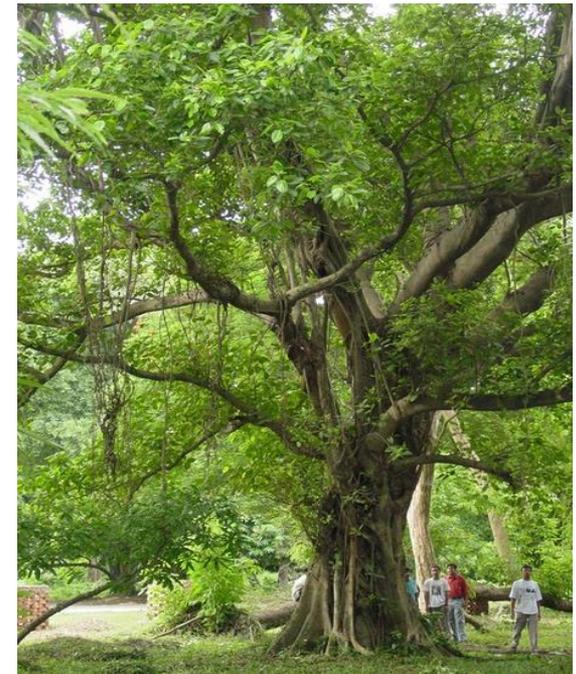


February 28 and March 1, in Seattle

CITES - listed tree species - timber identification

Dr. Milena Sosa Schmidt - Senior Scientific Support Officer (Flora) -
CITES Secretariat



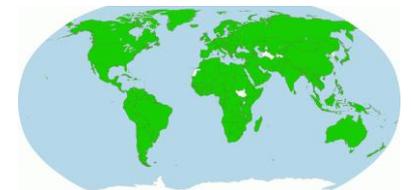
What is CITES



Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)



- Multilateral Environmental Agreement
- Also known as the Washington Convention, as it was signed in Washington D.C. on 3 March 1973 entering into force in 1975
- The species are listed in three Appendices, according to the degree of protection they need



Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Major exporting areas

South America
Central America
Africa
Asia



Major importing areas

North America
Europe
East Asia

Major importing & exporting areas

Asia
Southern Africa
Middle East
Oceania
Eastern Europe



The species are listed in three Appendices, according to the degree of protection they need

Appendix I

- includes species threatened with extinction
- International (commercial) trade is generally **prohibited**

Appendix II

- includes species not necessarily threatened with extinction, but for which trade must be controlled to avoid their becoming threatened
- includes species that resemble species already included in Appendix I or II
- International trade is **permitted but regulated**

Appendix III

- includes species for which a country is asking Parties to help with its protection
- International trade is **permitted but regulated**
(less restrictive than Appendix II)



CITES and Plants

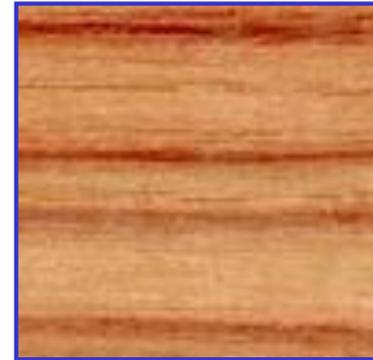
- For **plant species** included in **Appendix I**, any readily recognizable part or derivative is **included**
- For **plant species** included in **Appendices II and III**, any **specified** readily recognizable part or derivative **is included**

Annotations to the listings for plants in Appendix II, and for Appendix III species, **determine which parts and derivatives are included.**



