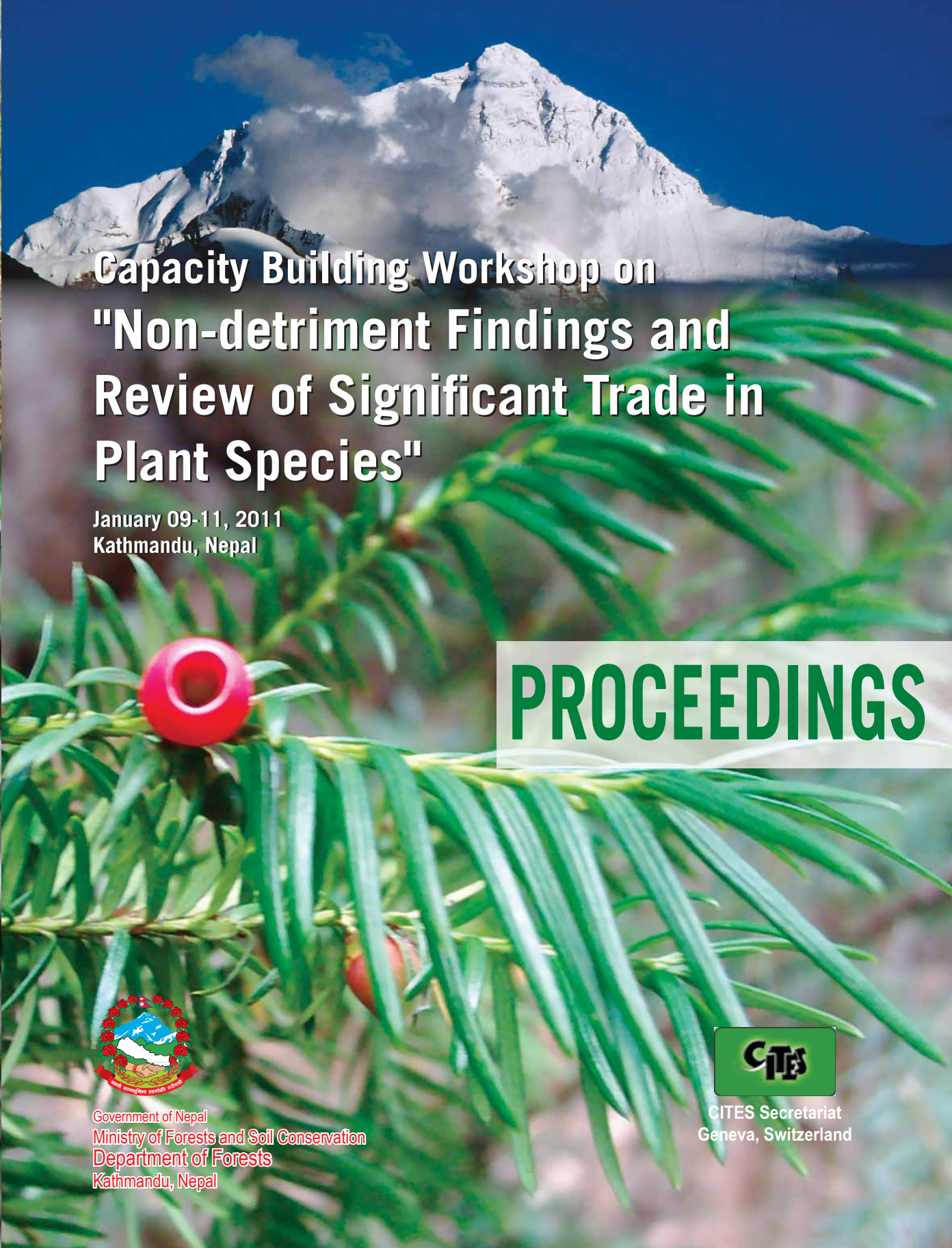

Capacity Building Workshop on "Non-detriment Findings and Review of Significant Trade in Plant Species"

January 09-11, 2011
Kathmandu, Nepal

PROCEEDINGS

Government of Nepal
Ministry of Forests and Soil Conservation
Department of Forests
Kathmandu, Nepal

CITES Secretariat
Geneva, Switzerland

Government of Nepal
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Ref. No.

FOREWORD

It is my pleasure to present the proceeding of the capacity building workshop on **"Non determent Findings (NDF) and Review of Significant Trade of Plant Species"** which was held in Kathmandu, Nepal from 9 to 11 January 2011 organized by Department of Forests with the financial and technical support of the CITES secretariat, Geneva.

