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

Include the *Diospyros* genus (Malagasy population) in Appendix II of CITES:

– in accordance with Article II, paragraph 2 (a), of the Convention and Resolution Conf. 9.24 (Rev. CoP13), Annex 2 a, paragraph A; and

– for look-alike reasons, in accordance with Article II, paragraph 2 (b) of the Convention and the Resolution Conf. 9.24 (Rev. CoP13), Annex 2 b, paragraph A.

We propose that the inclusion be limited to logs, sawn wood and veneer and that the entry be annotated to that effect, based on the recommendations of the Plant Committee (PC20, Dublin, March 2012).

B. Proponent

Madagascar [*].

C. Supporting statement

1. Taxonomy

1.1 Class: Magnoliopsida

1.2 Order: Ebenales

1.3 Family: Ebenaceae

1.4 Genus, species or subspecies, including author and year: *Diospyros* spp.

The genus is in the process of undergoing taxonomic assessment and the preliminary results indicate a total number of 120 to 240 of the species (Lowry, comm. pers.).

The list of 84 accepted names for the *Diospyros* species and their synonyms are contained 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)

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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.*

1.6 Common names:

Malagasy:	Kakazomainty, Hazomafana, Hazomainty, Lopingo, Maintipody, Maintipototra, Mapingo, Pingo
French:	Ébène
English:	Ebony

1.7 Code numbers:

2. Overview

The *Diospyros* genus is comprised of 550 species of trees and bushes (Mabberley, 2008). This proposal only concerns the 240 species of *Diospyros* that make up the "Malagasy Populations", 84 of which are already described in the Catalogue of the Vascular Plants of Madagascar (Annex 1). Between 37 % and 40 % of the species described are large exploitable trees. A list of *Diospyros* species with their dendrometric characteristics is provided in Annex 2. *Diospyros ferrea* is the only species that is not endemic to Madagascar.

(Annex 2). The species is common along the coastlines of Madagascar, Africa and India (Lowry, personal observation).

Diospyros are found in different types of vegetation in Madagascar (dense rainforest, coastal forest, dry deciduous forest, dry undergrowth, Tapia forest). The ebony forests are extremely exploited: their dense and durable wood is sought for a variety of uses (marquetry, furniture making, hut construction, cabinet making). The heartwood is particularly well regarded because of its black colour, which has led to black woods, such as ebony, being famous. The wood from large trees is used in cabinet making, while the wood from smaller trees is used to carve small objects.

The Zafimaniry people, who live in the southern plateau of Madagascar, are renowned for their work with precious woods. Zafimaniry art favours tourism and the export of finished objects.

This document suggests that the *Diospyros* genus fulfils the criteria for inclusion in Appendix II of CITES, in accordance with Article II, paragraph 2 (a) of the Convention and Resolution Conf. 9.24 (Rev. CoP13), Annex 2 a, paragraph B. It has been established, or it is possible to deduce or foresee that regulation of trade in the species in that genus is necessary to ensure that harvesting of the specimens in nature does not reduce the size of the wild population to the extent that their survival could be threatened.

It has also been suggested to include all of the species in the *Diospyros* genus as it cannot be fully ensured that all of the botanical material exported will be correctly identified. Distinguishing between the woods of different species of the *Diospyros* genus is not always easy.

3. Species characteristics

3.1 Distribution

The « Malagasy populations » of the *Diospyros* genus cover the whole island; however, there are species that have a wide geographic distribution, such *as D. gracilipes* and *D. haplostylis* and those that have restricted distribution, such as *D. perrieri* and *D. tampinensis*.

The geographic distribution of some of Madagascar's *Diospyros* species is provided in Annex 3.

3.2 Habitat

The *Diospyros* species of Madagascar grow in sandy, ferralitic and basaltic soils (MBG, 2009) and chalky soils (Rabarison, 2000) and can live in different types of vegetation (Table 1).

Table 1: Example habitats of the *Diospyros* genus in Madagascar

Vegetation type	Species
Dense evergreen rainforests	*D. squamosa, D. calophylla, D. myrtilloides, D. clusiifolia, D. decaryana, D. velutipes*
Dense, dry, deciduous forests	*D. sakalavarum, D. perrieri, D. tropophylla*
Undergrowth	*D. nidiformis*
Savannah scrublands and/or wooded savannah	*D. mapingo*

3.3 Biological characteristics

Within the *Diospyros* genus, flowering time is between 1 and 6 months, depending on the species. Fruiting can last up to eight months for *D. pervilleana* and nine months for *D. squamosa*. The brightly coloured flowers grow in close clusters or as small, regular single flowers with 3-5 females, sometimes hermaphrodites. Pollination is ensured mainly by insects. The fruits are small and fleshy or fibrous, indehiscent, with (1-) 3-10 seeds, underpinned by a persistent, growing calyx. The seeds have a sometimes chewy albumen (Schatz, 2001). Dispersal of the seeds is carried out by lemurs (MBG, 2009).