Annotation example

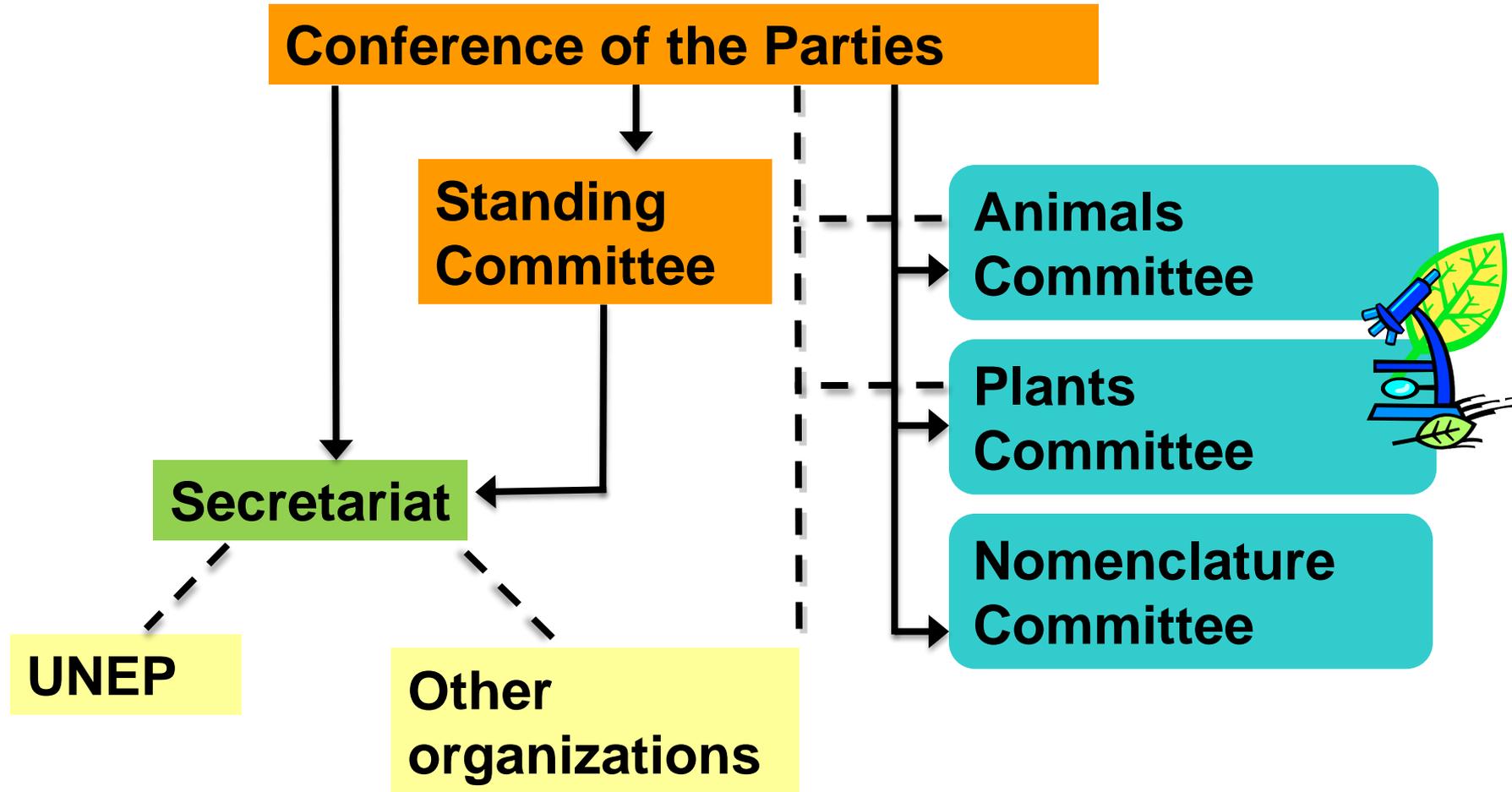
- *Aniba rosaeodora* #12 Logs, sawn wood, veneer sheets, plywood and extracts. Finished products containing such extracts as ingredients, including fragrances, are not considered to be covered by this annotation.



