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



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Interpretation and implementation of the Convention

Species trade and conservation

Trees

REPORT OF THE WORKING GROUP ON NEOTROPICAL TREE SPECIES (DECISION 16.159]

- 1. This document has been prepared by the Chair of the Working Group on Neotropical Tree Species based on information received from the range States on the status of the species from the *Dalbergia* genus in North, Central and South America and the Caribbean.
- 2. The requests for information were sent on 23 February 2015 by the Chair and Vice-Chair of the Working Group on Neotropical Tree Species, with direct support from Ms Valentina Vaglica. The requests and attached documentation was sent in Spanish and English to all of the countries in Central and South America and some of the countries in North America and the Caribbean. Countries such as France, Netherlands and United Kingdom of Great Britain and Northern Ireland, that also have a presence in the Americas, were also contacted in their capacity as range States for some species from the Dalbergia genus. Organizations such as TRAFFIC Mexico, Species Survival Network, the Amazon Cooperation Treaty Organization, the International Tropical Timber Organization and the UNEP World Conservation Monitoring Centre (UNEP-WCMC) were also consulted.

ACKNOWLEDGEMENTS

3. We wish to thank the range States that sent information in a timely manner, namely: Mexico, Guatemala, Honduras, Colombia, Plurinational State of Bolivia, Peru, Ecuador, Brazil, Uruguay, Cuba, United States of America, France (for French Guiana, Guadeloupe, Martinique and Saint Martin) and Netherlands (for Sint Maarten). We also extend our thanks to international organizations such as the International Tropical Timber Organization, Species Survival Network, TRAFFIC and UNEP-WCMC, which also provided information.

GENERAL CONSIDERATIONS

4. The species from the *Dalbergia* genus produce wood commonly known as rosewood, which is characterized by vivid colours, attractive grain and technical qualities that makes it highly desirable among high-quality furniture dealers (McLure et al., 2015). Demand for this species is growing exponentially and illegal felling is a frequent problem in Central America (Jenkins et al., 2012). Among the most valuable

^{*} 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.

species are: *Dalbergia retusa* (Cocobolo), which naturally occurs from Mexico to Panama; *Dalbergia stevensonii* (Rosewood), which is mainly found in Guatemala and Belize; and *Dalbergia nigra* in Brazil. The wood from these species has a long tradition of use in musical instruments, furniture and handicrafts. According to Wenbin and Xiufang (2013), China was responsible for more than half of global imports of tropical timber during the period 2001–2012 and it is believed that this figure may increase. Felling of trees in the wild for export purposes is the main cause of population changes as it directly affects the natural regeneration of the species, which leads to its loss both within and outside of protected areas in the Americas.

5. The main objective of the consultations was to identify and analyse the current situation of the Dalbergia genus in the regions of North, Central and South America and the Caribbean. For this purpose, a request for information was sent, accompanied by a questionnaire which would make it possible to complete and update available information on: a) Taxonomic validation of species from the Dalbergia genus present in the region, using herbarium records, field studies and available literature resources; b) Potential distribution and other biological information; c) Threats; d) Trade information (type of products on the market, trade volume, customs data, importing, exporting and re-exporting countries, trade levels at the national and international levels, illegal trade); and e) management guidelines for the species and legislation related to the management and protection of the species in each country.

SUMMARY OF RESULTS FROM THE CONSULTATIONS

6. This document has been prepared using the data provided by Parties that responded to the request for information. The data obtained, in the language in which they were submitted, are available in a table in Annex 1. The information received by 30 March 2015 is summarized below by country and in alphabetical order.

Plurinational State of Bolivia

7. The Dalbergia genus in the Plurinational State of Bolivia comprises 12 species (see Annex 1); the information presented was extracted from the Catalogue of Vascular Plants of Bolivia. The Plurinational State of Bolivia reports that there is little information on the species. Distribution within the departments of the countries is known but there was no information on the status of the population. Eleven Bolivian species of Dalbergia do not seem to have economic value and only Dalbergia riparia has been considered as a species of second/third class economic importance, for its type of wood. There was no information available on exports, trade or market values.

