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CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA



Sixteenth meeting of the Conference of the Parties Bangkok (Thailand), 3-14 March 2013

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Inclusion of the genus Dalbergia (populations of Madagascar) in CITES Appendix II:

- In compliance with Article II, paragraph 2(a) of the Convention, and the Resolution Conf. 9.24 (Rev. CoP13), Annex 2 a, Paragraph A.
- For similar reasons, in compliance with Article II, paragraph 2(a) of the Convention, and the Resolution Conf. 9.24 (Rev. CoP13), Annex 2 b, Paragraph A.

We propose that the listing be limited to logs, sawn wood, veneer sheets and plywood and that the listing be annotated to that end, according to the recommendations of the Plants Committee (PC20, Dublin, 2012).

B. Proponent

Madagascar*.

C. Supporting statement

1. <u>Taxonomy</u>

1.1 Class: Magnoliopsida

1.2 Order: Fabales

1.3 Family: Leguminosae (Fabaceae) Juss. 1789

1.4 Genus, species or subspecies, including author and year: *Dalbergia* Hemsley (Schatz, 2001)
The list of accepted names of the *Dalbergia* species and their synonyms in the *Catalogue des Plantes Vasculaires de Madagascar* (Catalogue of the Vascular Plants of Madagascar) is provided in Annex 1.

1.5 Scientific synonyms: (see Annex 1)

1.6 Common names: French: In Madagascar, there are two categories of *Dalbergia*: bois de

rose and palissandre.

English: Rosewood, Palisander

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^{*} The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

Malagasy:

Malagasy rosewoods are known as: Andramena, Bolabola, Hazoambo, Hazovola mena, Hendramena, Hitsika, Manary mainty, Manjakabenitany, Sovoka, Tombobitsy, Tongobitsy, Voamboana, Volombodipona.

Malagasy palisanders are known as: Manary baomby, Manary boraka, Manary fotsy, Manary havoa, Manary kamboty, Manary maroando, Manary mavo, Manary mena, Manary mendoravina, Manary redoto, Manary rekily, Manary sariadabo, Manary taolana, Manary toloho, Manary tombonditotse, Manary tsiandalana, Manary tsiatondro, Manary tsimahamasabary, Manary vazanomby, Manary voanjo, Manary voraka, Sovoka, Sovondrano.

1.7 Code numbers:

2. Overview

The genus *Dalbergia* comprises 250 species of trees, shrubs and lianas (Mabberley, 2008) but this proposal only concerns 48 *Dalbergia* species endemic to Madagascar (Catalogue of the Vascular Plants of Madagascar). The list of *Dalbergia* species with their dendrometric features is provided in Annex 2.

The genus includes rosewood and palisanders according to Bosser & Rabevohitra (2005).

Malagasy natural forests are renowned for *Dalbergia* species, which are a main forest product with a considerable added value on both international and national markets. These species are currently in high demand by consumers owing to their technological features and their various possible uses including in high-end carpentry.

As a result of growing demand on the market, rosewood and palisanders have become seriously endangered by their abusive logging and destruction of their habitat.

This document suggests that *Dalbergia* meets the criteria for listing in CITEX Appendix II in compliance with Article II, paragraph 2(a) of the Convention and Resolution Conf. 9.24 (Rev. CoP13) Annex 2 a, Paragraph B. It is established or it is possible to deduct or foresee that regulation of trade in the species of the genus is required to ensure that the harvest of their specimens from the wild is not reducing the wild population to a level at which their survival might be threatened.

3. Species characteristics

3.1 Distribution

The *Dalbergia* species occurs in different types of plant formations such as dense evergreen rainforests, dense dry semi-deciduous forests, thickets or savannahs. Certain species are specific to limited areas. Such is the case for *D. aurea*, *D. brachystachya*, *D. davidii*, *D. histicalyx*. Others have a broad geographic distribution such as *D. baronii*, *D. greveana* et *D. trichocarpa*.

The geographical distribution of some *Dalbergia* species is provided in Annex 3.

3.2 Habitat

Dalbergia of Madagascar are species found in closed, semi-open or degraded wooded areas and grow at an altitude below 1,200 m except for *D. monticola* and *D. tsaratanensis*, which are found above 1,500 m (MBG, 2009). The species grows in rainforests (*D. louvelii*, *D. monticola*, *D. normandii*), in sub-humid forests (*D. erubescens*, *D. glaucocarpa*, *D. capuronii*) and in dry and sub-arid forests (*D. chlorocarpa*, *D. mollis*, *D. xerophila*). Twenty-two species are typical of the western part and 21 species of the eastern part of Madagascar (MBG, 2009).

Twenty-two species are typical of the west part and 21 species of the east part of (MBG, 2009).

The different species colonize different types of substrates: sand, ferralitic, basaltic (MBG, 2009).

3.3 Biological characteristics

The flowering period of *Dalbergia* is from September to March. The pollination of these species is ensured principally by insects attracted to the bright colours of the flowers (MBG, 2009).

Inflorescences are terminal or sometimes axillary, racemes or panicles, sometimes scorpioid or corymbiform. Flowers are small to large, irregular and of various colours. Fruit are large pods that are indehiscent, coriaceous, flattened and often winged, elliptical-oblong, with one to several seeds (Schatz, 2001).

3.4 Morphological characteristics

The genus Dalbergia of Madagascar resembles rosewoods and palisanders.

Rosewood: They are medium-sized to large trees. The height of the trunk ranges from 2 to 10 m; the diameter can reach 0.70 m. The bark is greyish and at times cracked and comes off in rather thick pieces. The leaves are composed, odd pinnate, elliptical or oval-elliptical, glabrous. The flowers have vinous red calyx and white petals. The fruit are stipitate, flattened, elliptical-oblong pods, with one to several seeds (Rakotovao, pers. comm.).

The heartwood is surrounded by clearly differentiated white sapwood that is 3 to 4 cm thick. The wood is perfect, very bright purplish red, which does not stay, darkens relatively quickly in the light and becomes ebony black. Rosewoods are very homogeneous and very fine grained with straight lines (Rakotovao, pers. comm.).

