

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



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Species specific matters

NEOTROPICAL TREE SPECIES:
REPORT OF THE INTERSESSIONAL WORKING GROUP

1. This document has been prepared by the chairman and the vice-chairman of the Working Group on Neotropical Tree Species, based on the analysis of the information received from the countries in the species' range on the status of the following species *Swietenia macrophylla* King., *Cedrela odorata* L. (and other species in the genus *Cedrela*), species in the genus *Dalbergia*, *Aniba rosaeodora* Ducke. and *Bulnesia sarmientoi* Lorentz ex Griseb.
2. Requests for information were sent on 18 April 2018 by the chairman and the vice-chairman of the Working Group on Neotropical Tree Species. The request and attached form were sent out in Spanish and English in all countries in these species' range and to all members of the Working Group based on the membership agreed on during the 23rd meeting of the Plants Committee.

ACKNOWLEDGEMENTS

3. To the countries in the species' range that submitted the information: Argentina, Brazil, Costa Rica, El Salvador, United States of America, Guatemala, Jamaica, Mexico, Nicaragua, Peru and Uruguay and Colombia (received after the deadline) all provided information.

GENERAL CONSIDERATIONS

Swietenia macrophylla

4. With regard to the specific legislation that promotes sustainability for the management of the species, Brazil reported that it has a specific regulation for drawing up forest management plans; El Salvador has specific legislation for forestry issues; Mexico reported that its legislation has specific regulations for drawing up forest management plans and that the species is not included in the list of endangered species in Mexico; Peru meanwhile reported that it has a Forest and Wildlife Law and that its regulations govern national forest management issues. All the countries include in their legislation the requirement for Management Plans and other similar plans for forest use. With regard to the logging bans for the species, of the countries that presented a report, only Brazil stated that it applies a total ban for the logging of this tree species in deforestation areas and that partial logging and exploitation bans are applied for the rainy season. In Colombia, this species was declared threatened at a national level by Resolution 1912 of 2017. At a regional level, its use has been regulated by several Regional Corporations.