Brazil

8. Brazil has confirmed the presence of 39 species of *Dalbergia* in the country (see Annex 1); the information was extracted from the The Plant List and Tropicos databases. No information on population status, distribution, threats and management plans were submitted; instead information on exports of *Dalbergia* species were presented, specifying the destination country, volumes, products by species, type on the market and relative market values (reported in Brazilian Reais) for the period 2010–2015 (see Annex 1 for more details). The main species exported during the period 2010–2015 were *D. caerensis* and *D. spruceana*. For the species *Dalbergia caerensis*, 178.6 m³ of sawn wood was exported, mainly to China (135.84 m³) and Japan (38.62 m³). For *Dalbergia spruceana* exports of sawn wood were reported to Germany (22.28 m³), China (12.37 m³) and the United States of America (8.59 m³). Brazil has not recorded any imports for the same period.

Colombia

9. Colombia has confirmed the presence of 13 species of *Dalbergia* in the country (see Annex 1); the information was extracted from The Plant List and Tropicos databases. A geographical map was sent, which shows the sample collection points for the species in Colombia. There are no records for the *Dalbergia* genus of trade in forest products; however, Colombia presented trade data on other wood species in Colombia, such as *Camnosperma spp., Prioria copaifera, Pinus patula* and *Cedrela odorata*.

Cuba

10. Cuba confirmed the presence of one species in the country, *Dalbergia ecastaphyllum*, which is found distributed in wetland areas with freshwater and mangroves. The species is not catalogued as threatened

and there are no records of trade or any type of commercial activity related to this species or the entire *Dalbergia* genus in the country.

France

- 11. For Saint Martin/Sint Maarten only the species *Dalbergia ecastaphyllum* was reported, which is a climbing shrub that is not mentioned on the red lists of threatened species. France reported that the species is not subject to management guidelines. There is no evidence of illegal trade in this species in Saint Martin or any record of trade.
- 12. For Martinique and Guadeloupe, two species of *Dalbergia* are recorded across both territories: *Dalbergia ecastaphyllum* and *Dalbergia monetaria* (both species are shrubs). They have been found close to small streams, and are described as rare species that are not included in the red lists and do not have any protection status or management guidelines. At the trade level, there is no evidence of legal or illegal trade of the *Dalbergia* genus in Martinique and Guadeloupe.
- 13. For French Guiana, six species of the *Dalbergia* genus have been identified (see Annex 1), and all of these species are shrubs and do not have any protection status. There is no evidence of legal or illegal trade in the *Dalbergia* genus in the country.