3.4 Morphological characteristics

Ebony can come from trees reaching 15 m in height or from bushes measuring 2 to 4 m with many branches. The tough, stiff, short, smooth leaves are grouped at the top of the branches. The bud scales are covered in gold hairs. The wood from ebony trees is black or with dark veins, hard, fine-grained, and poor elasticity (Rakotovao, personal comment).

3.5 Role of the species in its ecosystem

The fruit from the *Diospyros* species are eaten and dispersed by lemurs.

Certain species of *Diospyros*, called locally “Hazomafana”, are protected as the tree is sacred (domestic use is taboo). The belief of the local population is a highly effective tool for the conservation of the ecosystem. However, migrants do not respect this conservation practice. As a result, the felling of these trees remains a disruptive element for the ecosystem.

4. Status and trends

4.1 Habitat trends

The majority of species from the *Diospyros* genus are tree species. The Malagasy forests that are home to the species are under numerous pressures and threats of a variety of origins. The consequences are the virtually irreversible degradation of natural ecosystems and the disappearance of numerous species.

The main pressures recorded are clearing, bush fires, slash and burn farming and, above all, excessive harvesting for local and international trade. Today, primary vegetation covers only 9.9 % of Malagasy territory (Kull, 2000; Myers *et al.*, 2000). The rate of deforestation is estimated to be 200,000 to 300,000 ha per year (Kull, 2000). Certain species grow in coastal forests which are currently in an advanced stage of fragmentation. This type of forest has reduced by 22.5 % since the 1970s (Moat and Smith, 2007).

4.2 Population size

Ecological assessments of the populations of the most marketed species of *Diospyros* are summarized in Table 2 below (DBEV, 2010).

Table 2: Density and dendrometric characteristics of certain species of *Diospyros* in Madagascar

Species	Sites	Density (Ind/ha)	Surface area (m^2/ha)	Biovolume (m^3/ha)
Diospyros aculeata	Beroroha	280	7.2	93.5
	Montagne des Français	70	0.4	1
Diospyros bernieri	Vohibola	900	3.1	63.9
Diospyros calophylla	Ambila lemaitso	450	1.9	7.7
Diospyros gracilipes	Andovoranto	500	3.6	12
Diospyros haplostylis	Andovoranto	500	4.9	23.3
Diospyros perrieri	Montagne des Français	10	0.9	2.9
Diospyros sakalavarum	Complexe Bongolava	50	0.6	1.6
Diospyros toxicaria	Complexe Bongolava	30	0.1	0.2

The results obtained on the density and dendrometric characteristics of some species of *Diospyros* show a wide variability in the density, ranging between 10 and 900 specimens per hectare. Moreover, the biovolume and surface area are generally low. This shows that the majority of specimens are not exploitable (DBEV, 2010).

4.3 Population structure

The population structure for species in the *Diospyros* genus shows a marked absence of certain types of diameter both within and outside of Protected Areas. The individual seeds have a diameter at breast height (DBH) greater than 20 cm as the large trees become rarer.

The natural regeneration rate is generally low (0 to 1214 %) (DBEV, 2010).

It takes at least 80 years for these species to reach a usable size.

4.4 Population trends

The number of usable specimens is reduced and they only exist in protected areas or in production areas (Barret *et al.,* 2010). The progressive decline in the ebony population of Madagascar has been recorded. For example, nearly all of the large *Diospyros perrieri* trees have disappeared from western Madagascar (Rabarison, personal observation).

4.5 Geographic trends

The *Diospyros* species virtually do not exist in the production areas. The wood has started to be illegally harvested in the Protected Areas.

The policy of the Government of Madagascar is to triple the surface area of protected areas to contribute to the conservation of *Diospyros* species.

5. Threats

The main threats to species in the *Diospyros* genus are excessive and illegal harvesting, the destruction of habitat as a result of land clearance, the extension of cultivation areas and bushfires.

6. Utilization and trade

6.1 National utilization

Ebony wood is used for the manufacture of luxury goods, cutlery, brushes, marquetry, canes, lutes, wind musical instruments and piano keys.

6.2 Legal trade

Twenty two species of ebony wood are the most marketed outside of Madagascar (ONE, 2005; Rabevohitra, 2006; CITES, 2008; Global Witness and Environmental Investigation Agency, 2010).