5. Regarding forest management, Brazil reported that a national forest inventory was currently being drawn up and that the inventories are carried out in the entire management plan area. El Salvador, meanwhile, reported that the national forest inventory had just been completed and that the results would be presented in the next few months; Mexico has a national forest inventory that includes the species. Peru, meanwhile, also has a very detailed national forest inventory and has defined the management units for the harvesting of this species. Colombia has inventories anticipated in Management Plans for the Conservation of Colombian Mahogany, Mahogany, Cedar, Brazilian rosewood and Rosewood (*Aniba canellila*), however, no logging permits are granted for this species.
6. With regard to the existence of forest management plans for the species, Brazil reported that it had forest management plans for timber exploitation, with short cycles of 25-35 years, an average annual growth of 0.86 m³/ha/year, 60 cm minimum cutting diameter and that 20% of the trees with a diameter over 60 cm are left as seed trees. El Salvador reported that it did not have management plans for the species; Mexico reported that it had forest management plans aimed at the sustainable use of the timber, and in general they propose 25-year cutting cycles, reporting an average annual growth of 0.5-0.8 cm, with a minimum cutting diameter of 55 cm for the species, and that they recommend leaving 10% of the trees as seed trees. Guatemala has forest management plans with commercial purposes, with cutting cycles of 25, 30 and 40 years, a minimum cutting diameter of 60 cm and annual average growth of 0.4 cm/year for mahogany, in Guatemala the sustainability criteria applied is based on the extraction of the basal area that is recovered during the estimated cutting cycle. Finally, Peru also has forest management plans for the species. Average annual increases of 0.5 to 0.53 cm have been recorded with short cycles of 20 years, a minimum cutting diameter of 75 cm and its management plans have included 10-20% seed trees. All the countries that carry out forest management reported that they validate and verify the forest management plans they carry out. Colombia has a Management Plan to promote actions aimed at the recovery of natural populations.
7. With regard to the assessment of the species, Brazil reported that at a national level the species is found in Amazonia. It is a co-dominant species, flowering between November and January. Its fruits ripen between September and November. Brazil has a resolution that establishes procedures for the inspection of consumer or processing industries for timber forestry products and by-products of wild origin and the rates of yield. If an industry works with a yield rate higher than the one established by this regulation, they have to prove it by presenting a project to the environmental institution; El Salvador reported that it does not have population studies for the species and that its range includes the country's western region. The regeneration of the species is greatly influenced by anthropogenic factors; there are no identification guides or yield tables for this species; through universities, Mexico has carried out biometric studies and studies of the species' biology and ecology. It is distributed in the "medium semi-evergreen forest", which corresponds to 1,629,800 ha of the country, in the states of Campeche, Chiapas, Quintana Roo, Oaxaca, Puebla, Tabasco, Veracruz and Yucatán. The diametric structure of the mahogany in Quintana Roo has an inverted "J" shape, flowers in July and August and the fruits ripen from November to January. The seeds can be obtained from the end of January to the start of March. Mexico also has yield studies for different types of mahogany wood products. Finally, Peru reported that the estimated size of the commercial population is around 124,683 +/- 5,480 trees. The phenological period for the species in Peru is one of the longest cycles (2 years) in comparison with other species, studies carried out determined that the flowering stage occurs between September and November, the fruits mature during a 8-10 month period and the seeds are dispersed between July and September the following year. In Peru, no studies have been carried out on the yield of round or sawn timber. In Colombia, *S. macrophylla* bears fruit between the months of August and December.
8. With regard to identification problems, Brazil reported that mahogany wood is similar to that of some other species such as *Cedrela*, for example. However, Brazil also reported that they have technical material for the identification of the species and they have the capacity to apply an identification methodology using near infrared; El Salvador reported that there are identification problems with *Switenia humilis* Zuc., whilst México and Peru did not report any problems with the identification of timber from this species.
9. With regard to forest plantations of this species, Brazil did not provide any data on the surface area or yield. However, it stated that all the plantations are intended for trade: El Salvador did not provide any information on the plantations; Mexico reported the existence of a surface of 8,335 ha of plantations with a yield of 140 m³/ha, intended for the round wood trade; Peru did not provide any information on plantations of this species. Colombia reported a surface area of 1,116.60 ha of plantations of this species.
10. Regarding information on exports for the period 2010-2016, Brazil reported that the volume of exported mahogany harvested from the wild was 150,407 m³ of sawn timber and 0.382 m³ of laminate. 7,355,158 m³ of sawn wood and 138,789 m³ of laminate were also exported under court order, the main products exported by Brazil are sawn wood and wood veneer, the main importing country is the USA (for wood with

a regulated management plan), and the Dominican Republic (for mahogany exported under court order), Brazil has a forest product source control and transport system called SINAFLOR; El Salvador reported an export volume of 25 m³ in 2012. The main products exported are planks, wood samples and the country implements an administrative procedure to check the legality of the exports; Mexico reported an export volume of 97,259,987 m³ (according to UNEP-WCMC data), the main export products are sawn wood, round wood and logs, the main importing countries are the USA, Canada and Germany. There is an administrative procedure to verify the legality of the exports; Peru reported that for the reference period, a total of 2,273,383 m³ of mahogany harvested from the wild was exported. There are no data for exports of wood from plantations, and the main exported product is sawn wood, the main importer is the USA, and the legality is verified through procedures in the field and visual inspections of export lots.

11. Regarding import and/or export volumes of mahogany for the period (2010-2016), of all the countries that reported only Mexico stated that it imported 124,373 m³ of round wood, sawn wood, laths and mouldings, from the USA, India, Belize, Bolivia, Côte d'Ivoire, Brazil, Ghana, Peru and Guatemala.