Palisander. They are medium-sized to very large trees with a trunk up to 14 m high and a diameter that can reach 1.20 m. The wood is all veined, light to dark with a hint of purple, which is why they are called "purple palisanders of Madagascar". The sapwood is clearly differentiated by its creamy white colour and is 3 to 7 cm thick. The wood is perfect in colour and can vary from a light greyish beige to dark brown or purple with often coarse grains but rare pores giving the wood a firm texture and with straight lines that are rarely inter-crossed (Rakotovao, comm. pers.).

3.5 Role of the species in its ecosystem

The *Dalbergia* species play a role in soil fixation and improve its fertility thanks to the presence of nodes and mycorrhiza (Rasolomampianina *et al.*, 2005). Cutting down these trees for their wood could lead to the elimination of these functions for the ecosystem.

The *Dalbergia* species provides food for some animal species endemic to Madagascar such as *Propithecus verreauxi* and *Lepilemur rufucaudatus* (Ganzhorn and Sorg, 1996).

4. Status and trends

4.1 Habitat trends

In addition to the damage caused by abusive logging of the *Dalbergia* species, the destruction of the habitat is worsened by various anthropological activities (slash-and-burn agriculture, extension of crop fields).

4.2 Population size

In the rainforest of Andohahela at around 400 m of altitude, the observed density of *Dalbergia* is 12 exploitable individuals per hectare (MBG, unpublished report). Rabenantoandro (2001) recorded 2 to 5 exploitable individuals per hectare in the low-altitude plots on the western slope of a formerly exploited site in the Masoala forest. Andriamahefarivo (1994) recorded 3 to 8 exploitable individuals per hectare in the low- and medium-altitude rainforest of Ranomafana.

The results obtained on the density and dendrometric features of some *Dalbergia* species show a wide variety of individuals ranging between 10 and 320 individuals per hectare (Table 1). Moreover, the biovolume and the land area are low. This indicates that most individuals are not exploitable (DBEV, 2010).

Table 1: Density and dendrometric features of some Dalbergia species of Madagascar

Species	Sites	Density (Ind/ha)	Land area (m²/ha)	Biovolume (m³/ha)			
Palisander							
Dalbergia abrahamii	Montagne des Français	120	1.9	6.6			
Dalbergia baronii	Manombo	10	1.5	5.7			
Dalharaia grayoona	Complexe Bongolava	270	4.2	16.6			
Dalbergia greveana	Beroroha	310	4.7	34.7			
Dalbergia madagascariensis	Manombo	250	4.1	16.5			
Dalharnia madlia	Complexe Bongolava	210	4.8	44			
Dalbergia mollis	Beroroha	220	2.6	24.7			
Dalbergia trichocarpa	Complexe Bongolava	300	11.1	40.3			
Rosewood				·			
Dalbergia louvelii	Ambila lemaitso	200	0.3	4			
Dalbegia monticola	Corridor Ankeniheny Zahamena	200	3.2	12.9			
Dalbergia normandii	Ambodirina	260	4.3	11.4			
	Complexe Bongolava	240	7.1	18.7			
Dalbergia purpurascens	Manombo	100	7.2	37.3			
	Beroroha	320	6	50			
Dalbergia xerophila	Beroroha	240	3.7	36.1			

4.3 Population structure

The population structure of the *Dalbergia* species presents a disruption caused by the absence of certain diameter classes inside and outside the protected areas. The seed individuals with a DHB that is higher than 20 cm represented by the tall trees are increasingly rare.

The rate of natural regeneration is generally low (16 to 1,700 %) (DBEV, 2010) and the growth in girth is slow (3mm/year) (Razafimamonjy, 2011).

The seeds need a certain amount of light to germinate and the opening of the canopy from the logging of mature individuals meets this requirement. The stumps observed at ground level generally emit vigorous shoots. The shoots grow more rapidly than natural regenerations in protected areas (Ramamonjy, 2006).

4.4 Population trends

Decrease in the number of exploitable individuals in the production areas.

4.5 Geographic trends

Rosewoods and palisanders can especially be found outside of protected areas that only contain 10-25 % of total populations. The policy of the Government of Madagascar to increase the area of protected areas threefold will contribute to the conservation of the *Dalbergia* species.

5. Threats

The main threats to *Dalbergia* species are abusive and illegal logging, destruction of the habitat due to clearing, extension of agricultural areas and brush fires.

6. Utilization and trade

6.1 National utilization

The *Dalbergia* species have several local utilizations because of their particular qualities (straight, long, robust, hard, termite-resistant): round logs (5 to 15 cm in diameter) are used to construct houses and fences. The species are also used in cabinetwork (wardrobes, furniture, tables, chairs, etc.) and sculpture (hand-crafted statuettes and tools).

The leaves of *D.greveana* are greatly appreciated during dry periods (Ganzhorn and Sorg, 1996).

Wood constitutes nearly all of the gross energy supply in the regions (Morondava). The energy constraint has therefore prompted the villagers to use *Dalbergia* species with high-calorific value as wood fuel, which seriously threatens the regeneration and reconstitution of the forest.

6.2 Legal trade

Five rosewood species and two palisander species are commercialized the most outside Madagascar (ONE, 2005; Rabevohitra, 2006; CITES, 2008; Global Witness and Environmental Investigation Agency, 2010).

Most logs are sold internationally (90 %) and only small quantities (10 %) of wood make it to local markets.

Exploitation and exportation of *Dalbergia* species are regulated by authorization and protection procedures at national level.

6.3 Parts and derivatives in trade

Rosewood and palisander species are exported as raw logs or finished products, furniture and handicrafts. Over 90 % of exported products are logs and sawn wood.

6.4 Illegal trade

One thousand and fourteen containers of rosewood with an estimated value of USD 217,800,000 resulted from illegal logging in the north-east region of Madagascar.

On the national and international market, precious woods are the most expensive especially rosewood (about EUR 6,000 per ton). As a result, illegal logging is increasing common, and even occurs in the protected areas. In 2009, there were 52,000 tons of precious wood, from about 100,000 stems of rosewood and ebony wood, 60,000 of which were cut in protected areas (Randriamalala & Liu, 2010). In 2009, Global Witness estimated rosewood trafficking in Madagascar to be EUR 400,000 per day on international markets. It is possible that international trade encourages illegal logging of these species.

