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



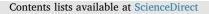
Eighteenth meeting of the Conference of the Parties Geneva (Switzerland), 17-28 August 2019

UPLISTING OF MALAGASY PRECIOUS WOODS CRITICAL FOR THEIR SURVIVAL

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Uplisting of Malagasy precious woods critical for their survival

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ARTICLE INFO

Keywords: Rosewood stocks Timber trade Precious timber Trafficking China Africa Forest regulations Forest governance

ABSTRACT

Illegal timber trade is a global issue; highly prized rosewoods are mainly sourced from Africa and Madagascar. In Madagascar, where corruption and political instability are rampant, forest regulations have been issued during the last 15 years to facilitate illegal rosewood exploitation. The current situation precludes non-detriment findings (under which the exporting State ensures that a proposed action will not be detrimental to the survival of a species) intended to enable sustainable use of standing populations, but the Malagasy government, backed by the World Bank, is promoting the sale of massive stocks of confiscated precious wood. We argue that allowing the sale of these stocks would encourage further illegal harvest. No suitable tools are available to identify, control or monitor standing trees or cut timber, and there are substantial knowledge gaps regarding species limits, population sizes, distribution and abundance. When combined with taxonomic confusion and weak governance, these factors necessitate uplifting all of Madagascar's precious woods to Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

1. Introduction

Since the early 2000s, the demand in China for high-value rosewood has become a serious threat to tropical forests (Innes, 2010). In 2016, the World Wildlife Crime Report published by the UN Office on Drugs and Crime indicated that rosewood comprised 35% of the value of all global wildlife and forest product-related seizures from 2005 to 2014 (United Nations Office on Drugs and Crime [UNODC], 2016).

The CITES treaty provides a legal framework for regulating international commerce in wild species that are threatened by international trade. CITES protection for a given species may mandate regulations and procedures to ensure a sustainable level of harvest ("Appendix II" protection) or it may completely ban international trade, provided that doing so is seen as the sole viable option to ensure survival ("Appendix I" protection). Traditionally focused on animals since its establishment in the 1970s, CITES has in recent years accorded increasing attention to timber species, especially high-value rosewoods. Brazilian rosewood (*Dalbergia nigra*) was placed on CITES Appendix I in 1992 and Siamese rosewood (*Dalbergia cochinchinensis*) was added to Appendix II in 2013. In the same year, CITES placed all the Malagasy species of *Dalbergia* and *Diospyros* (ebony) under Appendix II. In 2016, the CITES Parties included the rest of the world's *Dalbergia* species under Appendix II.

Since 2000, a rapid growth in the demand for rosewood from China has been recorded, with imports increasing from 200,000 to 1.7 million cubic meters between 2000 and 2014 (EIA, 2017). Rosewood imports to China peaked in 2014, mainly from Myanmar and Laos. However,

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https://doi.org/10.1016/j.biocon.2019.04.007

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Received 7 March 2019; Received in revised form 5 April 2019; Accepted 13 April 2019

imports decreased during the following years with the global economic slowdown, which strongly impacted the furniture industry. At the same time stocks had increased excessively (Randriamalala and Liu, 2010), the quality of the imported timber declined; and China increased its efforts to reduce illegal timber imports (Chatham House, 2019; ITTO, 2017).

West African rosewood (*Pterocarpus erinaceus*), also known as kosso, has recently become a highly sought-after species. Logging of kosso has increased dramatically in West Africa (Benin, Gambia, Ghana, Ivory Coast, Nigeria, Senegal) since 2010. Imports by China of West African rosewood in 2015 and 2016 exceeded on average 760,000 cubic meters, worth US\$ 840 million (UNODC, 2016). The increase in the trade of this species has presented difficulties for reactive policy-making; kosso was listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendix III in May 2016 and later under Appendix II in January 2017.

2. Madagascar's rosewood crisis

Madagascar's annual levels of deforestation since 2013 were among the highest ever recorded (Global Forest Watch, 2018) in a country that is renowned for its biodiversity, some 80% of which is dependent upon or related to forest ecosystems (Waeber et al., 2019). A combination of weak governance, poor law enforcement, confusing or unclear forest regulations, and a prevalence of corruption in Madagascar's forestry sector have, since the 1980s, led to sustained removal of rosewood (as well as ebony) from the country's forests (Randriamalala and Liu, 2010) (Fig. 1).

Large stockpiles of felled rosewood have accumulated since 2009–2010, facilitated by changes in forest regulations (Fig. 1). During the Presidency of Hery Rajaonarimampianina (2014–2018), rosewood exports escalated to unprecedented levels (Mason et al., 2016). It is worth noting that prior to becoming president, Rajaonarimampianina was the Finance Minister of Madagascar's transition government and was therefore responsible for customs, overseeing exports and imports. In recent years, a steady increase in corruption has placed Madagascar

among the top 14% of most corrupt countries in the world (Transparency International, 2018) (Fig. 1). Periodic increases in rosewood exports have been facilitated by government decrees issued prior to elections or during challenging political periods (Fig. 1). In each instance, 'exceptional' government orders were issued, allowing a few select operators to export massive quantities of wood (Randriamalala and Liu, 2010). Following intensified pressure from the international donor and conservation communities, in 2011 the Malagasy government began confiscating and stockpiling illegally-sourced timber (see regulations of stocks starting at the end of 2011 in Fig. 1; stocks refer to sourced timber in times of export bans, hidden and stored away until exports are permitted again). By 2011, Malagasy rosewood stocks were estimated to exceed 300,000 logs, collectively weighing more than 500,000 tons (ITTO, 2018).

