

Summary

Forest Legality Alliance Semi-Annual Meeting July 6-7, 2016 World Resources Institute Washington D.C.

The Forest Legality Alliance convened its members and partners on July 6 and 7 in the new Harmon Conference Center at World Resources Institute headquarters in Washington, D.C. With the [17th meeting](#) of the Conference of the Parties to the Convention on International Trade in Endangered Species ([CITES](#)) scheduled for the end of September, most of the meeting was focused on the growing profile of timber species in the CITES convention. The July meeting was the last FLA gathering to be convened under WRI's Cooperative Agreement with the U.S. Agency for International Development ([USAID](#)), which ends on September 30, 2016. Thus, a session of the meeting was devoted to reflections from FLA founders USAID, WRI and the Environmental Investigation Agency ([EIA](#)) on the accomplishments of FLA over the past seven years, changes in the challenges posed by illegal logging and associated trade over that period, and the priorities going forward. The meeting attracted 92 participants hailing from 13 countries.

Panel 1: Key timber issues at CITES COP-17 (September 2016)

The first panel focused on key timber issues to be raised at the 17th Conference of Parties (COP-17) of the Convention on the International Trade of Endangered Species of Fauna and Flora (CITES) in September 2016.

Keynote speaker

Milena Sosa Schmidt, Senior Scientific Officer for Flora, CITES Secretariat

Ms. Sosa Schmidt provided a brief history and overview of the CITES Convention, and reviewed proposals on tree species that will be discussed at COP-17.

More specifically, Ms. Sosa Schmidt described the working documents, the listing and/or amendment proposals (see below) and the nine side events that will encompass the timber topics at this year's COP.

Tree spp. working documents:

- Plants Committee Report of the Chair [Prop 10.3.1](#)
- United Nations Office on Drugs and Crime (UNODC) Timber Identification [Prop 48.1](#)
- Species specific matters on Agarwood-producing taxa [Prop 53.1](#)
- Species specific matters on Malagasy rosewoods, palisanders and ebonies [Prop 55.2](#)
- International trade in rosewood spp. [Prop 62](#)
- Conservation of trade in East African sandalwood [Prop 65](#)
- Harvesting and trade in *Prunus africana* [Prop 67](#)
- Species specific matters on neotropical tree spp. [Prop 76](#)

- International trade in African tree spp. [Prop 77](#)

Tree spp. listing and/or listing amendments:

- Thailand: Proposal for amendment of Appendices I and II on Siamese rosewood (*Dalbergia cochinchinensis*) [Prop 53](#)
- Mexico: Proposal to list 13 species of rosewood in Appendix II. [Prop 54](#)
- Argentina, Brazil, Guatemala and Kenya: Proposal to list genus *Dalbergia* in Appendix II. [Prop 55](#)
- EU and Gabon: Proposal to list three species of Bubinga (genus *Guibourtia*) in Appendix II. [Prop 56](#)
- Benin, Burkina Faso, Chad, Cote d'Ivoire, EU, Guinea, Guinea-Bissau, Mali, Nigeria, Senegal and Togo: Proposal to transfer *Pterocarpus erinaceus* from Appendix III to Appendix II. [Prop 57](#)
- Madagascar: Proposal to list Grandidier's baobab (*Adansonia grandidieri*) in Appendix II. [Prop 58](#)
- Algeria: Proposal for amendment of Appendices I and II on Algerian fir (*Abies numidica*). [Prop 59](#)
- United States: Proposal for Amendment of the listings of Agarwood (*Aquilaria* spp. and *Gyrinops* spp.) in Appendix II. [Prop 60](#)
- United States: Proposal for amendment of the listing of Holy wood (*Bulnesia sarmientoi*) [Prop 62](#)

Ms. Sosa Schmidt noted that one of the biggest challenges for CITES timber listings is the inability to identify timbers down to the species level. CITES has been working with CITES Parties, UNODC, and other International Consortium on Combatting Wildlife Crime (ICWC) partner and the International Tropical Timber Organization (ITTO) on this issue, but it is far from resolved. She also pointed out that the challenge of identifying timber to the species level is the main reason for existing and proposed genera-wide listings (e.g., the proposed listing of the *Dalbergia* genus globally.)

Ms. Sosa Schmidt concluded by highlighting the importance of working closely with the range states when formulating CITES listing or amendment proposals.

Updates on timber listing proposals

Isabel Camarena Osorno, National Biodiversity Commission (CONABIO), Mexico

Ms. Camarena Osorno, of Mexico's CITES Scientific Authority, presented a brief overview of Mexico's proposal to list 13 Neotropical species of *Dalbergia* native to Mexico and Central America. Echoing many points presented by the CITES secretariat, CONABIO discussed the major obstacles that enforcement bodies in Mexico and Central America face with respect to accurately identifying species within the *Dalbergia* genus.