The application of CITES regulations could help to protect and conserve these species at the national level.

6.3 Parts and derivatives in trade

Rosewood species are exported as raw logs or finished products, furniture and artisanal products. More than 90 % of products exported are logs and timber.

6.4 Illegal trade

It is likely that ebony wood and products made from it are marketed at the international level, which encourages illegal harvesting of this species.

6.5 Actual or potential trade impacts

Ebony wood is highly sought after on the international market because of its quality (sturdy, hard, resistant to heat and cold). The continuing increase in international demand encourages illegal trade and harvesting of this species. Selective and excessive harvesting of mature, seed-bearing specimens leads to rarefaction of large-diameter trees. It has been noted that harvesting has started to include small-diameter trees for the manufacture of artisanal products such as musical instruments. This is the case for *D. squamosa* and *D. aculeata*.

7. Legal instruments

7.1 National

The different legislative texts (orders, decrees, forestry law) published by successive governments for the conservation and rational management of forest heritage cover natural resources of rosewood. Unfortunately, these regulatory markers have not managed to check the illegal harvesting of these resources. This exploitation has continued to worsen over recent years. Hundreds of containers continue to leave the country, thus confirming the lack of State control of such activities at many levels.

The regulations currently in force reveal the following:

– the lack of texts and laws on rosewood species;

– the lack of links between the texts and social, technical and scientific principles;

– the violation of procedures and corruption of the power of the texts.

Currently, Decree 2010-141 of 24 March 2010, which prohibits the felling, harvesting and trade in ebony wood, is in force at the national level.

7.2 International

In 2011, the inclusion of 104 *Diospyros* species that are endemic to Madagascar in Appendix III of CITES enabled the strengthening of the application of national legislation in member States to the Convention that are destinations for illegally-exported wood. The inclusion of the species in Appendix II of CITES will make it possible to ensure that the specimens have been collected in accordance with current laws and using methods that will not harm the survival of the species.

In the medium to long term, this inclusion will be part of a wider clean-up operation of procedures for ebony wood in Madagascar. This activity will also need to include the implementation of management regulations based on a better knowledge of this species, ecological restoration initiatives, and coherence between legal texts, the technical processes for development and harvesting, and the forestry administrative procedure, which is one of the suitable approaches for the sustainable and rational management of *Diospyros* in Madagascar.

8. Species management

8.1 Management measures

Among the 84 species of *Diospyros* identified with certainty, only 13 have been assessed according to the International Union for the Conservation of Nature (IUCN) criteria by the Group of Specialists on the Plants of Madagascar (GSPM) and are threatened (document PC19 Doc. 14.3).

8.2 Population monitoring

There is no known continuous surveillance of the population of *Diospyros* species in the range areas.

8.3 Control measures

8.3.1 International

One hundred and four species of *Diospyros* have been included in Appendix III of CITES since 2011 (www.cites.org). This has made it possible to obtain the support of countries and third-party organizations at the international level to monitor trade in these species outside of the country as well the implementation of national measures to control the level of exports.

8.3.2 Domestic

Certain species of *Diospyros* are only known in two to five locations. The species listed below are those that do not appear in Protected Areas: *D. baroniana, D. filipes, D implexicalyx, D. nidiformis, D. perglauca, D. subfalciformis, D. tampinensis, D. tetraceros* and *D. thouarsii.*

8.4 Captive breeding and artificial propagation

There are no studies on artificial propagation in species from the *Diospyros* genus.

8.5 Habitat conservation

Ebony wood is particularly found beyond the Protected Areas. The Protected Areas only contain 10-25 % of the total population. Currently, the policy of the Government of Madagascar to increase the surface area of the Protected Areas with the demarcation of new such areas will contribute efficiently to the conservation of the species of the *Diospyros* genus.

8.6 Safeguards

The majority of species have not even been described as these species have particular anatomical characteristics which give them their qualities. Given the wide diversity of species contained in different forest ecosystems and to ensure their better management, a large number of species should be subjected to an anatomical study.

When removing the usable stock in the production areas there should be rigorous controls and care should be taken. This measure would enable the different actors involved (local communities, villages, regions and the central government) to benefit from official fees linked to the process. Currently, the harvesting only benefits exporters as current trade is illegal.

9. Information on similar species

The wood from *Diospyros* species is identifiable at the level of this genus and the proposal to include *Diosypros* (Malagasy population) in Appendix II will assist in the adequate implementation of the Convention.

10. Consultations

With a view to facilitating the implementation of this proposal and to reduce the impact on other Parties, the list is limited to 83 species of the *Diospyros* genus (Malagasy population) rather than the 550 species found throughout the world. *Diospyros ferrea,* the only species found outside of Madagascar, is not affected by this proposal.