Cedrela odorata (and other species in the genus *Cedrela*)

12. With regard to the specific legislation that promotes sustainability for the management of the species, Brazil reported that there is a specific regulation for the drawing up of forest management plans for the genus *Cedrela*; El Salvador applies forest legislation for the management of the species; Mexico reported that the legislation in general for tree species includes specific regulations for the drawing up of forest management plans and that in the Mexican Official Norm NOM-059-SEMARNAT-2010 the species is classified as being subject to special protection [Protección especial, Pr]; Peru reported that the Forestry and Wildlife Law [Ley Forestal y de Fauna Silvestre] and its regulations control forest management in Peru and that the status of the species in the genus *Cedrela* in accordance with the categorisation of endangered wildlife is as follows: *C. lilloi* (*C. angustifolia*) – Endangered; *C. fissilis* – Vulnerable; *C. montana* – Vulnerable; and *C. odorata* – Vulnerable. With regard to the logging bans for the species, of the countries that presented a report, only Brazil stated that it applied partial logging and exploitation bans for the rainy season. Colombia classified this species as Threatened at a national level through Resolution 1912 of 2017. Through this regional legislation, in some cases the use of the species in the genus *Cedrela* is banned. However, the use of duly registered agroforestry systems is allowed.
13. Regarding forest management, Brazil reported that a national forest inventory was currently being drawn up; El Salvador is in the final stage of its national forest inventory; Mexico has a national forest inventory that includes the species. Peru also has a very detailed national forest inventory where the management units for the use of this species have been defined and they carried out a population study of the genus *Cedrela* in its natural range from April 2008 to March 2009, in order to evaluate the commercial stocks and to consider a sustainable management strategy. Colombia has inventories of this species.
14. With regard to the existence of Forest Management Plans for *Cedrela*, Brazil reported that there are forest management plans for timber exploitation, with cutting cycles of 25-35 years, an average annual growth of 0.86 m³/ha/year a minimum cutting diameter of 50 cm, leaving 15% of the trees with a diameter of over 50 cm as seed trees; El Salvador reported that it had no management plans for the cedar; Mexico reported that it has commercial management plans, that they propose 25-year cutting cycles, with average annual growth of 0.4 to 0.6 cm for the species, the minimum cutting diameter is 55 cm and they recommend leaving 10% of the trees as seed trees. Peru also has forest management plans for this species, and reported average annual growth of 0.50 cm, with 20-year cutting cycles, a minimum cutting diameter of 65 cm for *Cedrela odorata* and 41 cm for the other species in the genus *Cedrela*, the management plans consider 10-20% of the trees to be seed trees. Jamaica also reported that it required forest management plans for the sustainable management of these species, and that it uses a minimum cutting diameter of 25 cm. In general, all the countries that carry out forest management reported that they validate and verify the forest management plans they carry out. In some regions of Colombia, where the natural populations are in good condition, the Environmental Authorities grant exploitation quotas for management plans that are not going to endanger the population that is being harvested.
15. With regard to the assessment of *Cedrela*, Brazil reported that at a national level the species is found in Amazonia and in the Atlantic Forest. It is a co-dominant species, fruiting starts in September-October, with the fruits ripening until June and July. Brazil has a resolution that establishes procedures for the inspection of industries and the determination of rates of yield; El Salvador reported that it does not have any population studies for the species, on the natural range of *Cedrela odorata* and *Cedrela salvadorensis*, it stated that they can be found along the entire Pacific Coast and in the inland mountain ranges, whilst *Cedrela monroensis* and *Cedrela tonduzii* are found on the mountains of the Northern Mountain Range; with regard to phenology, El Salvador reported that for *Cedrela odorata* and *Cedrela salvadorensis*, the flowers and

seeds coincide with the dry season (November-April), and the development of the viable seeds occurs at the start of the rainy season. In El Salvador there are no identification guides, nor yield tables for the species; In Mexico, the cedar occurs on the Gulf slopes, from the south of Tamaulipas and the southeast of San Luis to the Yucatán Peninsula, on the Pacific slopes. It is a pioneer species, very common in the secondary vegetation of different forests, frequent in the upper layer and in some grazing areas (pastures), coffee and cacao plantations, it flowers from May to August (October). In Los Tuxtlas and Veracruz, it flowers from March to April; the fruits ripen in April and May the following year when the tree has shed its leaves. In Los Tuxtlas, Veracruz, it bears fruit from January to April and from September to October. Mexico has not reported any yield studies for cedar.