Because of this complex problem, CONABIO hosted an expert working group workshop in June 2015 and presented their results at the CITES Plants Committee in October 2015. The experts agreed that 13 of 15 *Dalbergia* timber species being exported out of Mexico and Central America were either endangered or threatened and a proposal should be put forward to list them on CITES appendix II. CONABIO continues this work and is currently involved in research on Mexican populations of *Dalbergia granadillo* and *Dalbergia stevensonii*. The information they hope to obtain from this research will aid the decision-making process concerning potential sustainable harvest of these timbers, as well as informing CITES implementation.

Cesar Belteton Chacon, National Protected Areas Council (CONAP), Guatemala

Mr. Belteton, whose agency hosts Guatemala's CITES Scientific and Management Authority bodies, presented Guatemala's rationale for its proposal to list *all* species of *Dalbergia* worldwide on CITES Appendix II. Guatemala (with proposal co-sponsors Argentina, Brazil, and Kenya) believes that the booming international trade in *Dalbergia* represents a global species conservation crisis that requires a global response from CITES. Mr. Belteton also reiterated the concern that it is practically impossible at present to identify *Dalbergia* to the species level for enforcement purposes, making a global, genus-wide Appendix II listing the most practical and feasible strategy. Mr. Belteton noted that Guatemala and other proponents of the global listing would coordinate with Mexico on its proposal, as well as other *Dalbergia* range states, to ensure an effective outcome at COP-17.

Research Updates on Selected CITES-Listed Species

Romain Taravella, Environmental Investigation Agency (West Africa, *Pterocarpus erinaceus*)

Mr. Taravella discussed the surge in logging, mostly illegal, of the West African species *Pterocarpus erinaceus*, known locally as *Kosso*. Research conducted on China's 2015 trade data confirmed that 54% of imported rosewood logs – destined for the *Hong Mu* furniture market (furniture made of rosewood and rosewood-like species) - originated from West Africa (The remaining 46% is imported from various countries in Southeast Asia). The *Hong Mu* trade has grown dramatically since 2009, in line with the rapid growth of China's middle class and the market for luxury goods such as rosewood furniture. With over 30,000 companies in China importing *Kosso*, this has created \$25 billion in retail revenue.

In 2015, due to an apparent loophole in applicable legislation it became legal to export squared-off logs because they were deemed "transformed". Today, Nigeria, Gambia, Togo, Guinea-Bissau, Ghana, Benin, Cote d' Ivoire and Mali are the major exporters of West African rosewood to China, exporting an average of 45 containers a day. Each country is experiencing "boom and bust" waves of trade as their rosewood in their forests is systematically targeted, and then soon depleted. Since *Pterocarpus erinaceus* - the most highly traded CITES timber species - is already highly restricted and its harvest is already prohibited in many range states and even banned in many of these countries, Senegal, supported by eight additional range states, is proposing that the species be listed on Appendix II at COP-17.

Ms. Karen Winfield, Global Eye (Global Rosewood Trade)

Ms. Winfield presented results from Global Eye's ongoing research on the status of the global trade in *Dalbergia* spp. and other rosewood-like species favored by the Chinese *Hong Mu* furniture industry. The study focuses on the global health of *Dalbergia* and *Pterocarpus* species and populations found in international trade, as well as reviewing trade data and CITES Non Detriment Finding considerations, where available

Ms. Winfield pointed out that limited scientific research that has been conducted on the trade species of interest, and that much of this limited research was conducted prior to the early 2000s, and thus predates the global rosewood boom of the past decade or so. She also drew attention to China's customs data, which reveals that China's *Hong Mu* Standard (which codifies various types of rosewood imported for furniture manufacture) permits significant underestimation of the volume and value of rosewood entering China. Confirming EIA's research on the countries involved in the trade of *Pterocarpus erinaceus*, Global Eye's research also shows the same shifting boom-and-bust pattern of

rosewood species exploitation, in West Africa and elsewhere. Global Eye will present its finalized study at a side-event at COP-17.

Ms. Melissa Blue Sky, Center for International Environmental Law (Central Africa: “African Teak”)

Ms. Blue Sky presented results of CIEL’s research on the exploitation of and trade in *Pericopsis elata* (Afrormosia, also sometimes referred to as “African teak”), a Central African timber species. A longstanding CITES issue, *Pericopsis elata* was first listed on CITES Appendix II in 1992. Like *Pterocarpus*, *Pericopsis elata* is most heavily traded out of Central and West African countries. CIEL’s research has highlighted misuse of quotas and CITES permits as one persistent issue. Specifically, quotas are not run by calendar year and frequently, countries do not start new quotas until the prior year’s quotas have been met. Further, the process by which relevant government officials issue CITES permits – or re-issue permits that have been cancelled or expired – complicates the situation and facilitates over-harvesting.

Because of these issues in the DRC, CITES has enlisted an “Article 13 review” which is a type of enforcement mechanism used by CITES when a country cannot comply with CITES law.¹ DRC’s article 13 review will be reviewed at the COP-17.