11. Additional remarks

The recommendations emanating from the round table meeting organized by Chatham House (London) in 2012 on tackling the trade in illegal precious woods (Annex 4), which was attended by representatives of the Ministry of Environment and Forests (MEF) and civil society, stressed the importance of including precious woods in Appendix II at CoP16 and implementing a traceability system using a DNA database of precious woods.

The 36th session of the World Heritage Committee (Annex 5), which took place in Saint Petersburg from 24 June to 6 July 2012 saw the adoption of recommendations on precious woods (in particular, the application of existing legislation on the prohibition of illegal trade as stated in Decree 2012-141) and the taking of measures by member States of the Convention to ensure that wood that is illegally felled in Madagascar is prohibited and cannot enter into their national markets.

The Catalogue of the Vascular Plants of Madagascar (MadCat) has been used as a reference for the scientific names of the species of the *Diospyros* genus.

This proposal incorporates the main elements of Decision 15.97 recommended by Madagascar during the 15th session of the Plant Committee. With a view to strengthening the effective implementation of this proposal, Madagascar has worked in close collaboration with the Plant Committee. This proposal will be submitted to the 16th Conference of the Parties.

Within the scope of an agreement between the CITES Secretariat, the International Tropical Timber Organization and Madagascar, certain species of *Diospyros* were the subject of research during 2012 in order to supplement existing data.

The species of *Diospyros* that have been studied have been described and named in the flora of Madagascar and the Comoros and in numerous books since 1921. To date, the old classifications have been retained to facilitate the spotting and definition of samples. After taxonomic revision of this genus, updates to different herbarium and wood collections will be necessary.

12. References

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13. List of annexes

Annex 1: List of names of *Diospyros* species accepted in the Catalogue of the Vascular Plants of Madagascar (www.tropicos.org)

Annex 2: List of *Diospyros* species with their dendrometric characteristics

Annex 3: Geographical distribution of certain species of *Diospyros* in Madagascar, including wide distribution (*Diospyros haplostylis, Diospyros gracilipes*) and restricted distribution (*Diospyros aculeata*)

Annex 4: Participation report on the round table held on 23 and 24 April 2012: Tackling the trade in illegal precious woods, 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 names of *Diospyros* species accepted in the Catalogue of the Vascular Plants of Madagascar (www.tropicos.org)

1	*Diospyros ferrea* (Willd.) Bakh
2	*Diospyros aculeata* H. Perrier
3	*Diospyros analamerensis* H. Perrier
4	*Diospyros ankifiensis* H. Perrier
5	*Diospyros anosivolensis* H. Perrier
6	*Diospyros baroniana* H. Perrier
7	*Diospyros bemarivensis* H. Perrier
8	*Diospyros bernieriana* (Baill.) H. Perrier. = **Syn**: *D. torquata* H.perrieri
9	*Diospyros bezofensis* H. Perrier
10	*Diospyros boinensis* (H. Perrier) G.E. Schatz & Lowry
11	*Diospyros boivini* Hiern = **Syn** : *D. lenticellata* Baker
12	*Diospyros calophylla* Hiern
13	*Diospyros cinnamomoides* H. Perrier
14	*Diospyros clusiifolia* (Hiern) G.E. Schatz & Lowry
15	*Diospyros conifera* H. Perrier
16	*Diospyros coursiana* H. Perrier
17	*Diospyros cupulifera* H. Perrier
18	*Diospyros danguyana* H. Perrier
19	*Diospyros decaryana* H. Perrier
20	*Diospyros dicorypheoides* H. Perrier
21	*Diospyros ebenifera* (H. Perrier) G.E. Schatz & Lowry
22	*Diospyros erinacea* (H. Perrier) G.E. Schatz & Lowry
23	*Diospyros erythrosperma* H. Perrier
24	*Diospyros filipes* H. Perrier
25	*Diospyros fuscovelutina* Baker
26	*Diospyros geayana* (H. Perrier) G.E. Schatz & Lowry
27	*Diospyros gracilipes* Hiern = **Syn** : *D. albidum* Scott Elliot = *D. leucocalyx* Hiern
28	*Diospyros greveana* H. Perrier
29	*Diospyros haplostylis* Boivin ex Hiern = **Syn**: *D. hildebrandtii* Garcke = *D. onivensis* H.Perrier = *D. rubrolanata* H. Perrier
30	*Diospyros hazomainty* H. Perrier
31	*Diospyros heterosepala* H. Perrier
32	*Diospyros humbertiana* H. Perrier
33	*Diospyros implexicalyx* H. Perrier
34	*Diospyros ketsensis* H. Perrier
35	*Diospyros lanceolata* Poir.
36	*Diospyros latispathulata* H. Perrier
37	*Diospyros lokohensis* (H. Perrier) G.E. Schatz & Lowry
38	*Diospyros louveli* H. Perrier
39	*Diospyros madecassa* H. Perrier
40	*Diospyros manampetsae* H. Perrier
41	*Diospyros mangabensis* Aug. DC.
42	*Diospyros mangorensis* H. Perrier
43	*Diospyros mapingo* H. Perrier
44	*Diospyros masoalensis* H. Perrier
45	*Diospyros mcphersonii* G.E. Schatz & Lowry = **Syn**: *D.crassiflora* H. Perrier

