organisation and execution of a workshop in Hamburg												
	Daily subsistence allowance	31	10		participant	150	1500	750	0	750	0		
	International travel	32	10		participant	500	5000	2500	0	2500	0		
Output 4	Stakeholders identified and integrated in the proposal												
A4.1	Organisation and execution of a workshop in Yaoundé												
	Daily subsistence allowance	31		15	Participant	150	2250	0	1125	0	1125		
	International travel	32		15	Participant	1500	22500	0	11250	0	11250		
A4.2	Organisation and execution of a workshop in Hamburg												
	Daily subsistence allowance	31	10		participant	150	1500	750	0	750	0		
	International travel	32	10		participant	500	5000	2500	0	2500	0		
Output 5	Co-funding secured												
A5.1	Intergovernmental meetings												
	Daily subsistence allowance	31	8	4	day	150	1800	600	300	600	300		
	International travel	32	2	1	flight	2000	6000	2000	1000	2000	1000		
Output 6	Full proposal edited and submitted												
A6.1	Edition of the proposal												
	Scientist	11		3	month	7000	21000	0	10500	0	10500		
	Executing Agency management	11	6	8	month	1516	21224	4548	6064	4548	6064		
	Subtotal						162724	30748	50614	30748	50614		
	ITTO project administration costs (8%)						13018	2460	4049	2460	4049		
	Subtotal						175742	33208	54663	33208	54663		
	Project Coordinator (EA counterpart)	11	1	1	month	10500	21000					10500	10500
	Auditing Costs (EA counterpart)				1 unit	1500	1500						1500
	Total						198242	33208	54663	33208	54663	10500	12000
	Total by Agency								87871		87871		22500

Part 4 Implementation Arrangements

4.1 Executing agency and organizational structure

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 Fax: ++49 531 596-1099
<http://www.vti.bund.de/en/>

Through its:

Institute of Forest Genetics (vTI)
 Sieker Landstraße 2
 22927 Großhansdorf, Germany
 Telephone: ++49 4102 696 0
 Fax: ++ 49 4102 696-200

The pre-project will be co-ordinated by Dr. Bernd Degen, the head of the Institute of Forest Genetics of the vTI. The vTI will be responsible for edition of the full proposal and the organisation of a workshop with potential project partners and stakeholders in Hamburg.

The vTI will work in close collaboration with the BMELV particularly with Mr Matthias Schwoerer, head of the International Forest Policy Division. The BMELV will be responsible for all contacts on governmental level with involved timber producing and timber consuming countries.

Due to its local presence in different African countries and its good contacts to the forest sector and the forest ministries the TFT with its European office at Crussier in Switzerland and its local offices in Cameroon, Gabon and Congo will be responsible for the organisation of a workshop with potential project partners and stakeholders in Yaoundé. Further TFT will seek support and agreements with the governments and forest agencies of African countries involved in the project.

So far we identified the following potential partner agencies that expressed their interest to participate on the technical parts of the final project:

Potential European collaborating agencies

Organisation:	Université Libre de Bruxelles, Belgium
homepage:	http://www.ulb.ac.be/sciences/ecoevol/
Person:	Dr. Olivier Hardy
Contacts with producer	
Countries in Africa:	Cameroon, Gabon, Equatorial Africa, Congo

Organisation:	Faculté Universitaire des Sciences Agronomiques de Gembloux, Belgium
homepage:	http://www.ulb.ac.be/sciences/ecoevol/
Person:	Dr. Jean-Louis Doucet
Contacts with producer	
Countries in Africa:	Cameroon, Gabon, Equatorial Africa, Congo
Organisation:	NERC Centre for Ecology and Hydrology, Bush Estate, UK
homepage:	http://www.ceh.ac.uk/StaffWebPages/DrStephenCavers.html
Person:	Dr. Stephen Cavers
Contacts with producer	
Countries in Africa:	East Africa, especially Kenya
Organisation:	Inra, Bordeaux, France
homepage:	http://www.ulb.ac.be/sciences/ecoevol/
Person:	Dr. Remy Petit
Organisation:	CIRAD, Montpellier, France
homepage:	http://www.cirad.fr/en/who-are-we/cirad-worldwide
Person:	Dr. Jean-Marc Bovet
Contacts with producer	
Countries in Africa:	Cirad has offices in all involved African countries
Organisation:	vTI- Institute of Wood Technology and Wood Biology, Hamburg, Germany
homepage:	http://www.vti.bund.de/en/institutes/htb/
Person:	Dr. Gerald Koch
Organisation:	TÜV Rheinland, Agroisolab, Juelich, Germany
homepage:	http://www.agroisolab.de/e-index.htm
Person:	Dr. Marcus Boner
Contacts with producer	
Countries in Africa:	Cameroon
Organisation:	Federal Research and Training Centre for Forests, Natural Hazards and Landscape, Vienna, Austria
homepage:	http://bfw.ac.at
Person:	Dr. Thomas Geburek
Contacts with producer	
Countries in Africa:	Cameroon, Kenya