Guatemala

- 14. In Guatemala, 14 species of the *Dalbergia* genus are reported according to The Plant List (2015) and Linares and Sousa (2007) (Annex 1). The actual distribution of the genus in Guatemala is fragmented and populations of the species are in decline, principally as a result of the lost of forest cover from unsustainable farming practices, demographic growth, fires and illegal logging. Before 2012, the *Dalbergia* population in Guatemala has not been the subject of studies.
- 15. Two research projects that are currently underway have provided relevant data on the situation of all species of the genus, demonstrating a high level of endemism, and reporting that the typical habitat has been destroyed and is under continuous pressure, mainly as a result of increases in agriculture, livestock farming and African palm plantations, together with demographic growth and overexploitation (FAUSAC-FPNV, 2015).
- 16. Dalbergia stevensonii is the only species for which populations are reported, while for the other species, only scattered trees are reported. The results of the research projects demonstrate the presence of specimens from the Dalbergia genus in the departments of Petén, Alta Verapaz, Baja Verapaz, Quiché, Izabal, Escuintla, Guatemala, Suchitepéquez and Santa Rosa (see Annex 2). The population structure of Dalbergia calycina, Dalbergia tucurensis and Dalbergia retusa shows the absence of specimens of certain diameter classes in the natural range area. According to FPNV (2015), in general, trees of these species in the diameter class between 20 and 60 centimetres have been found in the wild, located mainly in two regions of Guatemala: Alta Verapaz and Petén. In the majority of places where these species are present, there are not favourable conditions for sustainable exploitation.
- 17. Wood products from the species of the *Dalbergia* genus have multiple uses in Guatemala: planks are used in the construction of houses and fences; wood from these species is also used in woodworking (furniture) and sculptures for local and craft markets (INAB- SEINEF, 2015). According to National Forestry Institute of Guatemala (INAB-SEINEF, 2015), for the year 2014, 177.10 m³ of wood products (logs, planks, sawn wood and furniture), from the *Dalbergia* genus were processed. *D. calycina, D. cubilquitzensis, D. stevensonii* and Dalbergia spp, have been marketed and exported outside of the country. According to the National Council on Protected Areas (CONAP), during the period 2008–2014, 51 CITES permits were issued for the export of sawn wood, for a total volume of 59.33 m³ of *D. retusa* (estimated value of US\$ 374,066.64) and 808.48 m³ of *D. stevensonii* (estimated value of US\$ 1,850,371.81). The main importing countries for *D. stevensonii* in the period 2008–2014 were China, with a total of 317.04 m³, followed by the United States of America (233.71 m³) and Japan (46.95 m³).
- 18. During the period 2011–2014, a total of 906.24 m³ of illegal wood from *D. stevensonii, D. retusa* and other undetermined species from the *Dalbergia* genus were seized (mainly logs, boards and planks). The majority of seizures were carried out in the country's ports (Puerto Quetzal, Santo Tomás de Castilla and Puerto Barrios), apart from two on the motorway to Honduras and El Salvador. The rest of the shipments were destined for China. In February and March 2015, two more containers of *D. stevensonii* and *D. retusa* were seized, with a volume of 18.90 m³ and 22.13 m³, respectively. These were detected by CONAP

shipping inspectors at Puerto Quetzal and were also destined for China. Generally, the following agencies have participated in these operations: CONAP, the National Forestry Institute, the Office of the Public Prosecutor and the Nature Protection Division of the National Civil Police.

- 19. Because of the great similarity between the wood of one species and another, it is very difficult to distinguish them. The wood of *D. retusa* is likely to be confused with *D. stevensonii* and *D. tucurensis*. The wood of *D. granadillo* (distribution range El Salvador and Mexico) is not distinguishable from *D. retusa*, which although known by the common name granadillo, is sometimes traded under the name cocobolo. The Faculty of Agronomy of the University of San Carlos de Guatemala, with funding from the International Tropical Timber Organization-CITES Project, has carried out microscopic analysis through which a greater understanding is being achieved of how to distinguish the Guatemalan species of the *Dalbergia* genus, such as *D. calycina, D. retusa* and *D. stevensonii*, whose woods are similar in colour and grain, especially some time after having been cut.
- 20. In Guatemala, governmental management of forests is the responsibility of the National Forestry Institute (INAB), which is responsible for the administration and management of forests outside of protected areas, and of CONEP, which is responsible for forestry management within the Guatemalan System of Protected Areas (SIGAP). In general, the legal frameworks that regulate forestry activities in Guatemala are the Forestry Law (Decree 101-96) and the Law on Protected Areas (Decree 4-89 and its reforms: 18-89;110-96; 117-97). Guatemala also has a list of threatened species and specific regulations for these species. Currently, sustainable forest management for species of the *Dalbergia* genus is permitted provided that it is carried out via forest management plans that meet all of the technical and legal requirements that guarantee sustainability.

Honduras

21. The *Dalbergia* genus in Honduras is represented by 16 species (see Annex 1). *D. retusa* and *D. tucurensis* are the most widespread in the country, mainly in the Atlantic region and the semi-arid high plateau or mountainous regions of Honduras. According to the Forest Steward Council, there are no specific studies of the population situation of these species. Honduras reports that the greatest threat to the survival of the species is land-use change (i.e. conversion of forests to livestock farming and palm oil plantations). No information on imports, exports and trade data for the species in the country was reported.