3. Madagascar's poor compliance with CITES requirements

At the 16th meeting of the CITES Conference of the Parties in 2013, Malagasy rosewood and ebony species were listed under Appendix II, which includes species that are not necessarily threatened with extinction but whose trade nevertheless needs to be controlled to ensure survival. At the time, the country agreed to implement a dedicated "Action Plan" (cf. Mason et al., 2016), including specific measures such as a status assessment of current standing tree populations, an inventory of existing stockpiles, and an international embargo on exports and trade in rosewood and ebony. More than five years later, Madagascar has failed to implement key components of the Action Plan (strengthening control and enforcement measures against illegal logging and export; stockpile auditing and inventory; CITES, 2017). The international embargo on exports has repeatedly been reaffirmed at successive meetings of the CITES Standing Committee, most recently at its 70th gathering in October 2018.

During the inventory of stockpiled rosewood in 2016, when the Malagasy authorities required that all stocks be declared, some traffickers complied. Their decision was based on experience with previous cycles during which government seizure was followed by the auction of

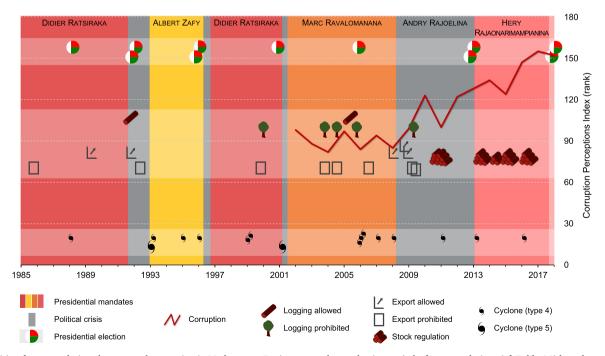


Fig. 1. Politics, forest regulation changes, and corruption in Madagascar. During pre- and post-election periods, forest regulations (cf. Table A1) have been adapted to open up forests for the exploitation of precious timber to finance political campaigns. Cyclones, which naturally felled a number of trees in forests, have been used as an excuse to extract rosewood logs from those forests. Corruption Perception Index based on Transparency International (2018); cyclone data retrieved from Météo France (2019).

now "legalized" stocks back to traffickers, who were then proceeded to export the precious wood (cf. Randriamalala and Liu, 2010). Supported by the World Bank, the Malagasy government recently retained a consultant to develop a "Stockpile Verification Mechanism and Business Plan" (Mason et al., 2016), which was discussed at a multi-stakeholder meeting in June 2018 and subsequently revised for presentation to the 70th meeting of the Standing Committee in October 2018. During this meeting, participants acknowledged some improvements in the latest draft of this plan, but the inclusion of a provision to provide US\$7 million in compensation to traffickers in possession of felled rosewood stocks was strongly opposed by many CITES Parties as well as by environmental NGOs. Critics felt that such a provision would be dangerous in the Malagasy context because it would reward those breaking the law and would risk triggering more illegal rosewood cutting. They also argued that such payments would set a dangerous precedent for CITES.

Madagascar's progress toward implementing the Action Plan and the revised Business Plan will be debated once more, during the 18th meeting of the CITES Conference of the Parties (Sri Lanka, May–June 2019). However, resolution of the outstanding issues under the current Appendix II listing is unlikely. Moreover, the proposed auctioning of stocks would increase the risk of further illegal sourcing of precious woods (Table 1).

4. Scientific gaps and governance uncertainties

In the context of CITES in Madagascar, 'precious timber' refers to two genera: Dalbergia (rosewood and palisander) and Diospyros (ebony). Not all species in these genera are equally threatened. Actors involved in the precious timber trade do not consider individual species, but rather, the quality of the wood itself. Globally, rosewood is obtained from genera in several families, including Fabaceae, Meliaceae, and Proteaceae, and ebony refers to wood from species in many genera. notably Diospyros and Euclea (Ebenaceae), as well as Bauhinia and Brya (Phyllanthaceae) (Fabaceae); Heywoodia and Handroanthus (Bignoniaceae). Our current knowledge on the taxonomy of many of these genera, in particular Dalbergia and Diospyros, is woefully inadequate, rendering it impossible to identify the species, and often even the genus, to which standing trees as well as cut logs belong, or to determine their provenance after harvest. Yet CITES is based on species (or genera when confusion exists).