16. With regard to the assessment of *Cedrela* in Peru, the size of the total population of the genus is estimated at 1,077,894 +/- 8%, including protected natural areas (PNA). The commercial tree population (> MDC and outside of PNA) amounts to between 261,159 and 300,743 specimens. Peru has a great deal of information on the distribution of the species in the genus identified for that country. There are a total of 10 species: *Cedrela odorata* L., *Cedrela angustifolia* DC. (*C. lilloi*), *Cedrela fissilis* Vell., *Cedrela kuelapensis*, *Cedrela longipetiolulata* Harms., *Cedrela molinensis* T. D. Penn. & Reynel., *Cedrela montana* ex Turcz., *Cedrela nebulosa* T. D. Penn. & Daza., *Cedrela saltensis* Zapater & del Castillo., *Cedrela weberbaueri* Harms., of these species only *C. odorata*, *C. fissilis* and *C. montana* have a commercial use. With regard to flowering, *Cedrela odorata* flowers from November to February, with this being more frequent in December during the rainy season, the fruits ripening for 6 to 8 months and the seeds being dispersed from July to October, reaching their maximum intensity in August, during the dry season. *Cedrela fissilis*, meanwhile, flowers from July to September, with the fruits ripening for 8 to 12 months and the seeds being dispersed from July to November of the following year. During the dispersal of the fruits, in both species the crown may lose all or some of its leaves. In Colombia, regarding the phenology of the species, in general the presence and ripeness of the fruits on the crown of the trees coincides with the end of the raining season in the months of October, November and December.
17. Regarding the existence of identification problems, only Mexico and Guatemala did not report problems with identifying the wood of this species; Brazil reported that, in general, it is hard to identify species in the genus *Cedrela*; El Salvador reported that they have more experience with identifying *Cedrela odorata*. However, the little information available and its great similarity with most of the other species of *Cedrela* means this is a confusing task; Peru reported that there are problems with the dendrological and anatomical identification, Description sheets were made for each of the species in the genus *Cedrela* distributed in Peru.
18. With regard to the cedar forest plantations, only Mexico reported the existence of a surface area of 37,176 ha of plantations with a yield of 160 m³/ha, with its commercial purpose being round wood. Colombia reported that it has registered 8,021.10 ha of plantations of this species.
19. With regard to the information on exports for the period (2010-2016), Brazil reported that the export volume of cedar from the wild was 1992,439 m³ sawn wood and 55,681 m³ wood veneer; the main product exported by Brazil is sawn wood, the main importing countries are Bolivia, Uruguay, Portugal and Spain. Brazil has a forest product origin control and transport system; Paraguay reported an export volume of 78 m³ in 2013 and 82 m³ in 2014, the main products exported being planks and wood samples; El Salvador implements an administrative procedure to verify the legality of the exports; Mexico reported an export volume of 229,386,893 m³ (according to UNEP-WCMC data). The main products exported are sawn wood, round wood and logs. The main importing countries are Cuba, the Dominican Republic and China. In Mexico, an administrative procedure is applied for the verification of the legality of the exports; Peru reported that for the reference period a total of 7,911,729 m³ of *Cedrela odorata* wood and other species in the genus *Cedrela* harvested from the wild were exported. There are no data for exports from plantations and the main product exported is sawn wood. The main importing countries are the USA, Germany, Mexico, China, and the Dominican Republic, and the legality is verified through field procedures and visual inspections of export lots. None of the countries provided information on the importing and/or re-exporting of cedar for the period (2010-2016). Colombia did not provide any export data.
20. Regarding the inclusion of populations of *Cedrela odorata*, in Appendix III and of other species in the genus *Cedrela*, Brazil, El Salvador, Peru, Jamaica and Guatemala considered the production of identification materials for these species and similar ones, as well as cooperation with the relevant expert organisations. Moreover, El Salvador, Peru, Jamaica and Guatemala reported having promoted national synergies, through the formal and specific formation of inter-institutional committees made up of competent scientific organisations to support the Scientific Authorities.
21. Brazil, Peru, Guatemala and Colombia have carried out population studies of the *Cedrela* species in order to discover the current situation with these species and to adopt measures to promote their forest

management. El Salvador, meanwhile, reported that it had analysed the possibility of including in the technical regulations a specific treatment for CITES species, in order to ensure that forest management plans consider censuses based on the lower minimum cutting diameters, so as to determine the stock of remnant trees, the percentage of remnant trees that should remain, and the exploitation techniques.