Netherlands

22. The Netherlands did not report the presence of species from the *Dalbergia* genus in Sint Maarten, or trade data. A literature review identified the presence of *D. ecastaphyllum* in the territory.

Mexico

- 23. Mexico reported that currently, information on the conservation status, threats and use of Mexican species is very limited. To date, Mexico has identified 22 native species that are distributed in Mexico and Central America (five of those were identified as endemic); in addition, five Mesoamerican species have been found outside of Mexico (see Annex 1). Three species of the Dalbergia genus have been assessed using the criteria of the IUCN Red List: *D. calycina* (least concern), *D. glomerata* (vulnerable) and *D. retusa* (vulnerable). Within the national legal framework, two species are listed in NOM-059-SEMARNAT-2010, the Official Mexican Standard on at risk species: *D. congestiflora* and *D. granadillo*. The department responsible for regulating sustainable use of these species is the General Wildlife Directorate (DGVS-SEMARNAT). Moreover, the General Act on Sustainable Forestry Development regulates the use at the national level of species from the *Dalbergia* genus that do not appear in NOM-059-SEMARNAT-2010. Three native *Dalbergia* species are listed in CITES Appendix II: *D. granadillo*, *D. retusa* and *D. stevensonii*. In accordance with the provisions of Articles III and IV of the Convention, all exports of the specimens included in Appendix I or II are authorized by the Management Authority of Mexico (General Wildlife Directorate of SEMARNAT); the authorizations are based on non-detriment findings issued by the Scientific Authority (CONABIO).
- 24. Currently, the Scientific Authority of Mexico (CONABIO) is coordinating the development of a publication intended to update current knowledge of the *Dalbergia* genus, particularly of timber species that are subject to logging. It is also trying to identify information gaps in order to define recommendations for decision-making on conservation and sustainable use. Mexico reports that the implementing Authority for the Convention and the implementation of the law of Mexico have detected worrying levels of illegal trade in species from the *Dalbergia* genus (both to and from Mexico), and therefore, it is possible that other

Mesoamerican species of the *Dalbergia* genus meet the criteria for inclusion in Appendix II, particularly because of the difficulties in distinguishing between species of the genus. Mexico recognizes that the first step is to distinguish between the timber species (that are therefore subject to greater demand on the market) and the non-timber species from the *Dalbergia* genus.

Peru

25. The *Dalbergia* genus in Peru comprises 11 species (see Annex 1). Peru does not have any data on trade or the market value of species from the *Dalbergia* genus, probably due to the fact that the majority of Peruvian species are shrubs and vines and are not traded at the national and international level. All of the species are protected by the Forestry Law No. 27.308.

Uruguay

26. Uruguay reports that there is no natural distribution of species from the *Dalbergia* genus in the country. The State has no data on trade, import or export for the *Dalbergia* species.

United States of America

- 27. The United States of America reported four species from the *Dalbergia* genus: *D. brownei*, *D. ecastaphyllum*, *D. monetaria* and *D. sissoo*. It was reported that there is currently no evidence that the native species *Dalbergia brownei*, *D. ecastaphyllum* are threatened. In the long term, the threats are: changes in habitat conditions (water regime), land conversion and climate change.
- 28. All of the native species from the *Dalbergia* genus that are found in state and federal territory and in protected areas are managed by federal/state agencies; *Dalbergia brownei* is regulated by the law of the State of Florida as a species at risk of extinction. The three native species from the *Dalbergia* genus are found in wetlands are are classified as vines, shrubs or small trees; therefore they are not considered to be commercial timber species.
- 29. There is no evidence of legal or illegal trade in the native species from the *Dalbergia* genus; *D. sissoo* is not native to the United States of America. As the native species in the country are not protected by the Convention or by domestic legislation, there is no requirement for a specific export declaration and therefore codes for the *Dalbergia* species or genus are not included in the harmonized customs tariffs of the United States of America. In addition, there is no demand on the international timber market for any of the species from the *Dalbergia* genus originating in the United States of America.