6.5 Actual or potential trade impacts

Generally, *Dalbergia* species have a relatively low regeneration rate and the absence of certain diameter classes (10-20 cm, 20-30 cm) further disturbs the health of regeneration. The selective cutting of exploitable individuals is the main cause of this disturbance.

Exportation could slow natural regeneration and lead to the decline of populations inside and outside protected areas.

7. Legal instruments

7.1 National

The different legislation (orders, decrees, forest law) published by successive governments for the conservation and rational management of the forest heritage concerns national resources in rosewood. Unfortunately, these regulatory guidelines are not able to stem the illegal exploitation of these resources. Exploitation has continued to worsen in recent years. Indeed, hundreds of

containers have continued to leave the country confirming that the state is unable to control exploitation at several levels.

Different regulations in force have brought the following points to light:

- the lack of texts and laws on the palisander species;
- the insufficient relations between texts and social, technical and scientific fundamentals;
- the violation of procedures and the misuse of the power of texts.

Currently decree 2010-141 of 24 March 2010 prohibiting the logging and trade of rosewood is in force at national level.

7.2 International

The five species of rosewood of Madagascar have been listed in CITES Appendix III since 2011 (www.cites.org).

There are no palisanders listed in CITES Appendices.

8. Species management

8.1 Management measures

Groupe des Spécialistes de Plantes de Madagascar (GSPM) has assessed the conservation status of 40 Dalbergia species. Most of the species assessed according to IUCN criteria have been classified as threatened: vulnerable, endangered and critically endangered (document PC19 Doc 14.3).

8.2 Population monitoring

No reports have been published on the continuous monitoring of the population for the *Dalbergia* species of Madagascar in the distribution areas.

8.3 Control measures

8.3.1 International

The listing of five rosewood species in Appendix III has obtained support of countries or third organizations internationally for the monitoring of trade in these species and the implementation of national measures.

The listing of *Dalbergia* species in CITES Appendix II has ensured that all exportation must be accompanied by a CITES permit that attests that specimens were collected in compliance with existing laws and using methods that are not detrimental to the survival of the species.

8.3.2 Domestic

The following species found up to 500 m above sea level are not found in the protected areas: *D. bojeri, D. brachystachya, D.capuronii, D. delphinensis, D. gautieri, D. glaucocarpa, D. hirticalyx, D. normandii, D. suaresensis, D. tsiandalana, D. urschii, D. viguieri et D. xerophila.*

8.4 Captive breeding and artificial propagation

Propagation trials from cuttings and by layering produced satisfactory results for *Dalbergia monticola* in the Zahamena Ankeniheny Corridor (unpublished CIMAD report).

The natural regeneration study in the Morondava region has shown that the *Dalbergia* species is regenerated from seeds and side shoots. The micro-propagation produced shoots from cotyledonary nodes and simple nodes (Rajaonson, 2005).

8.5 Habitat conservation

Rosewoods and palisanders are mainly found outside protected areas. Protected areas only contain 10-25 % of the total populations. The current policy of the Government of Madagascar to increase the protected areas with the delimitation of new protected areas will effectively contribute to the conservation of *Dalbergia* species.

8.6 Safeguards

To strengthen safeguard measures taken by the Government and to curb illegal logging of rosewoods and palisanders in protected areas, a task force was sent to red zones such as the north-east of Madagascar.

The stock remaining in the forests should be harvested under strict control and cautiously. This measure will enable those concerned (local communities, municipalities, regions and the central government) to benefit from this exploitation through the related official fees. At present, only exporters benefit from exploitation because current trade is illegal.

9. Information on similar species

Dalbergia species are identifiable by genus and this proposal to include "Populations of Madagascar" Dalbergia in Appendix II will help properly enforce CITES.

10. Consultations

In order to facilitate the implementation of this proposal for inclusion and to reduce the impact on other Parties, the list was limited to 48 "Populations of Madagascar" *Dalbergia* species of the 250 species existing worldwide. This proposal does not concern any *Dalbergia* species found outside of Madagascar.

11. Additional remarks

The recommendations made at the round table organized by Chatham House (London) in 2012 on tackling the trade in illegal precious woods (Annex 4), in which representatives from the Ministry of Environment and Forests and civil society participated, enhance the importance of listing the precious woods in Appendix II for the CoP16 and the implementation of a system of traceability system based on a DNA database of precious woods.

At the 36th session of the World Heritage Committee (Annex 5) held in Saint Petersburg from 24 June to 6 July 2012, recommendations were adopted on precious woods (particularly regarding the application of existing legislation on the prohibition of illegal trade as defined in Decree 2010-141) and the States Parties to the Convention taking measures to ensure that illegal timber in Madagascar is both forbidden and cannot enter their domestic markets.

The Catalogue of the Vascular Plants of Madagascar (MadCat) served as a reference for the scientific names of *Dalbergia* species.

This proposal for inclusion implements the major elements of Decision 15.97 recommended for Madagascar at the 15th session of the Plants Committee. In order to strengthen the effective implementation of this proposal, Madagascar is working in close collaboration with the Plants Committee. This proposal will be submitted to the 16th Conference of the Parties.

Under an agreement between the CITES Secretariat, ITTO and Madagascar, some *Dalbergia* species will again be the subject of research for 2012 with a view to completing the existing data.

12. References

Andriamahefarivo, L. 1994. Etude écologique de quelques types de forêt du Parc National de Ranomafana-Ifanadiana, Madagascar : Flore, structure et croissance des arbres autochtones *in situ* depuis la mise en place des parcelles de suivi (1993). Mémoire de Diplôme d'Etudes Approfondies. Sciences Biologiques Appliquées. Option Ecologie Végétale. Université d'Antananarivo.

Andriambanona, R. L. D. 2001. Analyse de la filière Palissandre (*Dalbergia sp.*) dans les régions de Morondava et de Mahajanga. Mémoire de fin d'études. ESSA. 150p.