22. Peru and Guatemala confirmed that they have developed identification tools to differentiate the *Cedrela* species. In the case of Peru, two manuals were created for the dendrological and anatomical identification of the main commercial species in the genus *Cedrela*. The manuals will be published online in the near future, and Peru stated that through the forest management plans it has promoted the use of *Cedrela odorata* in the country, validating and verifying the reports made by forest users, including periodical ecology and growth dynamics studies. Jamaica too reported that it had developed tools to differentiate cedar wood.
23. Only Brazil and Guatemala reported that they had considered including the populations of any species in the genus *Cedrela* listed in Appendix III of CITES.
24. El Salvador, Guatemala and Peru have considered requesting technical and financial support from the CITES Secretariat through the CITES Tree Species Programme (according to the Notification to the Parties No. 2017/059) in order to work with *Cedrela*.
25. Of the countries that provided a report, Nicaragua stated that it was included in the Review of Significant Trade for *Dalbergia retusa* and Argentina for *Bulnesia sarmientoi*. Therefore, both countries presented the progress that they had made in the management of these species in order to guarantee that extraction in the wild did not endanger the survival of these species.
26. The United States of America reported that it is was a major importer of products of many Neotropical species, but that it is also an area of distribution for some of them such as *Cedrela odorata*, which originates from Puerto Rico and the US Virgin Islands and was introduced in American Samoa. In their report they indicate that the US Forest Service (USFS) planted *C. odorata* in secondary forests in the Luquillo Mountains in Puerto Rico (within the USFS El Yunque National Forest). However, no crops are being harvested on this land. Nor is there a current emphasis on harvesting trees in the National Forest.
27. The USA also reported that *C. odorata* is mainly found in widely distributed natural populations, in the reserves administered by the Government of Puerto Rico, with the following reserves: Carite, Guajataca, Guilarte, Maricao, Río Abajo and Toro Negro. The harvest is limited, perhaps opportunist. It is possibly also located on private land, and this wood could also be for local domestic use. There is a small percentage of trees of this species and they are found on land belonging to the US National Park Service, on the Island of San Juan and in the US Virgin Islands, without evidence of commercial exports. Finally, in its report, the United States added that it is likely that these towns were affected significantly by hurricanes during the 2017 Caribbean hurricane season.

Species in the genus *Dalbergia*

28. With regard to the specific legislation that promotes sustainability for the management of the species in the genus *Dalbergia*, Brazil reported that it has a specific regulation for the drawing up of forest management plans for species in this genus; El Salvador applies its forest legislation for the management of these species; México reported that the general forest legislation also applies for tree species in the genus *Dalbergia* and that currently in the NOM--059-SEMARNAT-2010 *D. granadillo* and *D. congestiflora* are classified as being Endangered [En peligro (P)]; Peru did not provide any information on specific legislation for the management of species in the genus *Dalbergia*. With regard to logging bans for species in the genus, only Brazil reported that it applies partial cutting and exploitation bans for the rainy season.
29. Regarding the forest management of forests containing species in the genus *Dalbergia*, Brazil reported that the national forest inventory is currently being drawn up; El Salvador has finished the national forest inventory but has still not published the results; Mexico reported that this genus is listed in the national forest inventory. Peru did not provide information on the recording of species in the genus *Dalbergia* on the national forest inventory. Costa Rica, meanwhile, reported that it is in the process of drawing up a national forest inventory.
30. With regard to the existence of Forest Management Plans for species in the genus *Dalbergia*, Brazil reported that it has forest management plans for timber exploitation, and that cutting cycles last for 25-35 years, with an average annual growth of 0.86 m³/ha/year, and they have established a minimum cutting diameter of 50 cm and have established a management measure of 15% of trees with a diameter greater than or equal to 60 cm being selected as seed trees. El Salvador reported that it has no management plans for species in

the genus *Dalbergia*; Mexico reported that it has forest management plans and, in general, the plans involve 10-year cutting cycles, report an average annual growth of between 0.4 and 1.14 cm for species in the genus *Dalbergia*, with the minimum cutting diameter being defined as 35 cm.