Reactions from UK Scientific Authority and CITES Secretariat

Ms. Noeleen Smyth, CITES Scientific Authority (SA), United Kingdom

Ms. Smyth discussed the strategies of the UK – and the European Union (EU) – concerning the numerous COP-17 timber listing proposals and other matters, and highlighted support for *Dalbergia* proposals, commending Guatemala and Mexico for their work in bringing these proposals to COP-17. The UK and the EU are also supporting proposals to include additional rosewood species (*Pterocarpus erinaceus* and three *Guibourtia* species) on Appendix II. She noted that the international rosewood trade is an important concern for the EU and its Member States, and informed participants that the EU and Mexico have prepared a document for COP on International Trade in Rosewood Timbers ([Cop 17 Doc 62 Rev. 1](#)) calling for a study to highlight any gaps for remaining additional genera and species in trade which are also considered to be rosewood and which are currently not included in the appendices.

Ms. Smyth explained that the EU Member States vote as a bloc, thus drawing on the power of regional cooperation. To this end, many EU coordination meetings occur prior to and during COP sessions. She suggested that for Guatemala and Mexico, a regional approach with respect to the listing of global or

¹ Article XIII of CITES, titled “International Measures”, states the following:

1. When the Secretariat in the light of information received is satisfied that any species included in Appendix I or II is being affected adversely by trade in specimens of that species or that the provisions of the present Convention are not being effectively implemented, it shall communicate such information to the authorized Management Authority of the Party or Parties concerned.
2. When any Party receives a communication as indicated in paragraph 1 of this Article, it shall, as soon as possible, inform the Secretariat of any relevant facts insofar as its laws permit and, where appropriate, propose remedial action. Where the Party considers that an inquiry is desirable, such inquiry may be carried out by one or more persons expressly authorized by the Party.
3. The information provided by the Party or resulting from any inquiry as specified in paragraph 2 of this Article shall be reviewed by the next Conference of the Parties which may make whatever recommendations it deems appropriate.

neotropical species of *Dalbergia* could prove useful. The representatives of Guatemala and Mexico agreed, explaining that their objectives were similar, but that Mexico believed that the global listing proposal might incur significant opposition from other Parties, and wished to have a back-up plan (listing only neotropical *Dalbergia* species) on the table as well.

Ms. Milena Sosa Schmidt, Senior Scientific Officer for Flora – CITES Secretariat

Ms. Sosa Schmidt clarified some legal and procedural points:

- Under Appendix I, all trade is regulated, and all parts and derivatives fall under CITES controls.
- Under Appendix II and III, plant parts and derivatives are CITES-controlled only if specified in an annotation that states which are to be included or excluded from CITES controls. Footnotes are provided to further clarify the scope of CITES listings. Annotations can be confusing and also leave the door open for ways to get around CITES regulations.
 - For example, an annotation may include whole logs, sawnwood and veneer, but not cover furniture, which opens loophole for evading CITES by simply processing those products in a semi-finished or finished product that would fall outside the scope of the annotation and therefore would not be subject to CITES controls.
- Considering past experiences on implementing CITES for long-lived species that are vulnerable to over-harvesting, the best strategy for listing new tree species in CITES is to do so without an annotation. The absence of an annotation relating to that species indicates that all readily recognizable parts and derivatives are included and are thus subject to CITES controls and regulations. This has been the most effective manner to implement CITES for tree species.

Panel 2: Wood ID technologies for CITES implementation

The second panel of the July 2016 FLA meeting focused on technologies for wood identification which can be used to implement the Convention on the International Trade of Endangered Species of Fauna and Flora (CITES).

Ms. Shelley Gardner, USDA Forest Service and INTERPOL Washington

Ms. Gardner presented the International Consortium on Combating Illegal Wildlife Crimes (ICCIWC) Guidelines for Forensic Timber Analysis, a best-practice guide for forensic timber identification which aims to facilitate the employment of forensic science to the fullest extent possible in the fight against illegal logging and associated trade. The primary intended target audience is comprised of law enforcement agencies, the scientific community, and prosecutors.

The guide consists of four parts. Part One focuses on law enforcement; Part Two on scientists; Part Three on prosecutors; and Part Four on international cooperation. It will become available [online](#) in October 2016. This guide was used for technical capacity building at the first annual International Law Enforcement Academy (ILEA) training focusing on illegal logging and forest crime, held in Budapest, Hungary, in September 2015. The guide's appendices provide additional, more detailed information.²

² (taken from page 93 of the guide)

Annexes

1. Glossary

2. Non-timber forest products and identification considerations

In addition to the ICCWC guide, an online, queryable “Service Provider Directory” (SPD) will soon be accessible at www.forestlegality.org. This SPD will host information on scientific methods, tools and labs available where public, private or government sector users could send a wood specimen for testing.