- Barrett, M. A., Brown J. L., Morikawa M. K., Labat, J. N. et Yoder, A. D. 2010. CITES designation for endangered rosewood in Madagascar. *Science* 328. pp. 1109-1110.
- Bosser, J. et Rabevohitra, R., 2005. Espèces nouvelles dans le genre *Dalbergia* (Fabaceae, Papilionoideae) à Madagascar. *Adansonia*, Sér. 3, 27(2): 209-216.
- DBEV, GSPM et WWF. 2011. Statuts écologiques des espèces de bois précieux les plus commercialisées à Madagascar, Antananarivo, 18p.
- DBEV, 2010. Evaluation écologique de quelques espèces de bois précieux les plus commercialisées à Madagascar (bois d'ébène, palissandre et bois de rose), Rapport final WWF, 97p.
- DBEV, GSPM, Association Reniala et WWF. 2010. Proposition d'intégration des espèces de bois précieux de Madagascar dans l'Annexe III de la CITES: *Dalbergia* spp. et *Diospyros* spp. Antananarivo, 15p.
- Ganzhorn, J. U., Sorg, J. P. 1996. Ecology and economy of a tropical dry forest in Madagascar. (eds) *Primate report*, 46-1: 1-382.
- Global Witness and Environmental Investigation Agency (EIA), 2009. Mission d'investigation, trafic de bois précieux à Madagascar. Rapport, 19p.
- http://www.parcs-madagascar.com/doc/Rapport%20mission_finale_insert_231109.pdf
- Mabberley, D. J. 2008. Mabberley's plant book. A portable dictionary of plants, their classifications and uses. 3rd Edition, University of Washington Botanic Gardens. Seattle. 1040p.
- MBG, 2009. L'analyse écologique et économique des bois importants dans le complexe forestier de Makirovana Tsihomanaomby dans la région de SAVA. Rapport de mission. 57p.
- Rabenantoandro, J. T. 2001. Analyse floristique, structurale et dendrométrique de la forêt dense humide de basse altitude du Parc National Masoala sur versant occidental selon la méthode de la Parcelle Permanente. Mémoire de Diplôme d'Etudes Approfondies. Sciences Biologiques Appliquées. Option Ecologie Végétale. Université d'Antananarivo. 102p.
- Rajaonson, S. F. 2005. Conservation et valorisation des *Dalbergia* spp. (Fabaceae) de Madagascar par micropropagation *in vitro* et recherche d'activité antimicrobienne. Mémoire de DEA, option Physiologie Végétale. Université d'Antananarivo. 48p.
- Ramamonjy, H. Z. 2006. Etudes écologiques de six espèces endémiques et menacées (*Dalbergia baronii* Baker., *D. monticola* Bosser & Rabev., *D. chapelieri* Baill., *D. orientalis* Bosser & Rabev., *Masoala kona* Beentje. Et *Revenea dransfieldii* Beentje.) dans la partie orientale du Corridor (Ranomafana-Andringitra) en vue de l'élaboration d'un plan de conservation. Mémoire de DEA. Option Ecologie Végétale, Université d'Antananarivo, 92p.
- Randriamalala, H. et Liu, Z. 2010. Bois de rose de Madagascar : Entre démocratie et protection de la nature. *Madagascar Conservation and Development* 5, 1: 11-22.
- Razafimamonjy, N. A. N. 2011. Dynamique des populations de trois espèces de *Dalbergia* (*Dalbergia chlorocarpa* Viguier., *Dalbergia lemurica* Bosser & R. Rabev., *Dalbergia purpurascens* Baillon.) dans la forêt dense sèche de Kirindy-Morondava. Thèse de Doctorat en Sciences de la Vie, spécialité Ecologie Végétale. Université d'Antananarivo. 200p.
- Schatz, G. E. 2001. Flore générique des arbres de Madagascar. Royal Botanical Garden, Kew and Missouri Botanical Garden. The Crowmwell Press Ltd Grande Bretagne. 503p.
- Wilmé, L., Schuurman, D., Lowry II, PP. & Raven, P. H. 2009. Precious trees pay off But who pays?

13. List of Annexes

- Annex 1: List of the names of *Dalbergia* species accepted in the Catalogue of the Vascular Plants of Madagascar (www.tropicos.org).
- Annex 2: List of *Dalbergia* species with their dendrometric features
- Annex 3: Geographic distribution of some *Dalbergia* species of Madagascar with a broad distribution (*Dalbergia trichocarpa*, *Dalbergia greveana*) and limited distribution (*Dalbergia normandii*)
- Annex 4: Report on the participation in the round table of 23 and 24 April 2012: Tackling the Illegal Trade of Precious Wood Chatham House (London)

Annex 5: Report of the Mission in the 36th session of the World Heritage Committee. Tavritcheski Palace, Saint Petersburg (Russian Federation), from 24 June to 6 July 2012

List of the names of Dalbergia species accepted in the Catalogue of the Vascular Plants of Madagascar (www.tropicos.org)

1	Dalbergia abrahamii Bosser & R. Rabev.
2	Dalbergia andapensis Bosser & R. Rabev.
3	Dalbergia aurea Bosser & R. Rabev.
4	Dalbergia baronii Baker
5	Dalbergia bathiei R. Vig.
6	Dalbergia bojeri Drake
7	Dalbergia brachystachya Bosser & R. Rabev.
8	Dalbergia bracteolata Baker = Syn : D.grandidieri Baill.= D.richardii Baill.
9	Dalbergia campenonii Drake
10	Dalbergia capuronii Bosser & R. Rabev.
11	Dalbergia chapelieri Baill.= Syn: D.pterocarpiflora Baker.
12	Dalbergia chlorocarpa R. Vig.
13	Dalbergia davidii Bosser & R. Rabev.
14	Dalbergia delphinensis Bosser & R. Rabev.
15	Dalbergia emirnensis Benth.
16	Dalbergia erubescens Bosser & R. Rabev.
17	Dalbergia gautieri Bosser & R. Rabev.
18	Dalbergia glaberrima Bosser & R. Rabev.
19	Dalbergia glaucocarpa Bosser & R. Rabev.
20	Dalbergia greveana Baill.= Syn: D.ambongoensis Baill.= D.eurybothrya Drake.= D.ikopensis Jum.= D.isaloensis R.Vig.=D. myriabotrys Baker
21	Dalbergia hildebrandtii Vatke = Syn : D.boivinii Baill.= D. scorpioides Baker
22	Dalbergia hirticalyx Bosser & R. Rabev.
23	Dalbergia humbertii R. Vig.
24	Dalbergia lemurica Bosser & R. Rabev.
25	Dalbergia louvelii R. Vig.
26	Dalbergia madagascariensis Vatke