31. With regard to the assessment of species in the genus *Dalbergia*, Brazil reported that on a national level the species is found in Amazonia, the Cerrados and the Atlantic Forest. It also reported that *Dalbergia nigra* flowers from October to March and that the fruits ripen from September to December; El Salvador reported that all species in the genus *Dalbergia* are found nationally, being differentiated as a genus present at different altitudes, in particular sites such as the Bálsamo Range, the inland and border mountain ranges and foothills in the north and northeast of the country. Some species such as *Dalbergia salvanaturae* have been reported as occurring in the western part of the country. El Salvador does not have any identification guides, nor does it have yield tables for species in the genus *Dalbergia*; In Mexico, there are 20 species in the genus *Dalbergia*, occurring in the states of Chiapas, Oaxaca, Michoacán, Colima, Guerrero, Jalisco, Morelos, Puebla, Hidalgo and San Luis Potosí. Finally, Brazil, El Salvador and Mexico agree that, due to the great similarity in the appearance of the wood from different species, it is impossible to differentiate them with the naked eye. Therefore, it is essential to use identification guides and look for better tools for identifying them. Costa Rica informed that it drew up the Non-detriment Finding for *Dalbergia retusa* in which academics and other stakeholders involved in flora issues took part. Colombia has information available in the catalogue of plants and lichens of Colombia for the 13 species in the genus *Dalbergia* found in Colombia.
32. Regarding the information on exports for the period (2010–2016), Brazil reported that it exported 13,245 m³ of sawn *Dalbergia cearensis* wood (pre-Convention), the main product exported by Brazil is sawn wood; El Salvador reported an export volume of 580.96 m³ for the reference period, 96% of which was harvested in the wild. The main products traded were: logs, branches, roots and stumps. The main countries to import wood from El Salvador were: China, Taiwan, Hong Kong and Singapore. El Salvador has an administrative procedure to check the legality of its exports; Mexico reported a trade volume of 1,368.6248 m³ for the reference period (according to UNEP-WCMC data). These data refer to *D. retusa* and *D. stevensonii* since 2010, and to *D. granadillo* since 2013, which were included in CITES. The other species in the genus (included in 2017), are not included in the records. After the Experts Workshop on *Dalbergia* in 2015, it was determined that *D. retusa* is not found in Mexico, and it was pointed out that everything that was said to be this species was in reality *D. granadillo*; the products reported in the exports from Mexico are sawn wood, round wood and logs. The countries that imported wood from Mexico were China and Taiwan.
33. In response to the consultation, Nicaragua shared the: Review of Significant Trade for *Dalbergia retusa* Hemsf. Appendix II CITES, through which it assessed the Government of Nicaragua's compliance with the Resol. Conf. 12.8 (Rev.CoP 17) on the Review of Significant Trade in specimens of species in Appendix II. In that report, Nicaragua presents arguments on the scientific and technical bases for guaranteeing that the extraction and exporting of the species *Dalbergia retusa* do not endanger its survival, in accordance with Article VI of the Convention on International Trade in Endangered Species of Wild Fauna and Flora known as CITES.
34. Through the report it presented, Nicaragua reported that the Non-detriment Findings were only to be carried out in the authorised areas with an approved current forest use issued by the National Forest Institute. The prerequisite for this permit is the approval of a Forest Management Plan, the presentation and execution of which is the responsibility of the owners and those who exercise rights over the plan. The form, requirements and procedures for the approval of a forest management plan and the issuing of a logging permit are determined by the Regulation pursuant to Law No. 462: LAW FOR THE CONSERVATION, PROMOTION AND SUSTAINABLE DEVELOPMENT OF THE FORESTRY SECTOR. (Article 21,).
35. Nicaragua also reported that, since 2012 the Annual Allowable Cut Volume has been used to allocated annual exploitation quotas for broadleaf and conifer forests, and more specifically those containing the species *Dalbergia retusa*. The report indicates that this has been carried out in order to guarantee that the dynamic and the ecological distribution of the forest and the species do not change. The variables used to obtain the Annual Allowable Cut Volume are: Forest cover per forest type, total commercial volume per area, species authorised per municipality, volume authorised per municipality, cut intensity, short cycle per forest type, and the annual allowable cut.
36. With regard to the estimate of the population, Nicaragua reported that, in forest areas, there is a substantial decrease in the number of trees and the basal area per hectare, based on the diameter class of 70 cm. The commercial volume decreases substantially as of the larger diameter class of 80 cm. In areas with trees outside of forests, there is a substantial decrease in the number of trees and the basal area per hectare as of the diameter class of 50 cm, the commercial volume also decreases substantially starting at this diameter class.

