



# **Madagascar: Efforts to Improve Management of Threatened Tree Species, including through CITES Listings**

**International Meeting On Sustainable Forest Management In CITES  
8-10 January 2013  
Harris Hotel  
Bali, Indonesia**

# Description of the activity

<b>PROJECT</b>	: DESIGN, DEVELOPMENT AND VALIDATION OF QUANTIFICATION METHODS FOR SUSTAINABLE MANAGEMENT OF MALAGASY PRECIOUS WOOD
<b>EXECUTANT</b>	: Dept. Plant Biology and Ecology, University of Antananarivo (CITES SA)
<b>COLL.</b>	: Ministry of Environment and Forests ( CITES MA)
<b>DURATION</b>	: 15 mo.
<b>BEGINNING</b>	: Oct. 2012
<b>BUDGET</b>	: 65 034 USD

# The Dalbergia and Diospyros of Madagascar

- ⇒ Madagascar : home to **289 plant families** among them  
FABACEAE which belong the *Dalbergia*  
EBENACEAE with the *Diospyros*
- ⇒ *Dalbergia* : 47 endemic species
- ⇒ *Diospyros* : 214 endemic species
- ⇒ 2009- now: resurgence of the illicit exploitation and marketing of Malagasy  
precious wood
- ⇒ 2011: Dalbergias (5) and Diospyros (105) were included into Appendix III of  
CITES

# The Dalbergia and Diospyros of Madagascar

⇒ 2012: A stock assessment of some Dalbergia and Diospyros species in order to help the CITES authorities formulating NDF (funding from the CITES Secretariat and ITTO)

- The main objective :

- ▶ To design, to develop and to validate methods for quantification of precious wood by adopting a combined analysis of remote sensing and ground truthing.

⇒ 2012: Madagascar submitted a proposal to include the Dalbergias and Diospyros “Populations of Madagascar” into CITES Appendix II.

# Summary of works

Activities	Forecast (\$)	In use (\$)	Work done (%)
<u>Specific objective 1 :MBG</u> Additional scientific arguments <u>Specific objective 2: MBG</u> Information on the exact number of species subject to logging	8 181	8181	100
<u>Specific objective 4 : DPBE</u> Stock assessment	56 853	4 200	2
<u>Specific objective 8 : DPBE</u> Listing proposals Dalbergias and Diospyros « populations of Madagascar »			100
	<b>65 034</b>	<b>12 381</b>	

# On the Dalbergias...

- **List of accepted names**

- 48 species with 1 non endemic but indigenous to Madagascar

- **List of species with a Minimal Diameter of Exploitability ( $\geq 20\text{cm}$ )**

- 23/48 species (ca. 48%)
- DBH up to 100cm with *D. lemurica*.

- **MDE species distribution**

- highly variable
  - ▶ limited (*D. abrahamii*, *D. davidii*, *D. hirticalyx*...) affected by illegal logging
  - ▶ large ( *D. chapelieri*, *D. mollis*, *D. greveana*, *D. trichocarpa*)

- **MDE species conservation status (2012)**

- 19/23 species were classified as CR –EN or VU
- 40/48 species are threatened

# On the Diospyros...

- **List of accepted names**

- 85 known species with a native non endemic *Diospyros ferrea*
- 130 new species

- **List of species with a Minimal Diameter of Exploitability ( $\geq 20\text{cm}$ )**

- 26 /85 species (ca. 30%)
- DBH 20-60cm. (*D. fuscovelutina*, *D. lanceolata*, *D. haplostylis*, *D. mangabensis*, *D. platycalyx*, *D. sakalavarum*, *D. toxicaria*, *D. tropophylla*)

- **MDE species distribution**

- ▶ limited (*D. bernieriana*, *D. stenocarpa*, *D. masoalensis*)
- ▶ large (*D. haplostylis*, *D. mangabensis*, *D. occlusa*)
- ▶ littoral (*D. sclerophylla*, *D. louvelii*)

- **MDE species conservation status (2012)**

57 species: CR : 2; DD: 5; DD probably VU D2/CR: 3; EN: 17; LC: 2; NT: 4; VU: 24

# Stock evaluation

Sites	Zones	Species	Density	Volume exploitable	Regeneration (%)
Zahamena NP	Tropical forest	<i>Dalbergia monticola</i>	10 à 16 ind/ ha	1,75m³/ha	average 500-900 %
		<i>Diospyros sp</i>		0,05m³/ha	
		<i>Diospyros filipes</i>		0,16m³/ha	
		<i>Diospyros gracilipes</i>			
		<i>Dio. lanceolata</i>			
		<i>Dio. platyrathis</i>		0,04m³/ha	
Amoron'i Onilahy PA	Dry deciduous forest	<i>Dalbergia purpurascens</i>	10- 40 ind/ ha	0,41m³/ha	average 100-150%
		<i>Dalbergia greveana</i>			
		<i>Diospyros aculeata</i>		0,09 m³/ha	



# Outputs

- (1) Additional arguments supporting the listing proposals
- (2) Update on the exact number of species subject to exploitation,
- (3) Data on *Diospyros ferrea*, a species common to the Indian sub-continent and some countries of East Africa.
- (4) Stock assessment of some species

# Main findings

- Species distribution account for each species
- Conservation status according to IUCN species with MDE
- Taxonomic notes on *Diospyros ferrea*
- List of all species
- List of specimens of *Dalbergia* and *Diospyros* identified with certainty
- List of available wood samples *Diospyros* and *Dalbergia*
- Scanned images of reference specimens
- Further information on unsurveyed areas
- Extrapolation of the results to the regional and national scale based on the techniques of satellite imagery interpretation.

# NDF

- Taxonomy(scientific names)  
Implementation of CITES rules on nomenclature
- Stock assessment of species with MDE  
Stock management plan, quota system
- Population structure and regeneration rates  
Health and population viability
- Habitat and ecology of the species  
Habitat conservation plan

# Ongoing works

- 1 / Ensuring consistency of legislation, the social foundations (common names), technical (foresters) and scientific (scientific names). Creating a text stating that “the palissandre” are also rosewood /Dalbergia. (FAO TCP MAG 3304)
- 2 / Strengthening the monitoring and control of the implementation of these laws by the forest administration and stakeholders in the sector. (FAO TCP MAG 3304)
- 3 / Finalizing the taxonomic revision of the genus Diospyros (MBG)
- 4 / Designing and developing methods for rapid and reliable identification of Dalbergia and Diospyros wood based on their anatomy (DPBE, WWF)