27	Dalbergia manongarivensis Bosser & R. Rabev.
28	Dalbergia maritima R. Vig.
29	Dalbergia masoalensis Bosser & R. Rabev.
30	Dalbergia mollis Bosser & R. Rabev. = Syn : <i>D. chermezonii</i> R. Vig
31	Dalbergia monticola Bosser & R. Rabev.
32	Dalbergia neoperrieri Bosser & R. Rabev.
33	Dalbergia normandii Bosser & R. Rabev.
34	Dalbergia occulta Bosser & R. Rabev.
35	Dalbergia orientalis Bosser & R. Rabev.
36	Dalbergia peltieri Bosser & R. Rabev. = Syn : <i>D. microcarpa</i> R. Vig.
37	Dalbergia pervillei Vatke = Syn : <i>D. densicoma</i> Baill.= <i>D. obtusa</i> Lecomte
38	Dalbergia pseudobaronii R. Vig.
39	Dalbergia pseudoviguieri Bosser & R. Rabev.
40	Dalbergia purpurascens Baill.
41	Dalbergia suaresensis Baill.= Syn : D.bernieri Baill.
42	Dalbergia trichocarpa Baker = Syn : <i>D.boinensis</i> Jum.= <i>D. perrieri</i> Drake.
43	Dalbergia tricolor Drake
44	Dalbergia tsaratananensis Bosser & R. Rabev.
45	Dalbergia tsiandalana R. Vig.
46	Dalbergia urschii Bosser & R. Rabev.
47	Dalbergia viguieri Bosser & R. Rabev.
48	Dalbergia xerophila Bosser & R. Rabev.

List of *Dalbergia* species with their dendrometric features (the *DME* species are in the pink sections)

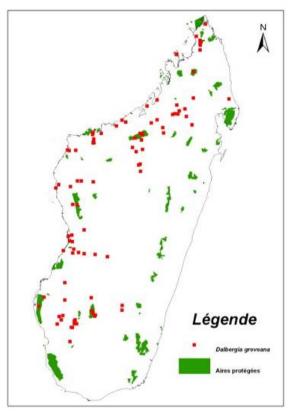
Genus	Species	ssp. or var	Authors	Exploitability		
				Growth habit	Height	DBH
Dalbergia	abrahamii		Bosser & R. Rabev.	tree	7 to 16 m	10 to 18 cm
Dalbergia	andapensis		Bosser & R. Rabev.	tree	8 to 13 m	13 to 30 cm
Dalbergia	aurea		Bosser & R. Rabev.	tree	6 m	8 to 17 cm
Dalbergia	baronii		Baker	tree	3 to 30 m	8 to 17 cm
Dalbergia	bathiei		R. Vig.	small tree, tree	2,5 to 30 m	10 to 22 cm
Dalbergia	bojeri		Drake	liane	3 m	
Dalbergia	brachystachya		Bosser & R. Rabev.	small tree, tree		
Dalbergia	bracteolata		Baker	liana	2 to 7 m	7 cm
Dalbergia	campenonii		Drake	small tree, tree	5 to 6 m	
Dalbergia	capuronii		Bosser & R. Rabev.	tree	5 to 15 m	12 cm
Dalbergia	chapelieri		Baill.	small tree, tree	4 to 15 m	11 to 22 cm
Dalbergia	chlorocarpa		R.Vig.	tree	6 to 20 m	10 30 cm
Dalbergia	davidii		Bosser & R. Rabev.	tree	20 to 25 m	30 cm
Dalbergia	delphinensis		Bosser & R. Rabev.	tree	2,5 to 6 m	9 cm
Dalbergia	emirnensis		Benth.	small tree, tree	11 to 15	
Dalbergia	emirnensis	var. decaryi	Bosser & R. Rabev.	small tree, tree	15 m	
Dalbergia	erubescens		Bosser & R. Rabev.	small tree, tree		
Dalbergia	gautieri		Bosser & R. Rabev.	small tree, tree	Environ 5 m	
Dalbergia	glaberrima		Bosser & Rabev.	small tree, tree	8 to 12 m	
Dalbergia	glaberrima	subsp. ankaranensis	Bosser & Rabev.	small tree, tree	10 to 12 m	
Dalbergia	glaucocarpa		Bosser & R. Rabev.	tree	10 to 12 m	
Dalbergia	greveana		Baill.	tree	(3-)4-15(-20) m	
Dalbergia	hildebrandtii		Vatke	small tree, tree	(4-)8-10 m	