37. The distribution of the species per diameter class showed the low abundance of the species above 50 cm DBH, which, according to the report, is a limiting factor for sustainable management. Finally, in this section of the report, it was stated that the trend for the distribution of the species per diameter class is not what was expected, and that this is due to human-induced disturbance that the species has suffered. So, the report considers providing incentives for natural regeneration due to the low abundance of this species.

Aniba rosaeodora

38. On the specific legislation that promotes sustainability for the management of this species, Brazil reported that the species is included in the Red List, in the EN category (Endangered), and that only the exploitation of plantations is permitted. In Brazil, cutting bans are applied for this species in the plantation area; Peru reported that the Forestry and Wildlife Law and its regulations control forest management and that the species is considered vulnerable according to the categorisation of threatened wildlife species, and that *Aniba rosaeodora* is only harvested from plantations. In Colombia, this species has been declared Critically Endangered (CR) on the official list of endangered species in Colombia (Resolution 1912 of 2017).
39. Regarding forest management, Brazil reported that a national forest inventory is being carried out; Peru reported that it carried out a population study of *Aniba rosaeodora* in its natural range (Ucayali), in 2017, with 42 plots being assessed. An assessment will be carried out in Loreto in 2018. In Colombia, the species was included in a forest inventory that was carried out recently.
40. With regard to the existence of Forest Management Plans for *Aniba rosaeodora*, Brazil reported that there are management plans only in plantations that are intended for oil extraction. In Peru too, forest management is carried out in plantations with short cycles of 20 years, an annual average growth of 0.26 cm/year and a minimum cutting diameter of 25 cm, with 10% of the trees being left as seed trees. The countries reported that they check the forest management plans carried out for this species. In Colombia, no logging permits are granted for this species.
41. With regard to the assessment of *Aniba rosaeodora*, Brazil reported that at a national level the species is found in Amazonia, the reproductive phenology of the species in Brazil is irregular and varies in accordance with the location. In the central region of Amazonia, it flowers from October to March and the fruits appear from February to June; In Peru, the population of *A. rosaeodora* is estimated at 237,171 specimens for the Ucayali region, and that population encompasses the diameter classes of 5 to 10 cm and 20 to 25 cm DBH. Peru reported that this species is found in larger numbers in lower diameter classes of between 5-10 cm, and there is a decrease in numbers in the 10-20 cm DBH class and a high number of specimens in the 20-25 cm DBH class. In the assessment, no specimens with DBH over 35 cm and few specimens over 25 cm were recorded. Colombia reported that the trees flowered in October (population found in Caño Toro), coinciding with the report by Cárdenas & Salinas (2007) who pointed out that the flowering occurred in December.
42. With regard to the information on exports, Brazil reported an export volume of 4769.69 kg of oil from 2010 to 2013 and of 9,358 kg of oil from plantations, Brazil's main export product is oil; Peru reported that it exported 713.50 kg (2015) 759.3 kg (2016) and 1,636.0 kg (2017) of *Aniba rosaeodora* oil extract. The main countries that import oil from Peru are: France and the USA. Peru also reported that before authorisation, the existence of 100% of the trees is assessed. Colombia reported a surface area of 1.70 ha of plantations of this species.