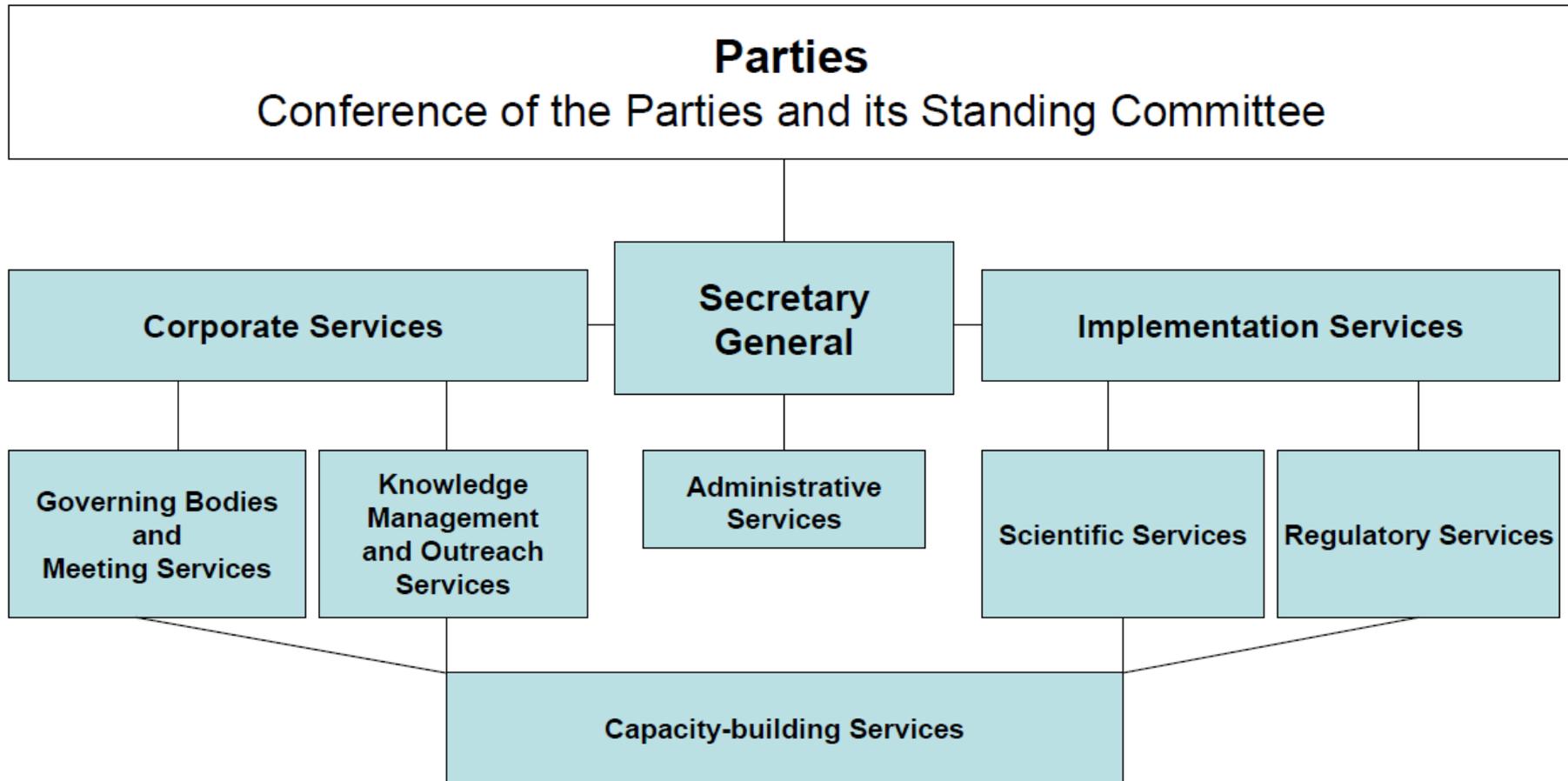
How CITES works



How CITES works



How CITES works – the CITES Secretariat



CITES-listed tree species



After CoP17 - 2017

On 1 July 1975, 18 tree species were included in the Appendices. Today more than 800 tree species are included in CITES, and at least 600 are economically valuable timber species.