46	*Diospyros meeusiana* (H. Perrier) G.E. Schatz & Lowry
47	*Diospyros megasepala* Baker
48	*Diospyros microrhombus* Hiern
49	*Diospyros myriophylla* (H. Perrier) G.E. Schatz & Lowry
50	*Diospyros myrtifolia* H. Perrier
51	*Diospyros myrtilloides* (H. Perrier) G.E. Schatz & Lowry
52	*Diospyros nidiformis* G.E. Schatz & Lowry = **Syn** : *D. intricata* H. Perrier
53	*Diospyros obducta* (H. Perrier) G.E. Schatz & Lowry
54	*Diospyros occlusa* H. Perrier
55	*Diospyros olacinoides* (H. Perrier) G.E. Schatz & Lowry
56	*Diospyros* pairifolia H. Perrier
57	*Diospyros parvifolia* Hiern
58	*Diospyros perglauca* H. Perrier
59	*Diospyros perreticulata* H. Perrier
60	*Diospyros perrieri* Jum.
61	*Diospyros pervilleana* (Baill.) G.E. Schatz & Lowry
62	*Diospyros pervillei* Hiern
63	*Diospyros platycalyx* Hiern = **Syn** : *D. striicalyx* H. Perrier
64	*Diospyros pruinosa* Hiern
65	*Diospyros quercina* (Baill.) G.E. Schatz & Lowry
66	*Diospyros* sakalavarum H. Perrier
67	*Diospyros sclerophylla* H. Perrier
68	*Diospyros sphaerosepala* Baker = **Syn** : *D.gonoclada* Baker
69	*Diospyros squamosa* Bojer ex DC.= **Syn**: *D. bernieri* Hiern = *D. laevis* Bojer ex Dc
70	*Diospyros stenocarpa* (H. Perrier) G.E. Schatz & Lowry
71	*Diospyros subacuta* Hiern
72	Diospyros subenervis (H. Perrier) G.E. Schatz & Lowry
73	*Diospyros subfalciformis* H. Perrier
74	Diospyros subsessilifolia H. Perrier
75	*Diospyros subtrinervis* H. Perrier
76	*Diospyros tampinensis* H. Perrier
77	*Diospyros tetraceros* H. Perrier
78	*Diospyros tetrapoda* H. Perrier
79	*Diospyros thouarsii* Hiern
80	*Diospyros toxicaria* Hiern = **Syn** : *D. caucheana* A. Chev
81	*Diospyros tropophylla* (H. Perrier) G.E. Schatz & Lowry
82	*Diospyros urschii* H. Perrier
83	*Diospyros velutipes* (H. Perrier) G.E. Schatz & Lowry
84	*Diospyros vescoi* Hiern

List of *Diospyros* species with their dendrometric characteristics *(the species with minimum exploitable diameters are those highlighted in pink)*