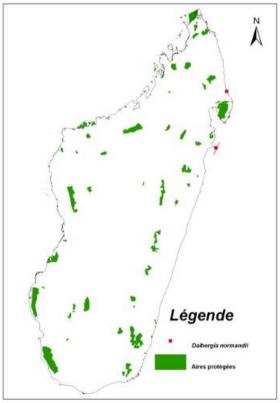
Genus	Species	ssp. or var	Authors		Exploitability		
				Growth habit	Height	DBH	
Dalbergia	hildebrandtii	var. scorpioides	(Baker) Bosser & R. Rabev.	small tree	(4-)8-10 m		
Dalbergia	hirticalyx		Bosser & Rabev.	tree		20 cm (LM)	
Dalbergia	humbertii		R. Vig.	tree	20 m (LM)/10 to 15 m	25 cm (S)	
Dalbergia	lemurica		Bosser & Rabev.	tree	6 to 10 m	20 to 100 cm	
Dalbergia	louvelii		R. Vig.	tree	8 to 10 m	18 cm	
Dalbergia	madagascariensis		Vatke	tree	5 to 15(- 20) m	20 to 45 cm	
Dalbergia	madagascariensis	subsp. antongiliensis	Bosser & Rabev.	tree			
Dalbergia	manongarivensis		Bosser & Rabev.	woody liana		tige 6 cm	
Dalbergia	maritima		R.	small tree	4- 10(-15) m		
Dalbergia	maritima	var. pubescens	Bosser & Rabev.	no data			
Dalbergia	masoalensis		Bosser & Rabev.	small tree	around 1,5 m		
Dalbergia	mollis		Bosser & R. Rabev.	small tree or tree	2 to 4m or 10 to 15 (-20) m	22 cm	
Dalbergia	mollis	var. menabeensis	(R. Vig.) Bosser & R. Rabev.	small tree or tree	3-6 m	15 cm	
Dalbergia	monticola		Bosser & R. Rabev.	tree	7 to 20(-30) m	20 -73 cm	
Dalbergia	neoperrieri		Bosser & R. Rabev.	large tree	8 to 25 m	15 to 50 cm	
Dalbergia	normandii		Bosser & R. Rabev.	tree	5 to 6 (- 15 m)		
Dalbergia	occulta		Bosser & R. Rabev.	small tree or tree			
Dalbergia	orientalis		Bosser & R. Rabev.	medium to large tree	7 to 15 m	25 to 40 cm	
Dalbergia	peltieri		Bosser & R. Rabev.	small tree	5 to 12 m	5 to 60 cm	
Dalbergia	pervillei		Vatke	small tree	3 to 12 (-15) m	12 to 40 cm	
Dalbergia	pseudobaronii		R. Vig.	small to large tree	8 to 20 m	30 -50 cm	
Dalbergia	pseudoviguieri		Bosser & R. Rabev.	small tree	1,5 m		
Dalbergia	purpurascens		Baill.	small to large tree	8 -25 m	20 to 80 cm	
Dalbergia	suaresensis		Baill.	small tree	6 to 12 m	8 cm	
Dalbergia	trichocarpa		Baker	tree	4 to 25 m	15 to 40 cm	
Dalbergia	tricolor		Drake	small tree	(2-)7-15 m		
Dalbergia	tricolor	var. breviracemosa	Bosser & R. Rabev.	small tree	8 m		

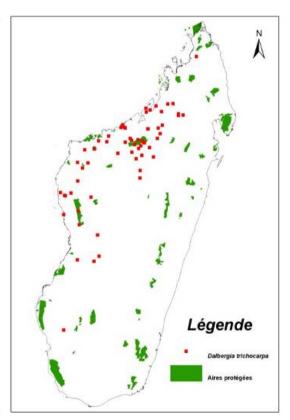
Genus	Species	ssp. or var	Authors	Exploitability		
				Growth habit	Height	DBH
Dalbergia	tsaratananensis		Bosser & R. Rabev.	small tree	8 to 10 m	
Dalbergia	tsiandalana		R. Vig.	small tree	4 to 6 m	
Dalbergia	urschii		Bosser & R. Rabev.	tree	10 to 12 m	
Dalbergia	viguieri		Bosser & R. Rabev.	tree	6 to 12 m	20 cm
Dalbergia	xerophila		Bosser & R. Rabev.	small tree	3 to 4 m	

DME : Diamètre moyennement Exploitable

Geographic distribution of some *Dalbergia* species of Madagascar with a broad distribution (*Dalbergia trichocarpa, Dalbergia greveana*) and limited distribution (*Dalbergia normandii*)







Dalbergia trichocarpa

Dalbergia greveana

Dalbergia normandii

Participation report on the round table held on 23 and 24 April 2012: Tackling the trade in illegal precious woods Chatham House (London)

Part I: Context of the meeting

Within the walls of the renowned institution, Chatham House, a round table meeting entitled "Tackling the trade in illegal precious woods" was held from 23 to 24 April 2012.

The meeting objective was to bring to the table a group of representatives of the main parties that take part in trade in precious woods in order to discuss different mechanisms, measures and policies that could contribute to reducing illegal trade.

The meeting was attended by representatives of consumer countries, producer countries, manufacturers of musical instruments, scientists, environmental organizations and international institutions that are active in the area. The discussions covered all levels of the marketing chain for precious woods.

The development of the situation in Madagascar in recent years with regard to illegal trade in precious woods has provoked numerous reactions and concerns at the international level and Madagascar was chosen as the representative of African producer countries. Belize and Brazil were also attending as representatives of producer countries. It should also be noted that the case of Madagascar served as an example in impact studies and in discussions during the meeting.

The consumer countries were represented by a number of European countries and China. The participation of the Chinese representatives enabled the Malagasy participants to get to know the "landscape" for precious woods in the main importer of Malagasy precious woods and establish contacts with the Chinese forestry authorities.

The organizer of the round table, Chatham House, is an independent institution whose mission is to be a source of independent analysis, debate, objectives and key ideas in order to build a prosperous and peaceful world for everyone. The institution has existed for more than eight decades and has welcomed numerous global leaders to its programmes and events.

The work of Chatham House is mainly focused on four themes: international economy; international security; regional studies and international law; and energy, environment and natural resource management.

Madagascar was represented by Ndranto Razakamanarina from the Worldwide Fund for Nature and Julien Noël from the Ministry of Environment and Forests. Hilde Dahl from the Office of the Ambassador of Norway to Antananrivo also participated in the workshop.

Part II: Trade in precious woods

The round table was based on an impact study carried out by TRAFFIC UK (Anna Jenkins and James Hewitt) which stated that a combination of the high quality (appearance, hardness, tone, fragrance, and a number of physical, chemical, spiritual and medicinal properties, etc..) and the rarity (and demand) of the wood have led to the inflation of the prices and their characterization as Precious Woods (*Dalbergia, Diospyros,* black woods, etc.).

Demand varies significantly between species and based on the types of use, which can be stable (for example for musical instruments) or increasing exponentially (for example for furniture made of rosewood).