Photo credit: J. Grogan

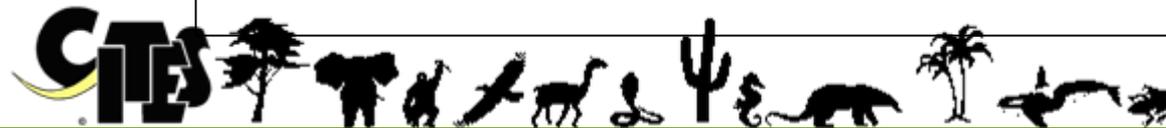
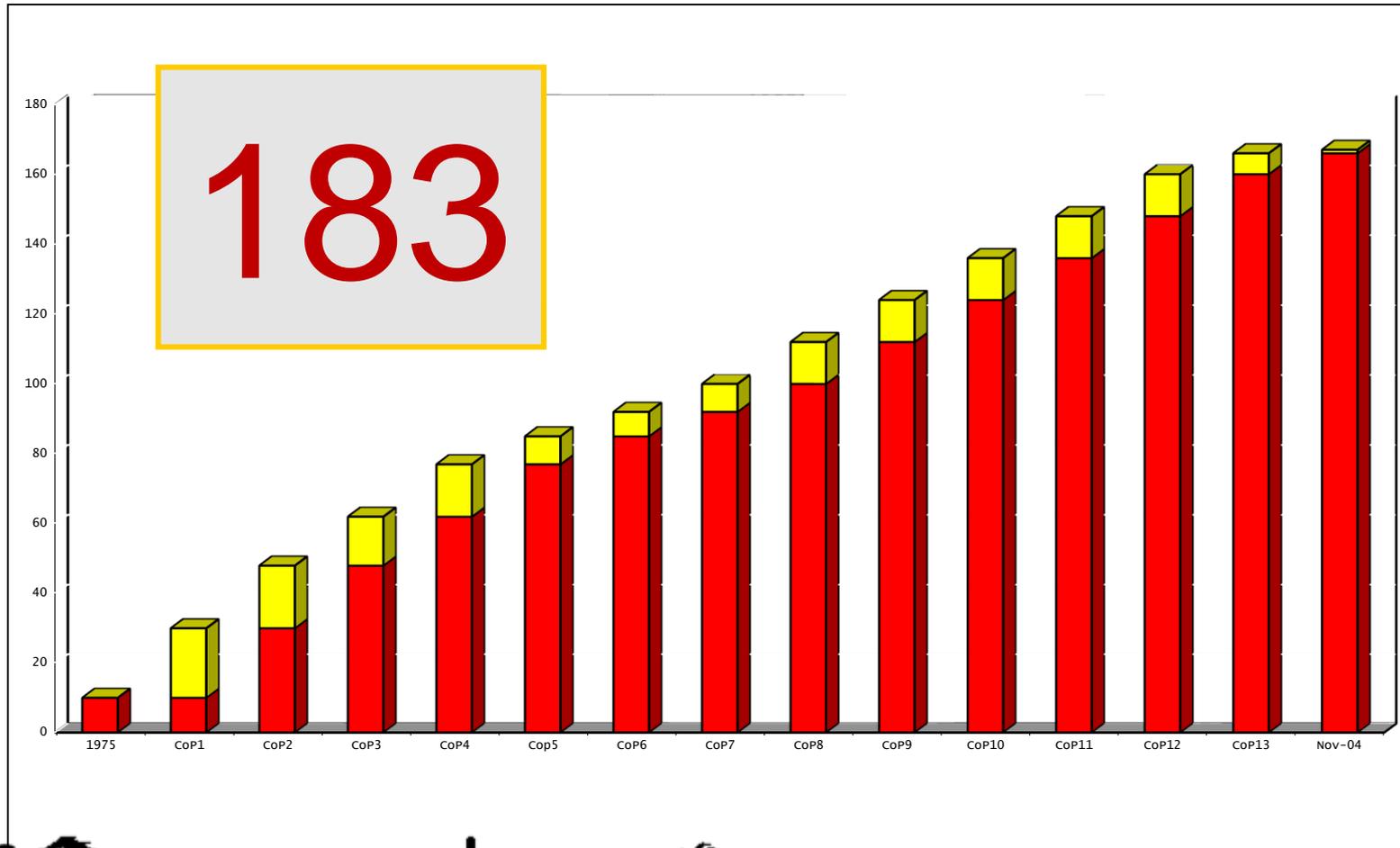


Swietenia macrophylla (mahogany) forest



Urgent need of ID materials in CITES for tree spp.

With an increasing nr of Parties we'll see more and more tree spp. listed



**Sustainable trade in CITES =
Non-detriment findings (NDF)**



What is a NDF?