The lack of clarity about which species of rosewood or ebony have been-and are-currently being exploited in Madagascar is alarming. According to Schatz and Lowry (2016), more than 60% of the ca. 215-230 ebony species currently recognized by specialists remain to be named and described; while for Dalbergia, 48 Malagasy species are currently recognized, while the actual species total is closer to 65. For both genera, there is a paucity of data on species delimitations, populations, ranges and distributions. Taxonomic information is insufficient and currently available identification tools are expensive, inadequate, and unreliable (Dormontt et al., 2015; Ugochukwu et al., 2018; Vlam et al., 2018). The widely used TRAFFIC wood identifier, for example, can only classify wood as ebony or rosewood-it cannot identify the species nor pinpoint its origin. This is important, given that rosewood refers to many species under varying levels of threat that occur in numerous tropical regions. This precludes effective and accurate monitoring and control by customs officials. An added complication is that some species, such as Indian rosewood (Dalbergia latifolia), are grown in plantations, with products being traded in China, the USA and the European Union.

A "non-detrimental finding" (i.e., the advice of a CITES Scientific Authority by the exporting State that a proposed action will not be detrimental to the survival of a species, nor reduce its ecosystem role) is required in order to justify exporting species listed under Appendix II. However, information concerning population sizes, growth rates, and threats affecting Malagasy rosewood and ebony species is completely

Assumptions and risks	Assumptions and risks of selling stocks of CITES listed commodities.	Isted commodities.		
Type of commodity Geographic scale	Geographic scale	Assumptions	Consequences/risks	Reference
African Elephant ivory Botswana, Namibia, Zimbabwe. South Af	Botswana, Namibia, Zimbabwe, South Africa	Revenue for host country to finance conservation; reduced poaching	Increased demand cannot be satisfied legally, resulting in increased poaching Stiles, 2004	Stiles, 2004
Rosewood	Madagascar	Revenue for the government	Threats on remaining standing trees	Randriamalala and Liu, 2010
African White Rhino horn	South Africa	With the opening of trade, with reinvestment into conservation, by 2023, Under the c the net profit generated through the legal trade was predicted to exceed go extinct b \$1,000,000,000 In accordance with the principle of supply and demand, an increase in Legalizing t supply leads to a decrease in price; both markets, legal and illegal, are the market synonymous	With the opening of trade, with reinvestment into conservation, by 2023, Under the current "business as usual" management scenario, the Rhino would Di Minin et al., 2015 the net profit generated through the legal trade was predicted to exceed go extinct by 2023; under the scenario of a lifted ban plus reinvestment into conservation, the species would survive. I accordance with the principle of supply and demand, an increase in the market is trade of Rhino horn would lead to a huge influx of supply into supply leads to a decrease in price; both markets, legal and illegal, are the market	Di Minin et al., 2015 Brown and Heinrich, 2014

inadequate. An unknown number of species of *Dalbergia* and *Diospyros* are threatened, with some on the brink of extinction (Barrett et al., 2010). Because it is very difficult to distinguish and accurately identify species in these genera, either as standing trees or as cut logs, sustainable harvest of non-threatened species is not an option. Even if some species were determined to be sufficiently plentiful to exploit, unscrupulous operators would apply those species' names to all cut logs and it would be impossible to challenge them or to prove that their claimed identifications are incorrect. Species subjected to high levels of exploitation and known to have been severely overexploited—and about which there is very little scientific information (Frank and Wilcove, 2019; Randriamalala and Liu, 2010)—easily meet the CITES scientific threshold criteria for inclusion under Appendix I.

Considering these gaps and uncertainties in scientific knowledge, robust implementation of an Appendix II CITES listing for a large and complex group of high-value tree species would present an insurmountable challenge, even in a country with low deforestation rates, little corruption, strong forest protection laws, and effective forest management practices. For Madagascar, no credible case can be made for the sale of existing stockpiles, "sustainable use" of precious timber, or a resumption of the export of rosewood and ebony, that would comply with CITES. This is especially so given that the country is beset by chronic political instability and corruption (Fig. 1). Moreover, the role of long-standing, entrenched dynamics hindering the improvement of forest management in Madagascar is widely acknowledged (Waeber et al., 2018 and references therein).

5. Conclusion

For nearly 10 years, the precious timber genera *Dalbergia* and *Diospyros* have been listed on CITES Appendix II. During this same period, exploitation has continued and rosewood stocks have expanded. Simultaneously, the proposal to "resolve" the problem by selling off the stocks has only fanned the flames of further illegal harvesting and has undermined efforts to stop trafficking.

Moving *Dalbergia* and *Diospyros* from CITES Appendix II to Appendix I is the only way out of what has become a vicious circle. Doing so would put an end to speculation via the regular, periodic accumulation of stockpiles and would prevent the sale of this illegally harvested timber. By requesting a move to Appendix I, Madagascar has a unique opportunity to exercise conservation leadership (Wilmé and Waeber, 2019). Listing Malagasy rosewood and ebony species in Appendix I is justified both on scientific grounds and because it is impossible to implement sustainable management of precious timber species in Madagascar.

Supplementary data to this article can be found online at https://doi.org/10.1016/j.biocon.2019.04.007.

Acknowledgements

We would like to thank the participants of the 70th meeting of the Standing Committee, Sochi (Russian Federation), 1–5 October 2018, for fruitful discussions. We also acknowledge the GEF funded project Global Forest Watch in Madagascar (ID: 5356).

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