It is estimated that China remains the main consumer/importing country for the majority of species of precious woods and the number of producer/exporting countries continues to increase each day, particularly those in Africa where the lack of real, political will to address the issue is more than obvious (Eg. United Republic of Tanzania and black woods; Madagascar and rosewood, etc.).

Whatever the price or value of the wood and their fluctuations, it has been unanimously verified that the local populations never profit from them (1 % for the local population of Madagascar for Chinese furniture made from rosewood or for musical instruments made from African black woods).

There is still uncertainty regarding the understanding and definition of the legality of timber, leading to strictly inadmissible data on the proportion of illegal precious woods on the market; however, specialists estimate that this proportion exceeds 90 %.

CITES data is unavailable: Partial application of the Convention, weak capacity of the CITES authorities to collect and analyse data, partial or sometime non-existent data, and confusion between the scientific and other names. Why not list the species in CITES by genus rather than by species in order to avoid the confusion?

Part III: Themes discussed

3.1. INTERNATIONAL MECHANISMS

Progress was made on the alternatives discussed based on the impact study carried out by the Environmental Investigation Agency (EIA) on the effective and efficient application of international regulations and controls:

- Trade control: IUCN/CITES or European Union/VPA (Voluntary Partnership Agreement)
- Application of the law: Interpol or regional police (Assistance for national police: Information and coordination). Issues = coordination with customs services regarding procedures and documentation. This will require an accessible electronic database with anti-counterfeiting measures such as a register of signatures.
- FSC certification, low-cost DNA test, etc...

3.2. MEASURES IN PRODUCER COUNTRIES

Progress was made on the alternatives discussed based on the impact study carried out by the EIA:

- Trade control: Improvement of legislation and the issuing of permits, laws and taxes, quotas (CITES) and prohibitions.
- Application of the law: The authority responsible for the application of the law usually varies (customs, police, forestry authorities, etc..). This increases the risk of lack of coordination and of disorganization and therefore of falsification and corruption. Alternatives: An inspection agency that is able to intervene at any point of the procedure (from harvesting to the departure ports, including transport or processing areas), permanent involvement of civil society, etc...
- Management of stocks:
 - O Sale by auction: legal transactions and provides assistance to local communities and conservation projects, but does not reduce demand and could also contribute to the sustainability of money laundering.
 - O Destruction/burning as done in the case of ivory in Africa or other illegal trade (drugs, counterfeiting, etc.).
 - O Other suggestions: Repurchase and destruction of illegal stocks by donor countries, encourage local stakeholders to protect stocks (preventative measures vs punitive measures), etc.

3.2. MEASURES IN CONSUMER COUNTRIES

Progress was made on the alternatives discussed based on the impact study carried out by the NGO, PROFOREST:

- Case studies of policies, initiatives or regulations for legal and sustainable demand:
 - O The policy of the United Kingdom of Great Britain and Northern Ireland for obtaining wood products: Requires independent verification of the legality and sustainability of sources (Greenheart, Global Forest Services) or FLEGT certification.

- O United States of America Lacey Act: Fight against the import and trade in illegal wood products. Following the Gibson Guitars scandal, the national association of musical instrument manufacturers became a member of the Forest Legality Alliance.
- O The Chinese Government's blueprint for the verification of legality includes two options:
 - The Chinese Government signs an agreement to only import wood products in accordance with the legal procedures of the producer countries.
 - A risk analysis procedure and identification of the origin is applied to wood processors.
- Suggestions discussed: Bring into general use the legal regulations for industries and complaints and questioning procedures for civil society (Third party).

Part IV: Recommendations for Madagascar

- 1. The implementation of an operational structure that also has technical and decision-making aspects is vital:
 - O This structure should be guided by the Ministry responsible for forestry and should include representatives of technical partners and civil society.
 - O Madagascar should continuously support the activities of this structure by approving the decisions proposed by it.
 - O The benefits of the implementation of a management strategy for the stocks of precious woods in 2011 should be assessed and used as a reference for what needs to be done (inventory results, tender dossier, regulatory texts based on the context...).
- 2. The acceleration of processing of rosewood and ebony stocks is urgent and vital to reduce movement and changes of stocks:
 - O A precise timetable of operations should be developed and respected by the responsible entities.
 - O Strengthening of circulation controls is increasing, particularly during the processing period of precious wood stocks.
- 3. Adoption of a tracing system that is clearly verifiable and easy to use:
 - O Access to the legal international market has minimum traceability requirements depending on the category of wood. Unequivocal recognition of the illegal origins of rosewood and ebony wood in Madagascar (coming almost entirely from protected areas) could facilitate the analysis of traceability. Demonstration of traceability is limited to the marking of seized goods with the sale destination.
 - O Support from international bodies in the development of a database of DNA formulae of precious woods has been proposed for the future management of precious woods in Madagascar.
- 4. Implementation/strengthening of a legal structure to address disputes regarding trafficking of precious woods:
 - O The first purpose of this structure is to balance pending disputes during the crisis in Madagascar.
 - O The second purpose is related to the systematic application of existing texts for violations observed during the processing of stocks.
- 5. Inclusion in Appendix II of the *Dalbergia* and *Diospyros* genera of Madagascar should be undertaken so that it is ready for the next meeting of the Conference of the Parties of CITES:
 - O The Ministry's technical partners are requested to strengthen their support for the preparation of the documents required by CITES.

- O During the meeting, the representative of CITES reiterated their intention to support Madagascar throughout the process.
- 6. Inclusion of civil society in the steps at the national level, together with observer institutions ensures transparency throughout the recommended steps.
- 7. A bilateral collaboration agreement between China and Madagascar should be developed and monitored to strengthen controls for trafficking in precious woods between the two countries.
- 8. Revenue from the sale of products should be used to prioritize the funding of restoration and monitoring activities within protected areas affected by illegal logging.

Report of the Mission in the 36th session of the World Heritage Committee

The 36th session of the World Heritage Committee (WHC) was held at Tavritcheski Palace in Saint Petersburg (Russian Federation), from 24 June to 06 July 2012.