The workshop was the first of its kind to be held in Nepal and it was a success in the sense that participants from the region were able to build their capacities on NDF and to review the significant trade CITES Annex II listed plant species. It was an immense opportunity to bring the national scientific and management authorities of plant species of CITES together with experts from CITES secretariat to share their experiences, understand how to implement effectively CITES mechanisms and review Significant Trade.

The workshop addressed key issues related with NDF and trade of CITES listed plant species and has strengthened communication between the authorities within the region. This has increased coordination and cooperation which will certainly help in reducing illegal trade of plant species.

The issues are similar in this region and with the organization of the workshop national authorities are now able to focus on realizing the importance of CITES requirements for survival of threatened plant species through its sustainable management and use. Even more parties are now ready to report to the Plant Committee of CITES secretariat about their status and progress on the implementation of CITES related decisions through regional representatives.

For this, I would like to thank CITES secretariat and all who has been involved and contributed in making the workshop a successful event and finalizing the proceeding in this shape.

Gopal Kumar Shrestha
Director General and
National Management Authority
for plant species

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1. Background

It is a major challenge for many countries in the region to meet the requirements for trade in CITES-listed plant species, which range from legal sourcing and sustainability of the harvest requirements to the effective control of legal trade and deterrence of illegal trade. Mechanisms exist in CITES, and in both exporting and importing countries, that promote and facilitate compliance. Countries that persistently do not meet CITES requirements and show no intention to achieve compliance, however, may be subjected to one or more international compliance measures adopted by the CITES Standing Committee and by the Conference of the Parties, including trade suspensions.

While mechanisms for identifying non-compliance and recommending actions to restore compliance are well developed, programmes to encourage and assist countries in meeting trade requirements are limited in number and funding and solutions are hampered by a lack of specialist capacity in many exporting countries, or a lack of current biological or trade information with respect to certain species. The result is poor or absent management plans for the populations of the species in the wild, reduced levels of legal trade, which in turn impact on economic growth and, on local livelihoods and, reduces options and incentives for conserving, managing and using wild resources effectively.

The CITES Secretariat is working with Parties and others to implement a number of Decisions adopted at the last meeting of the Conference of the Parties (CoP15, Doha, March 2010) that intend to strengthen the capacities of national authorities. This workshop focused on the implementation of six of these Decisions. These are Decision 15.36 on Review of Significant Trade in *Cistanche deserticola, Dioscorea deltoidea, Nardostachys grandiflora, Picrorhiza kurrooa, Pterocarpus santalinus, Rauvolfia serpentina and Taxus wallichiana* and, Decisions 15.23 to 15.27 on Non-detriment findings (NDFs).

This workshop was organized to strengthen the capacity of participants to formulate non-detriment findings and, to improve the general knowledge and understanding regarding the process of the Review of Significant Trade in CITES plant species from the South Asian region.

The workshop was also aimed at improving participants' understanding of the underlying concept of legal, sustainable and traceable trade and, model frameworks or approaches for achieving such trade.

There were 19 participants from Bangladesh, Bhutan, China, India, Indonesia, Myanmar, Nepal and Sri Lanka.

These Proceedings summarize the outcomes of the three day workshop.

2. Objectives

The main objective of the workshop was to enhance the capacity of participants to make nondetriment findings and, to respond to recommendations which result from the Review of Significant Trade of plant species**.**

The specific objectives were to:

1. identify the difficulties in meeting the requirements for trade in CITES Appendix-II listed plant species, ranging from the sustainability of the harvest and the formulation of the non-detriment findings to the recognition of applicable legal requirements and the assurance that trade in these species was sustainable and legal.

2. understand what effective implementation of CITES mechanisms involves, particularly in the case of the Review of Significant Trade in Appendix II listed species .

3. strengthen the capacity of national authorities to implement effectively a number of Decisions adopted at the last meeting of the Conference of the Parties (CoP15, Doha, March 2010). These are Decision 15.36 on 'Review of Significant Trade in *Cistanche deserticola, Dioscorea deltoidea, Nardostachys grandiflora, Picrorhiza kurrooa, Pterocarpus santalinus, Rauvolfia serpentina* and *Taxus wallichiana*', and Decisions 15.23 to 15.27 on 'Non-detriment findings'.

4. strengthen the communication among CITES authorities in the region, the Regional Representatives for Asia to the CITES Plants Committee and with the CITES Secretariat.