Bulnesia sarmientoi

43. Brazil reported that it does not have sufficient information on *Bulnesia sarmientoi*; it only reported that it is found in the Cerrado and the Pantanal. Moreover, it added that flowering occurs between December and February and the fruits appear between June and August. Brazil also reported exports of 6,060 kg of extract intended for Paraguay.
44. Argentina reported that, within the framework of the species' biological information, it promoted the signature of a Framework Agreement for the execution of a science and technology research project aimed at the interdisciplinary study for land-use planning, conservation and management of palo santo (*Bulnesia sarmientoi*), in order to obtain information on the geographical and environmental distribution of the species, the genetic and morphofunctional variation, the study of its growth and a forest inventory, as well as the development of basic information on the regeneration of *Bulnesia sarmientoi* in order to apply it to plans for the enrichment and conservation of the native forest. Argentina also reported that a second

Native Forest National Inventory is being carried out, which will lead to the updating of the species' baseline status, and increase its entire theoretical range.

45. With regard to the regulation, in Argentina Resolution MArDS N° 869/17 was passed, which established the requirements for exporters, the objectives for obtaining a CITES Certificate or Permit for exporting palo santo (*Bulnesia sarmientoi*) forest timber products. This ruling also established the protocol for the control and verification of palo santo (*Bulnesia sarmientoi*) timber products intended for exportation. Two more resolutions were passed, one approving the Forestry Administration, Control and Verification System (SACVeFor) for its implementation in the initial stage and the control of palo santo products, and the other for the re-categorisation of the Property Use and Change in Land Use, which established that the uses granted by the Province of SALTA are incompatible with the provisions set out in Law N° 26.331 (Land-use Planning of the Native Forests). Therefore, the issuing of any CITES Certificates for forest products, from re-categorised properties, was suspended and the local authorities were urged to restore the environments of the Native Forests that had been cleared.
46. Within the framework of the CITES Tree Species Programme, Argentina presented a project to establish the bases for the sustainable management of the palo santo (*Bulnesia sarmientoi*) in the Gran Chaco Region of Argentina. This study will generate the basic information required for the proper management of the species and the drawing up of a Management Plan.

ANALYSIS AND DISCUSSION OF THE INFORMATION PRESENTED

47. In global terms, all the countries have general and specific legislation for the protection and drawing up of plans for the sustainable management of the species involved.
48. With regard to forest management, all the countries stated that they had national forest inventories or were currently carrying the out or finishing them. They also reported that for forest management in their countries forest management plans were required preceded by forest inventories drawn up for the area to be managed. In general, all the countries have both general and detailed information on the distribution and phenology of the species, all variables that are essential for drawing up Non-detriment Findings.
49. There were several variations with regard to the sustainability criteria used for forest management, such as the minimum cutting diameter and the cutting cycle. There were also differences between one country and another in the estimates of the average annual growth for the same species. However, the presence and use of all these parameters are fundamental for drawing up forest management plans and Non-detriment Findings for tree species.
50. It is essential to continue to the efforts to provide financial mechanisms to the different parties, so that they can:
 - a) generate studies on the status of the populations of Neotropical trees, with an emphasis on those that have just been included in the CITES appendices;
 - b) implement traceability and chain of custody systems, which strengthen the transparency and sustainable trade in timber species;
 - c) create materials for identification and training in the different existing methods, with an emphasis on those that can be used easily by the authorities responsible for observation;
 - d) promote the exchange of experiences and skills between countries in the Neotropical tree species' range, and
 - e) support the countries that are in any of the stages of significant trade.
51. With regard to the Review of Significant Trade, Nicaragua, focusing on the assessment of *Dalbergia retusa*, reported on the mechanisms for drawing up national Non-detriment Findings, as well as the criteria for guaranteeing the sustainability of the management of this species. It also reported that the distribution of this species by diameter class showed a low abundance in the larger diameters, which consists a limiting factor for sustainable management, and the main cause of this behaviour is due to the human-induced disturbances suffered by the species. In the case of Argentina for *Bulnesia sarmientoi*, it mainly reported about all the legal measures that they have approved to guarantee the suitable administration of the species, and they reported about the scientific studies that are currently being carried out, which will generate more information for the sustainable management of the species.