International Tropical Timber Organization

30. The International Tropical Timber Organization shared information from its databases, in which it identifies two exports of sawn wood from Dalbergia spp. (identified by its common name Rosul) from Guatemala, one in 2012 and the other in 2013, of 0.19 m³ (US\$ 498.92) and 0.06 m³ (US\$ 173.89), respectively. Information on the destination countries was not identified.

TRAFFIC México and Species Survival Network

31. Both organizations report that at the time of the consultations they did not have data on populations of or trade in species from the *Dalbergia* genus in the region.

ANALYSIS AND DISCUSSION OF THE INFORMATION PRESENTED

- 32. All of the reports received from the States in the region contain information on the taxonomy of the species from the *Dalbergia* genus that are found in their territories, which confirms the presence or absence of certain species, in addition they include information on common and trade names.
- 33. The Plurinational State of Bolivia, Colombia, Cuba, France, Honduras, Guatemala and United States of America reported some information on the status of the species and the range area in their territories (Annex 1).
- 34. The species from the *Dalbergia* genus are not considered to be threatened in Cuba and United States of America or in the overseas territories of Member States of the European Union such as France.

- 35. Guatemala reports that species such as *D. calycina, D. tucurensis* and *D. retusa* are scarce and only appear in a scattered manner; *D. stevensonii* is the only species that is found at the population level in the country. All of the species demonstrate a high level of endemism and there is a high probability that wild populations will be significantly reduced as a result of the effects of illegal wood trafficking and land-use change.
- 36. Guatemala, Honduras and the United States of America provided information on the threats that are affecting the species of the *Dalbergia* genus. According to Guatemala, there is significant destruction of the typical habitat of the species and it is under continuous pressure, above all from illegal wood trafficking, increases in agriculture, livestock farming and palm oil plantations, and demographic growth. According to Honduras and the United States of America, the long-term threats include changes to habitat conditions (water regime), land conversion and climate change.
- 37. Guatemala, Mexico and United State of America provided information on existing measures and laws on the use of species from the *Dalbergia* genus.
- 38. Guatemala and Mexico reported the identification problems faced within the *Dalbergia* genus. Other research projects are ongoing in order to correctly determine the differences between the woods of the different species.
- 39. On trade information, Brazil reported on the export volumes by product type over the last five years for: *D. caerensis, D. spruceana, D. frutescens, D. brasiliensis* and *D. nigra*, including the main importing countries. Guatemala provided information on the quantities of sawn wood from species from the *Dalbergia* genus exported for the period 2008–2014. In both cases, the main importing country was China.
- 40. The States of the region reported that there is barely any trade in species of shrubs and vines.
- 41. With regard to information on illegal trade, only Guatemala reported information on seizures of wood from species from the *Dalbergia* genus (mainly *D. stevensonii*, *D. retusa* and *Dalbergia* spp) at the main ports of the country and during inspections on the motorway by the national authorities; almost all of the shipments were destined for the Chinese market.

INFORMATION ON EVENT RELATED TO THE WORKING GROUP

- 42. The Chairmanship of the Working Group on Neotropical Tree Species had at its disposal information on events planned or held by the range States that are linked to the objectives of the Working Group, in order to be able to report on the issue. This report lists those events below: a) "Workshop on wildlife information management and analysis for CITES Authorities" held in Iperó, São Paulo, Brazil from 8 to 12 June 2015, organized by the Ministry of Environment of the Government of Brazil with the support of the Amazon Cooperation Treaty Organization, the Amazon Regional Programme (BMZ/DGIS/GIZ) and the CITES Secretariat; b) "Workshop on assessing risk of extinction of the timber Dalbergia species in Mexico within the framework of NOM-059-SEMARNAT-2010", held in Mexico City, DF, Mexico on 11 and 12 June 2015, organized by the Mexican National Commission for Knowledge and Use of Biodiversity (CONABIO); and c) "First workshop for the conservation of palo santo in the Great American Chaco", planned to be held in Asunción, Paraguay on 30 September and 1 and 2 October 2015, organized by the Secretariat of Environment of Paraguay.
- 43. The Plants Committee is invited to consider, analyse and discuss all of the content of the report.

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