Genus	Species	ssp. or var	Authors	Exploitability		
				Growth habit	Height	DBH
Diospyros	*aculeata*		H. Perrier	shrub, small tree, tree	2 to 15 m	3 à 40 cm; 25 to 30 m
Diospyros	*analamerensis*		H. Perrier	large tree, shrub	4 to 15 m	6 cm
Diospyros	*ankifiensis*		H. Perrier	shrub, tree	6 to 10 m	Data not available
Diospyros	*anosivolensis*		H. Perrier	tree	4 to 7 m	12 cm
Diospyros	*baroniana*		H. Perrier	shrub, tree	6 to 10 m	5 to 25 cm
Diospyros	*bemarivensis*		H. Perrier	tree	Data not available	6 cm
Diospyros	*bernieriana*		(Baill.) H. Perrier	tree, small tree, shrub	2 to 15 m	50 cm
Diospyros	*bezofensis*		H. Perrier	tree	5 to 20 m	30 cm
Diospyros	*boinensis*		(H. Perrier) G.E. Schatz & Lowry	shrub, tree	2 to 3 m	Data not available
Diospyros	*boivini*		Hiern	tree, shrub	3 to 10 m	12 cm
Diospyros	*calophylla*		Hiern	shrub, tree	4 to 8 m	30 cm
Diospyros	*cinnamomoides*		H. Perrier	rheophyte, shrub, tree, small to very small tree	3 to 10 m	10 to 40 cm
Diospyros	*clusiifolia*		(Hiern) G.E. Schatz & Lowry	tree	7 to 25 m	20 to 30 cm
Diospyros	*conifera*		H. Perrier	tree	4 to 15 m	8 cm
Diospyros	*coursiana*		H. Perrier	tree	8 m	Data not available
Diospyros	*cupulifera*		H. Perrier	tree	4 to 12 m	5 to 15 cm
Diospyros	*danguyana*		H. Perrier	shrub, small tree, tree	2,5 to 6 m	Data not available
Diospyros	*decaryana*		H. Perrier	rheophyte, shrub, tree	6 to 20 m	Data not available
Diospyros	*dicorypheoides*		H. Perrier	shrub		Data not available
Diospyros	*ebenifera*		(H. Perrier) G.E. Schatz	tree	12 m	Data not available

Genus	Species	ssp. or var	Authors	Exploitability		
				Growth habit	Height	DBH
			& Lowry			
Diospyros	*enervis*			shrub	1 to 2 m	Data not available
Diospyros	*erinacea*		(H. Perrier) G.E. Schatz & Lowry	tree	15 m	12 cm
Diospyros	*erythrosperma*		H. Perrier	tree, small tree	4 to 12 m	4 to 11 cm
Diospyros	*ferrea*		(Willd.) Bakh.	shrub, tree, small tree	1 to 10 m	6 to 20 cm
Diospyros	*filipes*		H. Perrier	shrub, tree	2 to 17 m	Data not available
Diospyros	*fuscovelutina*		Baker	shrub, tree	2,5 to 17 m	3,5 to 40 cm
Diospyros	*geayana*		(H. Perrier) G.E. Schatz & Lowry	tree	6 m	Data not available
Diospyros	*gracilipes*		Hiern	tree, small tree	3,5 to 9 m	6 to 18 cm
Diospyros	*greveana*		H. Perrier	shrub		Data not available
Diospyros	*haplostylis*	var. *hildebrandtii*		tree	15 m	
Diospyros	*haplostylis*		Boivin	shrub, tree	3 to 15 m	17 cm
Diospyros	*hazomainty*		H. Perrier	tree	8 to 10 m	
Diospyros	*heterosepala*		H. Perrier	shrub		
Diospyros	*humbertiana*		H. Perrier	shrub	1,5 to 6 m	10 cm
Diospyros	*implexicalyx*		H. Perrier	shrub	7to 8 m	
Diospyros	*ketsensis*		H. Perrier	shrub	No data	
Diospyros	*lanceolata*		Poir.	shrub	4 to 6 m	7 cm
Diospyros	*latispathulata*		H. Perrier	shrub		
Diospyros	*lokohensis*		(H. Perrier) G.E. Schatz & Lowry	tree	4 to 12 m	
Diospyros	*louvelii*		H. Perrier	tree	20 m	
Diospyros	*madecassa*		H. Perrier	tree	6 to 7 m	
Diospyros	*manampetsae*		H. Perrier	shrub		A few centimetres