Dr. Alex Wiedenhoft, USFS Forest Products Lab

Dr. Wiedenhoft began by discussing the state of forensic science for CITES-listed timber species. There are two sources of variability in wood: structural variability, for which traditional wood anatomy (macroscopic and microscopic), fiber testing (used for pulp and paper) and ‘Machine Vision wood ID’ (automated wood anatomical analysis) can be used, and molecular variability, for which chemical fingerprinting (mass spectrometry), NIRS (near infrared spectroscopy) stable isotopes, and DNA analysis can be used.³ The scientific strengths of CITES, he noted, are evident: the framework exists, giving scientists something to work with, and it is an affirmative list, with specific hypotheses and questions. Additionally, there are resources and a built-up global network – countries invest effort in CITES implementation. However, he voiced some concerns, namely species circumscription, political and not biological boundaries, reference material for calibrating methods’ limitations, the availability for screening technology and implementation, and the availability of forensic methods and implementation. He stated that on the demand side, the US has a responsibility for implementation as a consumer. The USFS lab has provided enforcement support for CITES enforcement and trainings worldwide, including in Nicaragua, Honduras, and Singapore. His key takeaways included the following lessons: one, that technological integration is key; two, that scientific rigor is at a premium, but not all techniques rest on equally strong foundations and not all labs perform at the same level; three, that we need open access to information and active communication between scientists and law enforcement; four, that there is an

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3. Non-timber forest products of CITES listed species
 4. List of common risk indicators for trafficking of illegal timber and timber products
 5. Information on CITES listed tree species
 6. Native geographic distributions and known areas of cultivation of CITES listed tree species
 7. Guidance for search of containers, freight vehicles and premises
 8. Forensic identification method capabilities, approximate costs and lead times
 9. Resources to assist rapid-field identification of timber and timber products
 10. CITES listed timbers and lookalikes documented in CITESwoodID
 11. One hundred important traded timbers documented in macroHOLZdata
 12. Methods currently under development for rapid-field identification of timber
 13. Example chain-of-custody form
 14. Timber inventory and sampling data collection
 15. Resources to assist microscopic identification of timber and timber products
 16. Online resources for the acquisition of reference data

³ **Wood anatomy:** Using light microscopy for accuracy, diagnostic characteristics found in the cellular structure of wood can be analyzed (in certain circumstances, a hand lens may be sufficient). This method is unlikely to achieve identification below genus level without contextual information about the specimen.

Fiber analysis: Using high-power microscopes, the composition of a sample of paper can be analyzed by observing the reactions of fibers treated with various chemicals. Additionally, unique anatomical features in softwood fibers and hardwood vessels can also be used for identification of pulp and paper.

“Machine vision”: This method automates the wood anatomical analysis through the use of sophisticated image capture and processing algorithms

Chemical fingerprinting: Using mass spectrometry, phytochemicals laid down in heartwood can be assessed - and their resulting chemical profiles analyzed - to obtain identification of species or genus.

NIRS: Phytochemical properties can be analyzed by characterizing a wood’s absorption spectra when the wood is exposed to near infrared electromagnetic energy.

Stable Isotopes: When phytochemicals are synthesized in the plant, they incorporate specific stable isotopes (e.g., oxygen, nitrogen, hydrogen and carbon) relative to their availability in the surrounding environment. This method has the potential ability to resolve the geographic origin of the wood.

DNA analysis: By obtaining the genetic code of a tree species through DNA sequencing, the assignment of individuals to different groups based on shared ancestry or the relative frequency of different genes can be acquired.

emerging interest in illegal logging on the side of wood anatomists (for example, the International Association of Wood Anatomists started a new initiative, [WRAITH](#) – Wood Research Against Illegal Timber – in 2016); and five, that research by itself does not fix the problem, but that science needs to be connected to law enforcement.

Ms. Kristen Finch, Forensics Laboratory, US Fish and Wildlife Service

Ms. Finch focused on phytochemical analysis of timbers using direct analyses in real time, time-of-flight mass spectrometer (DART TOFMS). Because plants cannot move to flee a predator, they are constantly making chemical compounds to deter insects. Although the plant's genetics lead the production of these chemicals, an unfavorable climate where they live can make it difficult for plants to fight back. A stressed plant will have different chemicals than a healthy plant. In order to use the DART TOFMS – a machine that's not portable – you submit the wood sample, put into a stream of helium ions heated to 450 degrees Celsius and get a chemical profile of the sample, all in 8 seconds. The information and results can be put in a database to identify the compounds by name, but few plant chemicals have been described by chemists. You can use multi-variate statistics distinguish different species of trees and even populations of the same tree species. To date, this technology has been used to ID *Cedrela* and *Aquillaria* among others to species and country of origin. DART TOFMS has also been used to ID / differentiate *Pseudotsuga mentizii* (Douglas Fir, a plant native to the US) from two different areas in western Oregon.

Dr. Peter Gasson, Royal Botanic Gardens, Kew, UK

Kew has one of the largest world wood collections, an extensive but not comprehensive collection (33,000 samples) as well as online applications to help ID wood. Wood anatomy is well established; there is chemical isolation for some taxa; and NIR spectroscopy is being developed and there are molecular technologies limited for wood. The major limitation – for all labs — is the lack of authentic reference materials/samples. Kew is particularly interested in *Dalbergia*, but also interested in *Quercus mongolica*, species from the Solomon Islands, and mahoganies. Plywood ID poses a real problem; since they have very thin layers, getting DNA out of them is hard.