Scientific Authority

Making NDF is the main role of the SA



Management Authority

Art. IV

Not a standardized procedure

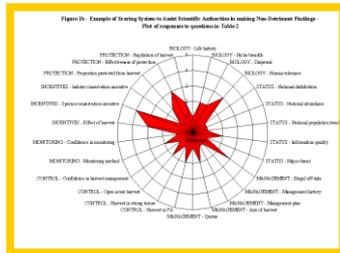
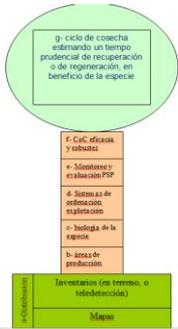
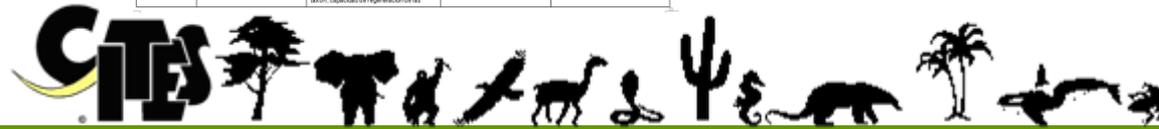
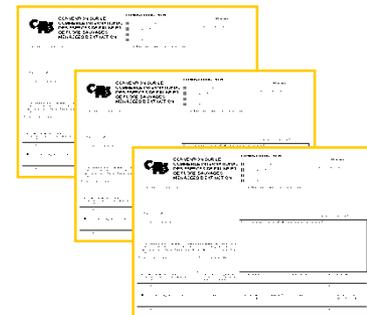
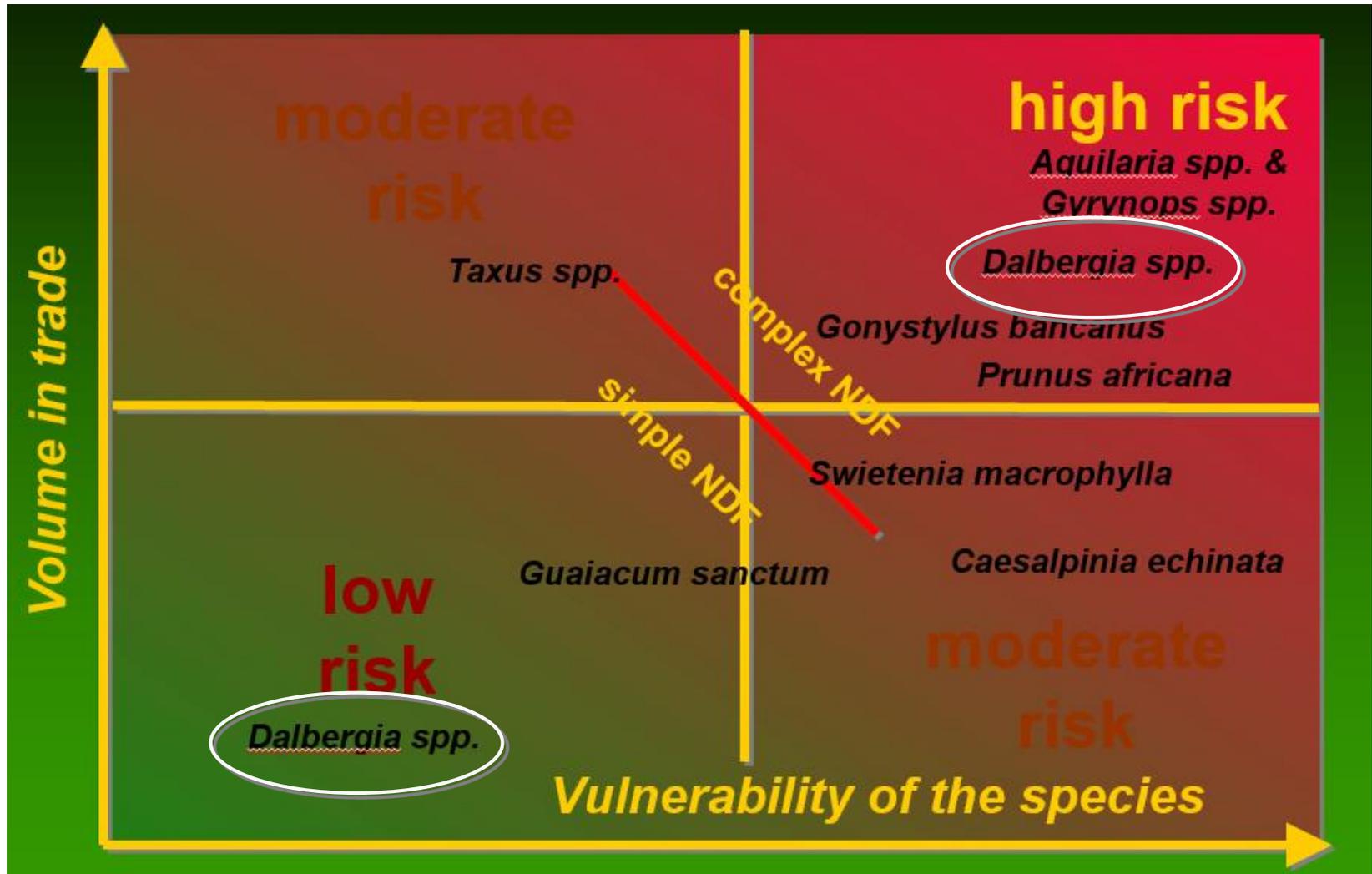