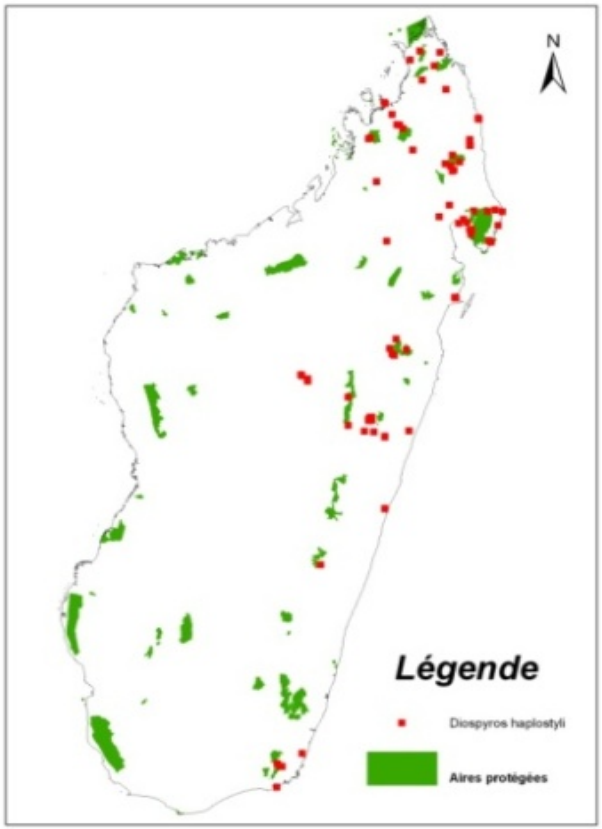
Genus	Species	ssp. or var	Authors	Exploitability		
				Growth habit	Height	DBH
Diospyros	*mangabensis*		Aug. DC.	tree	4 to 18 m	12 to 60 cm
Diospyros	*mangorensis*		H. Perrier	shrub		
Diospyros	*mapingo **		H. Perrier	shrub, tree	8 to 25 m	4 to 24 cm
Diospyros	*masoalensis**		H. Perrier	tree	12 to 24 m	16 to 20 cm
Diospyros	*mcphersonii*		G.E. Schatz & Lowry	small tree	2 to 3 m	
Diospyros	*meeusiana*		(H. Perrier) G.E. Schatz & Lowry	small tree	3 m	
Diospyros	*megasepala*		Baker	shrub, tree	3 to 12 m	7 cm
Diospyros	*microrhombus*		Hiern	shrub, tree	4 to 5 m	
Diospyros	*myriophylla*		(H. Perrier) G.E. Schatz & Lowry	shrub, tree	6 to 9 m	9 to 15 cm
Diospyros	*myrtifolia*		H. Perrier	shrub, tree	4 to 5 m	10 cm
Diospyros	*myrtilloides*		(H. Perrier) G.E. Schatz & Lowry	small tree	6 to 11 m	12 cm
Diospyros	*nidiformis*		G.E. Schatz & Lowry	shrub, tree	2 m	
Diospyros	*obducta*		(H. Perrier) G.E. Schatz & Lowry	shrub	2 m	
Diospyros	*occlusa*		H. Perrier	tree	7 to 25 m	12 to 30 cm
Diospyros	*olacinoides*		(H. Perrier) G.E. Schatz & Lowry	shrub	6 to 10 m	13 cm
Diospyros	*parifolia*		H. Perrier	shrub	2 to 10 m	8 to 10
Diospyros	*parvifolia*		Hiern	no information		
Diospyros	*perglauca*		H. Perrier	shrub	5 m	6 cm
Diospyros	*perreticulata*		H. Perrier	tree		
Diospyros	*perreticulata*		H. Perrier	tree	No data	
Diospyros	*perrieri*		Jum.	tree	2 to 3 m (15 to 25 m: FM)	5 cm
Diospyros	*pervilleana*		(Baill.) G.E. Schatz & Lowry	shrub, tree	4 to 9 m	4 to 9 cm

Genus	Species	ssp. or var	Authors	Exploitability		
				Growth habit	Height	DBH
Diospyros	*pervillei*		Hiern	tree	8 to 12 m (12 to 15 m: FM)	
Diospyros	*platycalyx*		Hiern	shrub, tree	3 to 8 m (4 to 10 m: FM)	3 to 40 cm
Diospyros	*pruinosa*		Hiern	shrub, tree	2 to 12 m	3 to 15 cm
Diospyros	*quercina*		(Baill.) G.E. Schatz & Lowry	tree	5 to 6 m	
Diospyros	*sakalavarum*		H. Perrier	shrub, tree	10 to 20 m (20 to 30 m)	13 to 50 cm (60 cm: FM)
Diospyros	*sclerophylla*		H. Perrier	tree	5 to 12 m	30 cm
Diospyros	*sphaerosepala*		Baker	shrub, tree	3 to 10 m	7 to 16 cm
Diospyros	*squamosa*		Bojer ex DC.	tree	10 to 20 m	15 to 28 cm
Diospyros	*stenocarpa*		(H. Perrier) G.E. Schatz & Lowry	shrub, tree	4 to 12 m	7to 16 cm
Diospyros	*subacuta*		Hiern	shrub	2 to 12 m	15 cm
Diospyros	*subenervis*		(H. Perrier) G.E. Schatz & Lowry	tree	6 to 10 m	5 to 18 cm
Diospyros	*subfalciformis*		H. Perrier	shrub, tree	2 to 6 m (4 to 12 m: FM)	
Diospyros	*subsessilifolia*		H. Perrier	shrub, tree	5 to 10 m	
Diospyros	*subtrinervis*		H. Perrier	shrub, tree	7 to 13 m	21 cm
Diospyros	*tampinensis*		H. Perrier	shrub, tree	4 to 12 m	
Diospyros	*tetraceros*		H. Perrier	shrub, tree	No data	
Diospyros	*thouarsii*		Hiern	shrub, tree	3 to 4 m	
Diospyros	*toxicaria*		Hiern	tree	5 to 20 m	10 to 60 cm
Diospyros	*tropophylla*		(H. Perrier) G.E. Schatz & Lowry	shrub, tree	2 to 14 m	3 to 50 cm
Diospyros	*velutipes*		(H. Perrier) G.E. Schatz & Lowry	small tree	5 to 12 m	5 to 10 cm