Dr. Sonja Hassold, Swiss Federal Institute of Technology (ETH), Zurich

Dr. Hassold spoke on molecular identification of *Dalbergia* species in Madagascar. The objective of her project is to identify species and, if possible, the provenance of the sample (where in Madagascar the sample came from). She collected data from the field, in order to build the necessary library of reference data. Sampling took place in 2011, 2013, and 2016, but only some of the samples were used in the project. While there are at least 48 species within the genus *Dalbergia* in Madagascar, Dr. Hassold's project focused on the 28 species that are of relevance for international trade.

Lessons learned from this project include the fact that DNA-based identification of *Dalbergia* is possible; that having a reference database based on vouchered and reliably identified samples is key; that the samples must be stored in well-curated herbaria; and that we must standardize sampling protocol for comparisons of different techniques. In its next phase, the project aims to improve DNA isolation from wood, and apply DNA analysis to confiscated logs.

Ms. Elena Fedichkina, Worldwide Fund for Nature (WWF), Russia

Ms. Fedichkina discussed the use of remote sensing technologies to detect illegal logging in high conservation value forests in the Russian Far East (RFE). She focused on Mongolian oak (*Quercus mongolica*), introducing participants to the distribution of the species in the RFE. She also noted that WWF has developed a map of the species' distribution by age group. Mongolian oak forests provide important biodiversity habitat, while the timber is highly valued by industry. The species is listed in CITES Appendix III. Logging the species on the Chinese side of the China-Russia border is prohibited, as there is a ban on logging natural forest in place. Demand for the species is nonetheless high in China, to feed that country's booming domestic and export-oriented timber products markets, and this has incentivized illegal cutting in Russia and illegal cross-border trade into China.

The CITES Appendix III listing is a commendable first step, but Appendix III is a relatively weak control instrument, and there are significant problems with implementation and enforcement as well. Mongolian oak is a prime target for illegal loggers, along with Korean pine (*Pinus koraiensis*).

Lack of monitoring capacity is a significant challenge for detecting and controlling illegal logging in the RFE. The Forest Service lack both financing and sufficient staff. Remote sensing technologies may be able to help, but because illegal logging – unlike wholesale forest clearing – is relatively small-scale, with logging at a fairly low intensity, it is therefore more difficult to detect with remote sensing systems. To address this problem, WWF started its “Eyes on the Forest” program in various countries, including the Russian Far East. The main tool for the project is an alert system for tree cover loss, generated by the University of Maryland.

Panel 3: CITES & Timber – The Case of Madagascar

The third panel of the July 2016 FLA meeting focused on Madagascar's unique case with regards to the Convention on the International Trade of Endangered Species of Fauna and Flora (CITES).

Mr. Benoit Bosquet, Practice Manager for Environment and Natural Resources, The World Bank

Speaking on behalf of The World Bank, Mr. Bosquet gave an overview of the institution's historical support for environmental issues in Madagascar. In the 1970s and 1980s, The World Bank supported the development and management of pine plantations in Madagascar and, concurrently in the 1980s, there was an effort to reform the country's Forest Department. Reforming management of natural resources continued to be a theme with the onset of the country's National Environmental Action Plan (NEAP) in 1991. Over the following decade, the government tried to implement NEAP but largely failed to deliver results. Because of this, foreign governments and international donor communities grew fatigued of the existing situation and moved away from supporting the government in environmental issues and towards supporting parastatal and non-profit organizations, further weakening the state and the institutions that had been established in the 1990s.

More recently, The World Bank has addressed environmental issues in Madagascar through International Development Association projects up until December 2015. Going forward, The World Bank will shift from purely conservationist approaches to integrative approaches with other issues, such as agricultural issues and watershed protection, thus requiring improved land-use planning.

Mr. Giovanni Ruta, Senior Environmental Economist, World Bank Group

Mr. Ruta provided a brief background on Malagasy laws and regulations concerning the precious woods trade, since the beginning of this century, culminating in the listing all of Madagascar's *Dalbergia* and *Diospyros* species on the Convention on the International Trade in Endangered Species Appendix II in 2013. An Action Plan was concurrently adopted by CITES for Madagascar, to support the implementation of the Appendix II listings.

The Action Plan covers three main issues related to the trade in precious woods in Madagascar: an audit of log stockpiles, enforcement, and scientific work. While The World Bank has made a lot of effort regarding the stockpiles audit and enforcement, less attention has been paid to the scientific work. The stockpile audit developed feasibility analyses on three points: 1) the legal issues concerning the obtainment, holding, and disposing of the log stockpiles; 2) the operational issues concerning a detailed audit, consolidation, and disposal of the logs; and 3) different options for disposing of the logs and managing the revenue.