Sunday, 24 June from 12:00 to 15:30, an Africa group meeting was held. The group was led by South Africa. At this meeting, each State Party gave a summary report on cases. The purpose of this meeting was to consolidate the Africa group and to agree on the important points to address at the session. Further details were also provided about the state of conservation by the Tanzania delegation, only, some sites will be discussed in the plenary session.

Natural sites in Africa to be discussed include the Rainforests of the Atsinanana. Support of the African group was requested for the State Party taking the floor.

Tuesday, 26 June 2012: the state of conservation of properties on the List of World Heritage in Danger was discussed. The property, the Rainforests of the Atsinanana, was addressed in point 7A.10 number 1257.

Mr Debonnet of UNESCO explained the current state of the property and the ongoing threats to Masoala protected areas. He explained that despite the political backdrop, corrective measures were implemented and he congratulated the State Party for the efforts it has made.

The projects of Decision 36 COM 7A.10 are as follows:

- 1 Welcomes the efforts by the State Party to start implementing the corrective measures, in particular the inscription of ebony and rosewood species under Appendix III of CITES, and the reported halting of all illegal logging in Masoala National Park;
- 2 Considers that to address the issue of illegal logging in a sustainable way, it is important to tackle the governance of the forest sector and in particular eliminate all existing rosewood and ebony stocks, as foreseen in the urgent corrective measures;
- 3 Takes note of the strategy to eliminate rosewood and ebony stocks based on a "zero stock, zero logging and zero transporting" approach proposed by the State Party, and urges the State Party to confiscate illegal timber, and include illegal timber stocks retained by timber traders in the operation, and requests the State Party to involve an independent observer in this process;
- 4 Also urges the State Party to take an unequivocal position on the illegal logging and trade of rosewood and ebony at the highest level and enforce the existing trade ban legislation as defined in Decree 2010-141;
- Reiterates the importance of the States Parties to the Convention taking measures to ensure that illegal timber from Madagascar is both forbidden and cannot enter their domestic markets;
- Notes with concern reports that an estimated 10,000 sapphire artisanal miners are currently based near Zahamena National Park, one of the components of the property, which could affect the Outstanding Universal Value of the property, and further urges the State Party to provide immediate and appropriate support to park management and local authorities to effectively address this threat;
- 7 Also requests the State Party to continue its efforts to implement the corrective measures;
- 8 Further requests the State Party to submit to the World Heritage Centre, by 1 February 2013, a detailed report on the state of conservation of the property, including, notably, an overall assessment of the impacts of illegal logging in Masoala and Marojejy National Parks, and an evaluation of the implementation of corrective measures, for consideration by the World Heritage Committee at its 37th session in 2013;

9 Decides to retain the Rainforests of the Atsinanana (Madagascar) on the List of World Heritage in Danger.

After this presentation, the floor was given to the IUCN who stressed the condemnation of all existing stocks and asked the State Party to eradicate all existing stocks and thereby arrive at zero transporting. The entire process is expected to be completed with the collaboration of an independent observer. The IUCN has asked the Malagasy Government to inscribe rosewood under the CITES Appendix II relatively swiftly.

In March 2012, it was reported that mining was occurring on the property. The State Party should provide more details about this issue.

Germany took the floor and commended the State Party for the detailed report and the inscription of rosewood under CITES Appendix III. Germany considered this to be a good example. It fully supported Decision 36 COM. 7A. 10 and encouraged the State Party to continue its efforts. It was recalled that it was up to all State Members to refuse the marketing of precious woods from illegal logging.

Senegal supported the embargo and asked the State Party to take action.

The Malagasy delegation was asked to take the floor. The delegation focused on the desire of the Malagasy State, with the assistance of Madagascar National Parks and the Madagascar Biodiversity Fund, to solve the problems of illegal logging of precious woods and mining in the Rainforests of the Atsinanana.

It stated that the State Party fully supported the projects of the decision and recognized that it was crucial to study the possibility of expanding the property to include the adjacent protected areas and forest corridors as soon as they meet the integrity requirements for better protection of the property.

Then, Norway and Bulgaria were thanked for their contribution in implementing activities related to corrective measures to re-establish the Rainforests of the Atsinanana.

Moreover, the will of the Malagasy Government was stressed in continuing efforts to eradicate illegal exploitation in all world heritage sites. However, it was asked that the corrective measures be completed in two years.

To conclude, an appeal for international assistance was reiterated to restore the Outstanding Universal Value (OUV) and re-establish the integrity of the property thereby making it possible to remove the site from the List of World Heritage in Danger.

Mali asked for clarifications concerning efforts that have been undertaken and the steps that have already been taken with regard to expansion to include other adjacent sites.

It was reported that efforts focused on evictions of loggers in the Park and strengthening the control and monitoring missions.

At the end of the interventions, the projects of Decision 36 COM. 7A 10 were adopted on **Tuesday**, **3 July**: the issue of international assistance was discussed in the plenary session.

The following three points were raised:

- * Clarifications pending concerning a number of points including illegal and legal rosewood stocks, the independent observer in conducting the process (inventory, sale) requested in the letter of March 2012;
- * Release of USD 65,000 for the inventory of rosewood from the USD 65,000 that was already acquired and to be disbursed;

Clarification of possible support from the World Bank in this inventory (activities, amount) following the request of the DGF;

Proposal for a new budget on the use of this fund showing the contribution of all stakeholders (UNESCO, State, World Bank) NB: UNESCO is not responsible for the sovereign roles of the State (log skidding, sale) that should be ensured by the State itself;

Meeting of the Steering Committee to determine an independent observer (NGO?) and its roles in the USD 65,000 project;

Establishing a contract for the use of USD 65,000.

Norway's funding

- * Project document was submitted to Norwegian Government by the World Heritage Committee;
- * Some changes to the form but not the content were made by the World Heritage Committee;
- * Feed-back from Norwegian Government pending;
- * The remuneration of the independent observer is including in this funding;
- * Upcoming dispatch of an updated version of the project document to the Malagasy Party.

Summary of steps to be taken:

- * UNESCO will send all the decisions to the State Party with an official copy to the delegation;
- * Madagascar should continue to implement the action plan to show its will;
- * Activation of the inventory with the funding of USD 65,000 is extremely urgent while waiting for funding from Norway.