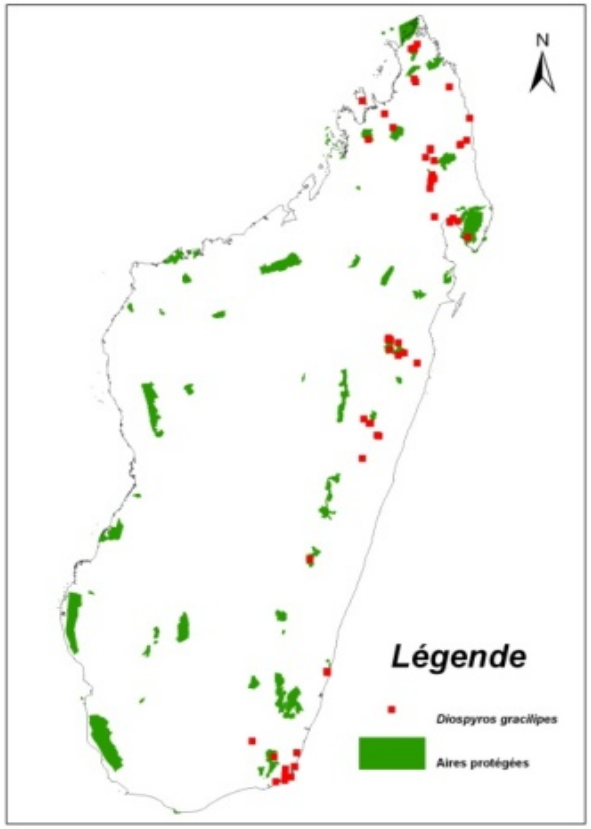
Genus	Species	ssp. or var	Authors	Exploitability		
				Growth habit	Height	DBH
Diospyros	*vescoi*		Hiern	shrub, tree	4 to 12 m	8 to 15 cm
Diospyros	*tetrapoda*		H. Perrier	tree	10 to 12 m	

MED: Minimum Exploitable Diameter

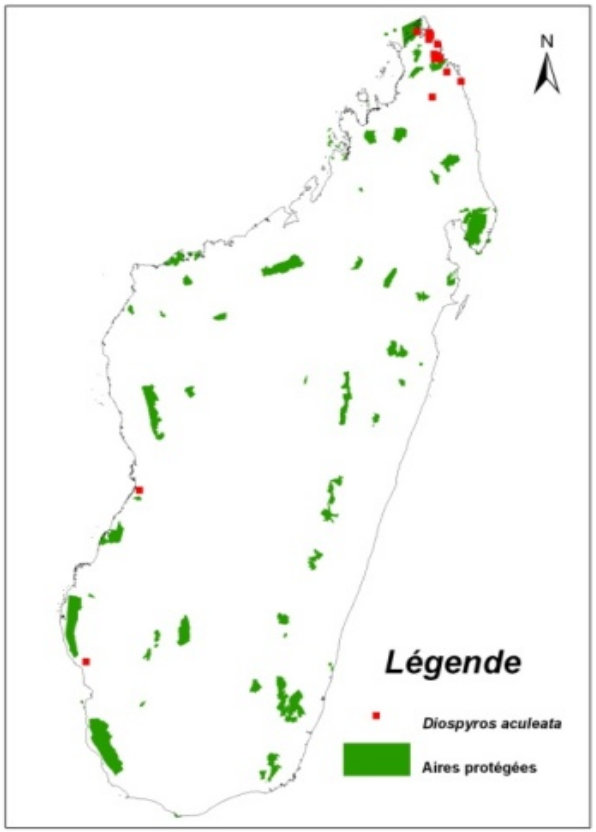
Geographical distribution of certain species of *Diospyros* in Madagascar, including wide distribution (*Diospyros haplostylis, Diospyros gracilipes*) and restricted distribution (*Diospyros aculeata*)



Diospyros haplostylis



Diospyros gracilipes



Diospyros aculeata

**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;

5 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;

6 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.

<u>The following three points were raised:</u>

* 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.