3. Expected Outcomes

- Management and Scientific Authorities from Bangladesh, Bhutan, China, India, Myanmar, Nepal, Pakistan and Sri Lanka are familiar with CITES requirements and compliance measures; the Review of Significant Trade is understood and implemented through fluid communication between these countries, the CITES Secretariat, the Plants Committee and, the Standing Committee.

- Current guidance on non-detriment findings for plant species is tested through case studies relevant to the region. Feedback from participating countries to be presented at the 19th meeting of the Plants Committee (PC19, Geneva, April 2011) and regional PC representatives to coordinate with other colleagues from their region on their report to the Committee; improved Asian regional report submitted at PC19.

- Parties ready to report to the PC in line with Decisions 15.23 and 15.26, the two regional representatives for Asia to the PC make progress on the implementation of Decision 15.24. The CITES Secretariat to be in a position to report at PC20 on progress made with the implementation of Decisions 15.36, 15.25 and 15.27.

4. Participants

The participants of the workshop were the Management and Scientific Authorities from Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Sri Lanka as well as one regional representative, for Asia, from Indonesia, to the Plants Committee. Altogether there were 24 participants, among them 14 national authorities from seven Asian countries, and one Plants Committee member from Indonesia, two facilitators from the CITES Secretariat (Geneva, Switzerland) and, seven observers from the host country. Pakistan, unfortunately, was unable

to participate in the workshop. The list of the workshop participants is given in Annex 1.

5. Management

The CITES Secretariat, based in Geneva, provided necessary technical and financial support for the workshop. Under contract with the CITES Secretariat, the Department of Forests, the CITES Management Authority for plant species in Nepal, organized the logistics for the workshop and otherwise managed the workshop.

6. Venue

The workshop was organized at the Everest Hotel, New Baneshwor, Kathmandu, Nepal.

7. Methodology

The methodology adopted for the workshop was based on the principle of "sharing and learning". More specifically, it included presentations, plenary discussions and group exercises, demonstrations and displays, experience-sharing and short briefings following participatory approaches.

8. Materials

The CITES Secretariat provided necessary NDF training materials and CITES- related documents. Other materials provided during the workshop included soft and hard copies of the NDF capacity-building package.

9. Workshop Program

The workshop was successfully conducted as per the working programme shown in Annex 2

9.1 *Opening of the workshop:*

Chief Guest, the Honorable Minister of Forests and Soil Conservation (MFSC), Nepal Mr. Deepak Bohara formally inaugurated the workshop by watering a *Taxus wallichiana* plant. The Honorable Minister welcomed participants and delegates and thanked the CITES Secretariat for providing Nepal the opportunity to host the workshop.

He assured participants that Nepal will take seriously their deliberations on NDF and incorporate them into the national policy. Recently, Nepal had signed a Memorandum of Understanding (MoU) with China, on matters related to the conservation of and the curbing of trans-boundary illegal trade in wild animal and plant species and soon a similar MoU would be made with India. He also emphasized that the lessons learned from the workshop would be instrumental in helping to fulfill the requirements for sustainable harvest and legal trade in CITES-listed plant species, help understand the effective implementation of CITES mechanisms and, consolidate the capacities of national authorities to implement effectively the number of decisions adopted at the last meeting of the CoP held in Doha, during March 2010.

i) Welcome Address

Mr. Gopal Kumar Shrestha , Director General, Department of Forests and Management Authority for Plant Species, Nepal, welcomed

participants and delegates from the CITES Secretariat. He hoped that the workshop, the first of its kind in the region, would be fundamental in helping to enhance the capacity of national authorities in understanding the making of NDFs and various CITES related processes. He also emphasized that the outcomes of this workshop would be appropriately taken into account by CITES Authorities of the region in order to fulfill the objectives of the Convention.

ii) *Opening remarks*

1. Ms Marceil Yeater, Chief, Legal Affairs and Trade Policy, CITES Secretariat, Geneva, made remarks on behalf of the Secretariat. She expressed appreciation to Nepal and other participating countries and highlighted the importance of the workshop being held in a range State, in order to gain a better understanding of the context in which the regulation of CITES trade of plant species takes place. She also mentioned that one of the key purposes of the workshop was to test with participants, and to obtain their feedback upon, new guidance material that had been developed by the Plants Committee for making non-detriment findings – that is, determining whether proposed trade in a particular plant species would be detrimental to its survival in the wild.