Potential African collaborating agencies

Organisation:	The Forest Trust (TFT), Yaoundé, Cameroon
Homepage:	www.tft-forests.org
Person:	Mr Germain YENE

- Organisation: L'INSTITUT DE RECHERCHE EN ECOLOGIE TROPICALE
(IRET)
LIBREVILLE, GABON
Homepage: <http://www.cenarestgabon.com/instituts/iret/index.html>
Person: Dr Alfred Ngomanda
- Organisation: INSTITUT DE PHARMACOPEE ET DE MEDECINE
TRADITIONNELLES (IPHAMETRA)
LIBREVILLE, GABON
Homepage: <http://www.cenarestgabon.com/instituts/iphametra/index.html>
Person: Dr Alain Souza
- Organisation: l'Herbier National Camerounais (HNC)
Yaoundé, Cameroon
Homepage: http://irad-cameroon.org/station_fr.php?idRub=1&ids=4&idc
- Organisation: Université Marien Ngouabi
Brazzaville, Congo
Homepage: <http://univ-mngb.prepa-bac.com/>
Person: Mr JM Moutsamboté
- Organisation: Université de Bangui, Faculté des Sciences
Bangui, Central African Republic
Person: Dr Olga Yongo
- Organisation: Ecole Régionale d'Aménagement Intégré des Forêts Tropicales
Université de Kinshasa, Democratic Republic of Congo
Homepage: <http://www.eraift.org/index.html>
Person: Mr Baudoin Michel
- Organisation: University of Dschang
Dschang, Cameroon
Homepage: <http://www.univ-dschang.org>
- Organisation: Kenya Forestry Research Institute,
Nairobi, Kenya
Homepage: <http://www.kefri.org/contacts.html>
Person: Dr. David Odee
- Organisation: Forestry Research Institute of Ghana,
Kumasi, Ghana
Homepage: <http://www.csir-forig.org.gh/>
Person: Dr. Emmanuel Opuni-Frimpong

4.2 Pre-Project management

The executing agency appoints an experienced scientist to support the project co-ordinator with the preparation and edition of the final project proposal. The project management team will be created including the project co-ordinator, one representative of the BMELV and one from TFT. They will have an intensive exchange by regular phone conferences and at least two common meetings in the pre-project phase. Representatives of the ITTO will be invited to participate in the planned two workshops in Hamburg and Yaoundé. The potential stakeholders will be invited to participate in the two workshops.

4.3 Monitoring and reporting

A final report will be submitted to ITTO not later than three month after project completion. A financial report audited by independent auditor will be submitted after project completion.

For pre-projects ITTO evaluation missions are not foreseen. An ITTO representative will participate at both workshops in order to monitor the progress of the project. The final result of the pre-project is the full project proposal. The plan is to submit this proposal to the ITTO thematic call in spring 2011. Thus the evaluation of the proposal is also an evaluation of the work of the pre-project phase.

Annex 1 Profile of the executing agency

vTI (General)

The Johann Heinrich von Thünen Institute (vTI) is one of four German federal research institutes under the auspices of the German Federal Ministry of Food, Agriculture and Consumer Protection (BMELV). The vTI was created on January 1, 2008 from the German Federal Research Centre for Fisheries, the German Federal Research Centre for Forestry and Forest Products and part of the German Federal Agricultural Research Centre.

The vTI drafts scientific basics as decision-making helps for the policy of the German federal government and thus serves, with its application oriented and practice related research, the development of the society of tomorrow.

The vTI pursues interdisciplinary research in the following areas:

- Economics (micro and macroeconomics of agriculture, forestry, lumber, food and fish production),
- Technology,
- Material use of renewable natural resources,
- Climate,
- Biodiversity,
- Organic Farming.