Tabla 20 - Estándar para la Realización de un DENP, para el aprovechamiento sustentable de una especie arbórea listada en el Apéndice I de la CITES.

7 áreas temáticas*	Principios*	Criterios*	Indicadores*	Verificaciones*
<p>7 áreas temáticas* FAO (2012)</p>	<p>Principios* CITES (2010)</p>	<p>Criterios* DMT (2011) MCAI (2011)</p>	<p>Indicadores* DMT (2011) MCAI (2011)</p>	<p>Verificaciones* CITES (2010)</p>
<p>*Hacia la ordenación forestal sostenible. Es posible establecer un paralelismo entre la ordenación forestal sustentable y un manejo sostenible de las especies silvestres. Se propone agregar un nuevo principio? para ser cumplido con los 7 principios de la FAO. *Hacia la ordenación forestal sustentable.</p>	<p>El principio de precaución, medio ambiente, sostenibilidad y social, aplicables al proceso de formulación de decisiones CITES en la CITES, independientemente de los temas de los artículos. Se propone agregar un nuevo principio? para ser cumplido con los 7 principios de la FAO. *Hacia la ordenación forestal sustentable.</p>	<p>*Aspecto del manejo forestal a evaluar (DMT)</p>	<p>*Variable cuali o cuantitativa que evalúa por indicación el estado de implementación de criterios. Los indicadores son utilizados conjuntamente de acuerdo a la especie e intensidad del manejo del bosque (MCAI 2002).</p>	<p>A desarrollar por cada AC de acuerdo a su caso. *Fuente de información que facilita la evaluación de un indicador. (MCAI 2002).</p>
<p>1. Diversidad biológica conexión y sostenibilidad de las especies.</p>	<p>1. El dictamen DENP para especies de la lista I y II debe incluir volúmenes comercializados no son perjudiciales para la supervivencia de la especie.</p>	<p>1. El Plan de manejo y documentos de apoyo proveen (lista# 1 MCAI 2002) a) Que en el momento de las peticiones de la especie CITES concuerda, indique un uso sustentable de la especie que permita obtener un DENP positivo de la AC pertinente. b) Características de la especie CITES concuerda, con el uso de la información sobre técnicas de identificación de la especie o la otra, capacidad de regeneración de las</p>	<p>1. Disponibilidad e implementación del Plan de Manejo Forestal pertinente, en la medida de lo posible, cada uno de los puntos mencionados bajo el Criterio 1.</p>	<p>- Plan de Manejo Forestal</p>



...NDF is a science-based risk assessment
we need to ID which is the target species



...NDF is about identification

- *Aquilaria malaccensis*
- *Aquilaria beccariana*
- *Aquilaria hirta*
- *Aquilaria microcarpa*
- *Aquilaria cumingiana*
- *Aquilaria audate*
- *Aquilaria brachyantha*
- *Aquilaria urdanetensis*
- *Aquilaria citrinaecarpa*
- *Aquilaria parvifolia*
- *Aquilaria rostrata*
- *Aquilaria crassna*
- *Aquilaria banaense*
- *Aquilaria khasiana*
- *Aquilaria subintegra*
- *Aquilaria filaria*
- *Aquilaria grandiflora*
- *Aquilaria secundana*
- *Aquilaria moszkowskii*
- *Aquilaria tomentosa*
- *Aquilaria bailonii*
- *Aquilaria sinensis*
- *Aquilaria apiculata*
- *Aquilaria acuminata*
- *Aquilaria yunnanensis*
- *Gyrinops versteegii*
- *Gyrinops moluccanna*
- *Gyrinops decipiens*
- *Gyrinops ledermanii*
- *Gyrinops salicifolia*
- *Gyrinops caudate*
- *Gyrinops podocarpus*