For enforcement issues, The World Bank has supported efforts to improve surveillance, including purchasing satellite images and equipment for patrol response. Additionally, The World Bank has increased efforts to improve inter-ministerial cooperation and the establishment of a special judicial tribunal for addressing Madagascar's illegal trade of precious woods. Mr. Ruta concluded that corruption continues to be a major barrier to overcoming these challenges but that improving in-country capacity to combat the illegal trade can lead to positive results. Moreover, the issues of enforcement, science, and the handling of stockpiles must be addressed together and not separately to ensure that the activities complement each other and build on important synergies.

Dr. Laura Vary, Africa Forest Associate, World Resources Institute

Dr. Vary presented on a recently completed report that addresses research and capacity-building needs for determining population statuses for *Dalbergia* and *Diospyros* species; technologies used for identifying those species; the potential for silvicultural regeneration of those species; and the potential for private sector investment for developing an in-country value chain for exploiting the species. The report's authors included staff and experts from The World Bank, the University of Antananarivo, ETH Zurich, Missouri Botanical Garden, and the World Resources Institute. Dr. Vary pointed out that while the geographic range of the two genera are known, there is inadequate information concerning their population statuses, that identification methods and technologies are not yet robust enough to differentiate between species, and that the IUCN Red List criteria has not yet been systematically applied to the two genera.

Regarding the potential for silvicultural regeneration, Dr. Vary provided an overview of existing seed depositories and conservation efforts, while also outlining some of the difficulties, such as germinating seeds outside Madagascar. With respect to the potential for private sector investment, Dr. Vary described the potential interest of several U.S.-based guitar companies in sourcing precious woods from Madagascar, but noted that outstanding taxonomy and identification issues as well as enforcement challenged will need to be addressed before this potential can be turned into reality.

Prof. Aro Vonjy Ramarosandratana, Professor, University of Antananarivo

Focusing on wood identification tools and taxonomy, Prof. Ramarosandratana presented on the state of the science in Madagascar for managing the country's precious woods. Outlining the purpose of building a reference library, he described the current efforts of Dr. Sylvie Andriambololonera at the Missouri Botanical Garden, which has among the most experienced experts in Madagascar for establishing a reference library. At the University of Antananarivo within the School of Agronomy and Forestry, Dr. Tahiana Ramanantoandro has led work on updating xylaria, describing macroscopic wood anatomy characteristics of 302 native species, and increasing the use of near infrared spectroscopy for determining geographic provenance and species identification.

Microscopic stem anatomy research of *Dalbergia* and *Diospyros* species has been led by Dr. Harisoa Ravaomanalina, also at the University of Antananarivo. Her research has demonstrated the ability to use wood anatomical features for differentiating between species, and she has also led research work on look-alike species. Related work that is yet to be completed includes fully equipping laboratories to improve analysis, validating wood anatomy discrimination keys, and developing wood identification tools for enforcement purposes.

Ms. Milena Sosa Schmidt, Scientific Support Officer for Flora, CITES Secretariat

Ms. Sosa Schmidt began by reiterating the point that CITES-listed tree species are often listed on Appendices after exploitation has already proven to be detrimental, and noted that this appears to be the case with *Dalbergia* and *Diospyros* in Madagascar. She explained that there has been considerable activity addressing scientific aspects of the Action Plan but relatively little progress has been made on inventorying and securing stockpiles of cut rosewood, or on enforcement against continued illegal logging and associated export trade.

The CITES Secretariat drafted a revised Action Plan for consideration at COP-17, including language to encourage transit and destination countries to be more rigorous in addressing their role in the illegal trade in Malagasy precious woods. The cost for implementing the Action Plan is estimated to be approximately USD \$500,000, with approximately USD \$110,000 in costs to be incurred by the Secretariat. The sources for this funding are yet to be identified. Additionally, the importation of Malagasy *Dalbergia* and *Diospyros* species is currently banned for all CITES Parties as decided at the January 2016 CITES Standing Committee Meeting. In September 2016, dependent upon progress made on the Action Plan, the Standing Committee will assess whether or not to extend the ban to all of Madagascar's CITES-listed species

Panel 4: Reflections on the Forest Legality Alliance, 2009 – 2016

In the final panel of the FLA meeting, entitled "Reflections on the Forest Legality Alliance, 2009 – 2016, and the Road Ahead," Dr. Alex Moad, Assistant Director of Policy and Climate Change at the U.S. Forest Service – International Programs moderated a discussion on how the world has changed since the FLA was founded, and where the next challenges lie in promoting timber legality. Three panelists representing the founders of the Alliance (USAID, WRI and EIA) each brought their experiences and perspectives to the discussion.

Ms. Alicia Grimes, Forestry, Agriculture and Biodiversity Program, USAID

Ms. Grimes began by describing how the idea for establishing the FLA in 2009 arose from a concept note submitted to USAID by EIA and WRI. After the 2008 amendments to the Lacey Act (which brought timber within the scope of the Act), there was a need to work across sectors to ensure dissemination of accurate information about the law and its implementation. Private sector interest was important for the new initiative, and it did attract considerable private sector participation.