For more details see: <http://www.vti.bund.de/en/>

The vTI will contribute to the pre-project by one of its speciality Institutes:

Institute of Forest Genetics

The Institute of Forest Genetics is one of the 15 vTI Institutes. It carries out research on genetics of indigenous and exotic tree and shrub species. The studies help to elaborate recommendations for national and international laws, conventions and strategies in the area of forest reproductive material, biological diversity, control of origin for timber and forest reproductive material, conservation of forest genetic resources, genetic engineering, adaptation to climate change and optimisation of biomass production. Since five years the Institutes is working in close co-operation with the University of Hamburg on the development and implementation of DNA-fingerprinting methods in different timber tracking projects in the tropics.

Annex 2 Tasks and responsibilities of key experts provided by the executing agency

Dr. Bernd Degen at vTI will be responsible for the co-ordination pre-project (see his CV in Annex 5). A scientist will be hired for three month to assist with the editing of the final project proposal.

Annex 3 Terms of reference of personnel and consultants funded by ITTO

Terms of reference for the project coordinator

- Coordination of the preparation of the final project proposal => supervision of a contracted scientist at the vTI that will edit the proposal
- Organisation of the workshop in Hamburg
- Close interaction with TFT and the BMELV to determine the role and contributions of the partners and stakeholders in timber producing and timber consuming countries
- Implement the state of the art of DNA and isotope timber tracking techniques in the proposal
- Setup sampling design for the planned reference data in the main project phase
- Coordinate the contract preparation between ITTO and EA and between the EA and the collaborating agencies
- Supervision of the financial project administration at the EA
- Responsible for the preparation of the project report

There are no consultants foreseen for this project phase

Annex 4 Recommendations by ITTO's expert panel and resulting modifications

No.	Comment from the ITTO's expert panel	Modification in the proposal
1	List of Abbreviations and Acronyms: Provided, but incomplete. It should be noted that too many abbreviations do not have their meanings, while others appear in the background. Make a complete list in the section reserved for this.	The list of abbreviations has been completed and double explanations in the main text have been removed.
2	Relevance to the submitting Country's policies: ... References are made to work in Central Africa but the link with the policies of those countries engaged in other systems is not explicit	Links with the policies engaged in other systems has been added.
3	Preliminary problem identification: In fact, previous consultation should be done before the formulation of the proposal and at least the partners in the African countries should have been already identified.	During the revision of the pre-project proposal the ministries of timber producing countries in Africa and potential partners at research institutes, universities and forest concessions have been identified and contacted. From the ministries in the Congo Republic and Cameroon and from three research institutes/ universities we got already letters expressing their interest (see attached pdf-files). A part of the contacted institutions is not against the project but request further information and dialog. This will be done in the pre-project phase. During the pre-project phase even more potential partners will be identified.
4	Preliminary problem identification: Revise the identification of the problematic that arises from CITES species	The problem of identification of CITES protected tree species and mix-up with similar exchange species has been added as an important topic to the proposal
5	Outputs: To achieve outputs 1 & 2 previous contacts with participating countries and institutions in Africa are required BEFORE the submission of the proposal, otherwise the pre-project may not reach these two expected outputs	In the meantime potential partners in Africa and the ministries have been contacted (see Part 4 Implementation Arrangements).
6	Activities, inputs and unit costs: It is not clear why there is a need of a workshop in Hamburg. combining it with the workshop in Yaoundé seems feasible and will reduce costs.	The workshop in Hamburg will be focused on European participants and the workshop in Yaoundé will be focused on African participants. This will clearly reduce the costs for flights a lot in comparison to one big workshop in Yaoundé.

No.	Comment from the ITTO's expert panel	Modification in the proposal
7	Approach and methods: The only problem in the approach is that the potential collaborating agencies in Africa should have been already identified	In the meantime potential partners in have been identified and contacted (see Part 4 Implementation Arrangements).
8	Budget to be reviewed to include all costs. For instance, the project coordinator costs (which seems to be entirely absorbed by the EA) are not stated nor valued. The budget may be reduced if the number of workshops is reduced.	The costs for the project coordinator have been added. These costs will be covered in the pre-project phase by the EA. The reduction to one big workshop in Yaoundé would increase the costs due to more expensive flights. Thus the plan of two workshops one with focus on European participants in Hamburg and one with focus on African participants in Yaoundé was kept because it is cheaper.
9	Executing Agency and organizational structure: Should indicate possible counterpart / collaborating agencies in participating African countries	Possible counterpart / collaborating agencies in participating African countries have been added from three we received already the letters expressing the strong interest
10	ToRs of personnel, consultants and sub-contracts funded by ITTO: At least brief terms of reference for the project coordinator should be included	The terms of reference for the project coordinator have been added