Challenges ... Identification

Physical ID methods (wood anatomy, paint marking, plastic tags, barcoding, radio-frequency ID)

Chemical ID methods (DNA sampling, Isotopic sampling)



ITTO-CITES Programme for Implementing CITES Listings of Tropical Timber Species

Tracking sustainability: review of electronic and semi-electronic timber tracking technologies

Timber tracking and timber products tracking technologies are relatively new and are gaining increasing importance through changing consumer and policy demands. This report is a useful guide to these rapidly evolving technologies.

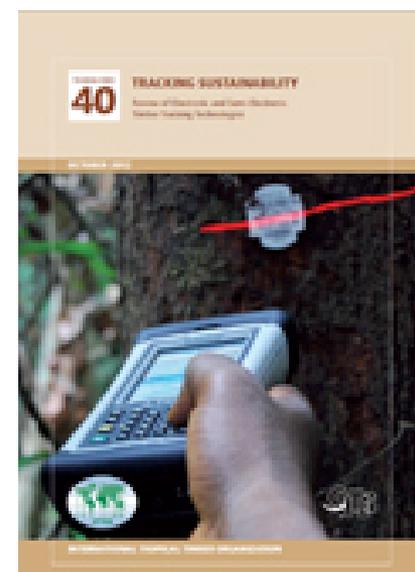
Published : October 2012

Author : Felix Seidel with Emily Fripp, Annie Adams and Ian Denty

ID number : TS-40

ISBN : 4-902045-95-8

 [en]  [fr]  [es]