Looking back at the situation in 2008, it is clear that the amendments to the Lacey Act has had a big impact on the amount of attention paid to illegal logging. Between 2008 and 2016, the amendment has led to a wide range of changes in how actors across the different sectors operate: certification bodies, service providers, industry associations and individual buyers now take due care and legal sourcing into account. The FLA has been an important part of driving this change, in bringing together actors from different sectors, including EIA, who have played a key role in raising the issue on the political agenda.

The agenda now has changed from providing accurate information about the Lacey Act to the question of how to tackle due care. The FLA has attempted to address these questions through case studies focusing on different types of supply chains in different producer and processing countries.

The Lacey Act has also helped improve the cooperation between the various US Government Agencies and with multilateral forums working to address illegal logging, such as the APEC Expert Group on Illegal Logging and Associated Trade (EGILAT), and has promoted the inclusion of private sector and civil society perspectives and experiences with training and capacity building to these meetings.

Another change to the discussion has been the significant progress in science and technology since 2008. Going forward, one key challenge remains finding applications that make the trade more efficient and revolutionize the way the trade manages information.

Ms. Grimes confirmed that USAID will continue funding projects related to biodiversity. Last year, USAID presented its first agency “Biodiversity Policy”, which reflect the Agency’s view that biodiversity conservation is an important basis for sustainable economic growth and development. USAID also continues to support good governance, law enforcement and anti-corruption measures in relation to biodiversity conservation and natural resources management. There has been bipartisan political support for measures to counteract illegal logging going back to the President’s Initiative Against Illegal Logging (PIAIL), which was established by President Bush in 2003. Since that time, other notable U.S. initiatives have included an MOU on illegal logging and associated trade with Indonesia (2006); a similar MOU with China (2008), establishment of the Experts Group on Illegal Logging and Associated Trade (EGILAT) under APEC and, of course, the 2008 Lacey Act amendments.,. U.S. efforts have also increasing recognized and supported the role of innovative technologies such as novel wood identification methods, as a vital element of an overall strategy on illegal logging and associated trade.

USAID remains interested in the work of the FLA, and in the knowledge and experience that the FLA members and partners bring to the table. USAID has been meeting with a number other agencies within the US government to reflect on priorities for allocating the limited amount of funding in the future, including working through USAID field missions. USAID is committed to continue funding several large programs that are already in place, in the Congo Basin, in the Amazon, in Peru, and Guatemala.

Dr. Charles “Chip” Barber, Director, Forest Legality Initiative, World Resources Institute

Dr. Barber began by thanking USAID for its longstanding support and partnership, explaining that this was the last meeting held under the traditional FLA format, since the USAID-funded cooperative agreement would end in September 2016. However, in three independent evaluations, the FLA team has gathered considerable feedback on what the members and partners would like the FLA to work on in the future. The FLA meetings are consistently seen as very useful, and the FLA anticipates that meetings will continue to be an activity going forward, but maybe in a slightly different format or in different locations.

WRI’s overall approach to working with industry partners and civil society as well as with governments will remain the same. Working with the set of technologies presented in the second panel yesterday will also remain an important feature of WRI’s work. The geographic focus will be Indonesia, China, Peru, Brazil, Madagascar, the Congo Basin, as well as some “light touch” engagement in Central America.

Dr. Barber then reflected on how the landscape for dealing with the illegal logging issue has changed in over the past seven years: Some producer countries have changed their attitude to illegal logging, are now much more open to discussing the issue and potential solutions, and are in some cases putting their own programs and systems in place to improve forest governance and monitoring. A key change has been the shift of supplies from long-term logging concessions in areas designated as “permanent forest estate” to forests slated for conversion to other land uses such as industrial agriculture. In these cases, “sustainable forest management” is by definition out of the question – the issue becomes whether permits have been allocated in accordance with the law, not whether the forests are managed sustainably.

There is also a new set of actors involved in discussing illegal logging and trade, coming from the transnational crime community. Similarly, the connections between trade agreements and illegal logging have become very clear through processes like the Peru-US Free Trade Agreement and its Forest Governance Annex, and the negotiations over the 12-nation Trans-Pacific Partnership.

Dr. Barber closed his remarks by pointing out that at the “Oslo REDD Exchange” meeting hosted by the Government of Norway the previous month, the United States and Norway issued a high-level joint statement on forests and climate change, signed by the U.S. Secretary of State and the Norwegian Minister of Climate Change and Environment. During the signing ceremony, the Norwegian Minister included some very clear language on the importance of considering illegal logging when making investments in REDD+, recognizing that forest governance and land tenure are key preconditions to making such commitments. In this regard, Dr. Barber noted that the incoming director of WRI’s Climate Change Program, Ms. Paula Caballero, is well placed to link WRI’s work on forest and climate issues based on her previous experiences leading environmental work at the World Bank, and as a primary catalyst in the development of the UN Sustainable Development Goals.