Annex 5: Curriculum Vitae Dr. Bernd Degen

Since 2004 Dr. Bernd Degen is the director of the Institute of Forest Genetics at the Federal Research Institute for Rural Areas, Forestry and Fisheries in Grosshansdorf, Germany. There he is responsible for research on tree breeding, biotechnology, genomics and population genetics of native and exotic tree species. 2005 he received the postdoctoral lecture qualification (habilitation) at the University of Hamburg. There he is giving lectures in forest genetics, applied botany and wood science. He studied forestry at the University of Göttingen and received the master degree in Forest Science in 1993. Three years later he finished there his doctoral thesis about computer simulations on the genetics of tree populations. Until 1998 he worked in research projects on the impact of air pollutions and forest management on the genetic diversity of tree populations at the Federal Research Centre of Forestry and Forest Products and the University of Hamburg. From 1998 to 2004 he was a scientist at the French National Agricultural Research Institute (INRA) in French Guiana (South-America). Main topics of his work there were the gene conservation, biology and forest management of tropical tree species. In cooperation projects with research Institutes in Brazil, Panama and Costa Rica we worked on guidelines for sustainable forest logging in natural tropical rain forests. Since 5 years he participates in different projects using DNA fingerprints to control the origin of forest reproductive material and timber. These projects include Mahogany (*Swietenia macrophylla*) in Latin-America, Sapeli (*Entandrophragma cylindricum*) and Iroko (*Milicia excelsa*) in Cameroon and Merbau (*Intsia sp.*) in South-East Asia. Bernd Degen has more than 60 publications in international scientific journals and is the editor in chief of the international journal *Silvae Genetica*. Besides German he is speaking English, French and Portuguese.

Selected Publications in international journals of the last 5 years

- Hardesty B D, Dick C W, Hamrick J L, **Degen B**, Hubbell S P, Bermingham E (2010) Geographic influence on genetic structure in the widespread Neotropical tree *Simarouba amara* (Simaroubaceae) - Landscape genetic diversity of *Simarouba amara*. *Tropical Plant Biology* (2010) 3:28–39
- Scotti I, Calvo-Vialettes L, Scotti-Saintagne C, Citterio M, **Degen B**, Bonal D (2010) Genetic variation for growth, morphological, and physiological traits in a wild population of the Neotropical shade tolerant rainforest tree *Sextonia rubra* (Mez) van der Werff (Lauraceae). *Tree Genetics & Genomes* 6, 319-329.
- Degen B.**, and Fladung M. (2008): Use of DNA-markers for tracing illegal logging. *vTI Agriculture and Forestry Research* 321: 6-14
- Sebbenn, A. M., **Degen, B.**, Azevedo, V. C. R., Silva, M. B., De Lacerda A, A. E. B., Ciampi, A. Y., Kanashiro M., Caneiro, F. D., Thompson, I. and Loveless, M. D., (2008): Modelling the long-term impacts of selective logging on genetic diversity and demographic structure of four tropical tree species in the Amazon forest. *Forest Ecology and Management* 254: 335-349.
- Cloutier, D., Hardy, O.J., Caron, H., Ciampi, A.Y., **Degen, B.**, Kanashiro, M. and Schoen, D.J. (2007) Low inbreeding and high pollen dispersal distances in populations of two Amazonian forest tree species. *Biotropica* 39 (3), 406–415.
- Carneiro L, F. D. S., Sebbenn, A. M., Kanashiro, M. and **Degen, B.**, (2007): Low interannual variation of mating system and gene flow of *Symphonia globulifera* in the Brazilian Amazon. *Biotropica* 39: 628-636.
- Gregorius, H. R., **Degen, B.** and König, A., (2007): Problems in the analysis of genetic differentiation among populations - A case study in *Quercus robur*. *Silvae Genetica* 56: 190-199.
- Degen B.**, Blanc L., Caron H., Maggia L., Kremer A. and S. Gourlet-Fleury (2006) Impact of selective logging on genetic composition and demographic structure of four tropical tree species. *Biological Conservation*, 131, 386-401.
- Hardy J.O., Maggia L. , Bandou E., Breyne P., Caron H., Chevallier M.-H., Doligez A., Dutech C., Kremer A., Latouche-Hallé C., Troispoux V., Veron V., **Degen B.** (2005) Fine-scale genetic structure and gene dispersal inferences in ten neotropical tree species. *Molecular Ecology*, *Molecular Ecology*, 15, 559–571.
- Cavers, S., **Degen B.**, Caron H., Lemes M. , Margis R. ,Salgueiro F. and Lowe A. (2005) Optimal sampling strategy for estimation of spatial genetic structure in tree populations. *Heredity*, 95, 281-289.