http://www.itto.int/technical_report/

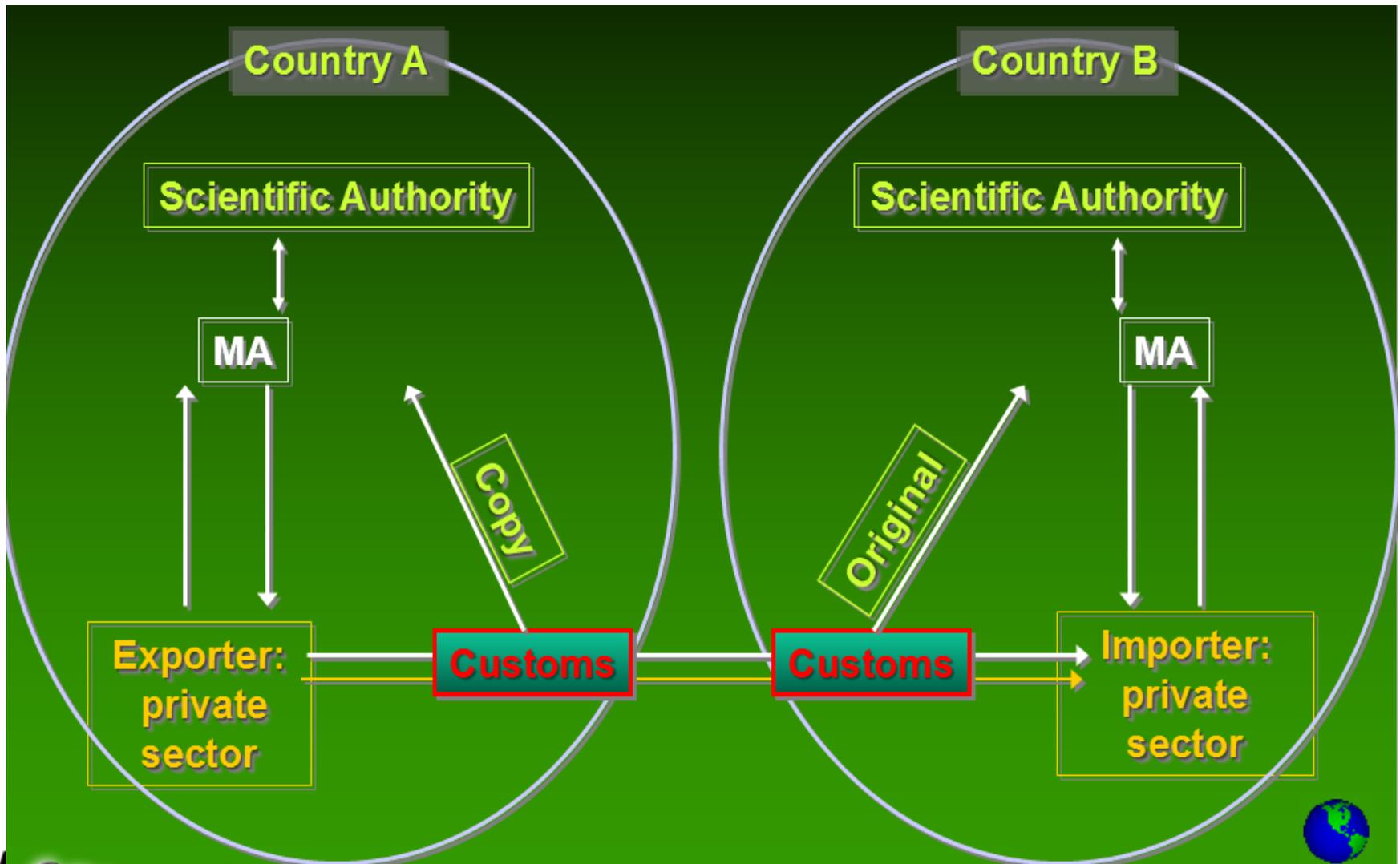


International cooperation



WHY TIMBER ID IS NEEDED? WHO NEEDS TO ID TIMBER?

Cooperation at the national level are essential for CITES implementation:
+ police, judiciary, partner organizations.



WHO IS FUNDING TIMBER ID WORK?

International Consortium on Combating Wildlife Crime



UNODC

United Nations Office on Drugs and Crime





Best Practice Guide for Forensic Timber Identification





ITTO-CITES Programme - 2006-2016



- SA-MG: partnered Switzerland in the implementation of the project *Establishment of a fully documented **reference sample collection** and identification system for all CITES-listed Dalbergia species and a feasibility study for Diospyros and look-alike species.*
- Guatemala: **Establishment of a forensic laboratory for timber identification** and description in the implementation of legal proceedings and traceability systems for CITES listed products
- Brazil: Using the **Near Infrared Spectroscopy (NIRS)** technique on a pilot scale, as a potential tool for the monitoring of Mahogany trade
- Cameroon: Pilot Implementation of a **DNA traceability system** for *Pericopsis elata* in forest concessions and sawmills in Cameroon and Congo: development of genetic markers for *Pericopsis elata* suitable for DNA fingerprinting
- Malaysia: The development of *Gonystylus* spp. (ramin) timber monitoring system using **radio frequency identification** (RFID) in Peninsular Malaysia



WHO IS FUNDING TIMBER ID WORK?

**‘Supporting sustainable management
of endangered tree species and
conservation of the African Elephant’
2017 - 2021**

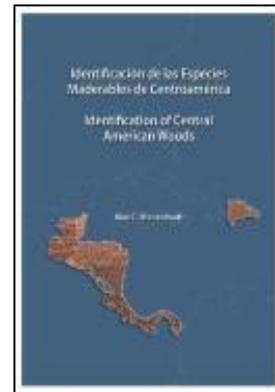


National initiatives



U.S. Forest Department – ID wood tool

- A wide variation exists on the materials that have been produced by the Parties in the past. Some examples are:
- USFS Machine Vision Field-level Automated Wood Identification – prototype to be used in situations with a minimal need for training



- GE: update computer-aided identification and description of CITES timber species: the *CITESwoodID*, CD-Rom and on-line version
- **Woods of the World in the Thünen Institute**, the xylotheque (with more than 37,000 wood samples, the Hamburg xylotheque is one of the largest of the world).



CoP17 Decs. on timber identification

- Dec. 17.166: *Parties are encouraged to expand or create and maintain scientific reference collections essential for the development of methodologies to identify CITES-listed tree species and distinguish them from look-alike species, in accordance with current best practices regarding collection, curation and facilitation of exchange of reference materials.*



Thank you very much



www.cites.org