Alexander “Sascha” von Bismarck, Executive Director, EIA

Mr. von Bismarck began by pointing out that in reviewing the achievements of the FLA, it is useful to revisit the overall goal of the initiative. Legality and illegal logging are really a shorthand for the governance of forests. This represents a fundamental challenge, with different forms of forest

governance around the world, the variety of species, forest types, products, and the rise of a truly global trade.

Before this global trade emerged, it was possible to find local examples of functioning forest governance. The divergence between the local resource management challenges and the global trade pressures have created a key challenge to address going forward. The question will be whether there is a global solution to this global problem. CITES proposes to confront this global issue for certain species – but only once they become endangered.

Mr. von Bismarck confirmed that EIA is very grateful to USAID for supporting this project, which at the time was perceived as different and potentially controversial. The challenge at that point was to make an empty law into a real law, and to create a sounding board for the entire community of stakeholders. The FLA has succeeded in these objectives. Although it is difficult to find reliable evidence, academic studies have attempted to analyze how much money has been spent and by how much illegal logging imports have been reduced. The last seven years have shown progress in how the Lacey Act is implemented and understood. But the curve is still steep, and more needs to be done to effectively implement this law and lead to worldwide action on illegal logging.

A good test case for whether the Lacey Act can solve the problem of local governance and global trade pressure can be found in Peru. The recent government agency search conducted on the premises of a US company importing timber from Peru indicates that the same problems that EIA highlighted in the its 2012 “Laundering Machine” report still persist: a disconnect between the paperwork and the management of the forest resources. But the requirement to include information about which concession a shipment of timber came from sets an important precedent for supply chain transparency and monitoring. More importantly, Peru has established an independent supervisory body for the forest sector, OSINFOR.

Von Bismarck pointed out that corruption in the producer countries is financed through a market in consumer countries that doesn’t reward good governance. The Lacey Act and other demand-side laws are the first example of a challenge to this problem.

Looking ahead to what is needed in the future: it’s important to focus the discussion on nested solutions that are politically feasible, such as action by individual countries such as the United States, through the Lacey Act, and Japan, through the new timber legality regulations. However, something needs to hold these nested solutions together. The FLA has the convening power to take these local signals in different countries, and make them into a global norm for sourcing. EIA can contribute to this work by ensuring that there are mechanisms to collect real-time inputs from communities that are witnessing illegalities, and bringing more demand-side laws into force, through campaigning work that complements and is based on the convening work that is at the core of the FLA.

Comments from Participants

In the discussion, a participant representing an industry association underscored the need to create a dialogue or a similar mechanism to the FLA in China, since the majority of imports in hardwoods, plywood and veneer now comes through China. The moderator, Dr. Alex Moad of the U.S. Forest Service, pointed out the importance of framing legal and sustainable sourcing as a moral issue, not just as a compliance issue. Chip Barber stated that the FLA had initially thought about creating something

similar to the FLA in China, but that the institutional and political landscape there are more complicated, and that WRI is currently building on various ideas to leverage the interest that the Lumber Liquidators case has generated in China.

A participant from an NGO mentioned that they had conducted polling about market and purchasing preferences in the US, and found that respondents had little knowledge about timber legality, which underscores the importance of finding easy tools (such as FSC certification) for the consumer to distinguish between product types. The participant further thanked the FLA for its work and highlighted the evolution in discussion about the issue of illegal logging over the course of the partnership, from disseminating basic information about the legal requirements, to attempting to show examples of how due care can be conducted.

A participant representing a private company thanked the FLA for their work, and suggested focusing more effort on procurement officials, since this target audience is limited in size but wields significant decision-making power that affects supply chains. There's an urgent need to work with companies on implementing their commitments to no deforestation in their supply chains, and to provide tools and resources to investors to assess and manage risk in their portfolios regarding illegal logging and deforestation.

A representative from a government agency pointed out that the convening power of the FLA has been especially helpful for their work, because the FLA helped disseminate different opportunities, techniques, and approaches to deal with illegal timber. The participant then recommended engaging more with governments and NGOs in Japan and Korea, which are both developing or have recently launched timber legality regulations. The participant encouraged extending the convening to representatives from the agencies involved in designing and implementing these regulations in Japan, Korea, and other countries, to provide a more nuanced understanding of some of the benefits and drawbacks of different models. The participant encouraged engaging processing countries in addition to producer countries in meetings and projects.

A representative from a technology provider pointed out that a lot of information needs still exist in the executive level of forest product companies. More dissemination is needed.

A representative of an NGO from Mexico highlighted the evolution of the discussion in Mexico on the topic of illegal logging, and requested more direct peer-to-peer interaction among the FLA members and partners to exchange resources, information, and interests.

The representative from the CITES secretariat mentioned that at the September 2016 COP a document prohibiting, countering and combatting corruption would be discussed by the parties for the first time, indicating a willingness to engage on the topic of corruption.