Although the workshop's title refers to non-detriment findings and the Review of Significant Trade, she hoped that participating countries would also be considering matters such as legal acquisition findings, the setting and management of voluntary export quotas, the issuance of CITES trade documents, inter-agency cooperation, CITES compliance procedures and regionally- coordinated activities to improve the management of shared plant species.

2. Mr. Yubaraj Bhusal, Secretary, MFSC, Nepal welcomed delegates and workshop participants to Nepal. He highlighted Nepal's natural features as a country of rich biodiversity and its potential for legal trade in international markets through the implementation of CITES mechanism. He affirmed that Nepal is in a process of preparing domestic CITES legislation to ensure its commitment to the conservation of endangered wild flora and fauna and to responsible (i.e. sustainable and legal) trade in species listed in CITES which were not endangered.

3. Dr. Krishna Chandra Paudel, Joint Secretary, MFSC, Nepal, as the chair of the opening ceremony, overviewed the scope of the workshop. He hoped that participants' commitments and feedback would play an important role in developing a framework within which countries could effectively make NDFs and participate in the Review of Significant Trade in plant species. Finally, he wished all success to the workshop.

iii) Vote of Thanks

Mr. Mohan Prasad Amatya, Officiating Director General, Department of Plant Resources and Scientific Authority for plant species, Nepal, thanked all of the invitees for their participation in the opening ceremony, emphasizing that the CITES Secretariat had provided financial and technical support for organization of the workshop in Nepal. He thanked the Hon. Minister, the Secretary and the CITES Secretariat representatives for their opening remarks.

9.2 Sessions Detail

After the formal opening, different sessions of the workshop were facilitated by Ms Marceil Yeater and Ms Milena Sosa Schmidt as per the working program. The third day's sessions were chaired by the Director General, Department of Forests, Nepal. On the first day, the facilitators focused mostly on a range of different subjects and issues in order to enhance participants' familiarity with NDFs so that participating national authorities would be able to report to the PC in line with Decisions 15.23 and 15.26. The regional representative of Asia to the PC informed other participants about the progress to be made on the implementation of Decision 15.24 and the need to report at PC20 on progress made with the implementation of Decisions 15.36, 15.25 and 15.27. On the second day, a country-based group exercise on NDFs was carried out and each participating country presented the status of information generally available to it for making NDFs, which is explained in more detail in Annex 3. On the third day, participants gave their country presentations about NDFs they had done in relation to one species from their respective countries. See Annex 4 for these country presentations. Participants finalized the workshop's findings and recommendations before concluding the last session. Complete texts of the workshop materials and presentations, along with pictures taken of different events, were burned onto a DVD and a copy was provided to each participant. The table below provides a summary of the deliberations within each of the different sessions held during the three days of the workshop.

Days	Topic of the session	Session Deliberation	Resource person
1	Plants in CITES	This session was focused on increasing participants' knowledge about the definition of 'species', with respect to readily-recognizable parts and derivatives, the definition of 'artificially propagated', the treatment of hybrids, and the use of phytosanitary certificates and permits for timber species under the Convention. Participants were also informed about exemptions for seedlings and tissue cultures in vitro, solid or liquid media, transported in sterile containers.	Milena Sosa Schmidt
1	Compliance with CITES	The CITES compliance procedures have their basis in and are applied in a manner consistent with the text of the Convention (e.g. Article XIII), applicable rules and principles of international law, relevant Resolutions and Decisions of the Conference of the Parties (e.g. Resolution Conf. 14.3), the decisions and recommendations of CITES subsidiary bodies and historical practices. The CITES compliance procedures focus on the obligations to designate a Management Authority and a Scientific Authority (Article IX), to ensure that trade only takes place according to the Convention (Articles III-VII and XIV), to take appropriate measures to enforce the Convention and prohibit trade in specimens in violation thereof (Article VIII), to maintain records of trade and prepare periodic reports on implementation of the Convention (Article VIII) and to respond to communications of the Secretariat (related to information that a species in Appendix I or II is being adversely affected by trade or that the provisions of the Convention are not being effectively implemented) (Article XIII)	Marceil Yeater

Days	Topic of the session	Session Deliberation	Resource person
1	Science in CITES and the Plants Committee	In this session, discussions focused on the importance of science in CITES, the need for non-detriment findings as the basis for trade, how pragmatic management can support sustainable utilization and how CITES data can be used to analyze wildlife trade trends. Science is what makes CITES achieve its conservation and environmental sustainability results, and it gives credibility to CITES decision-making processes. The principal requirement of managing wild resources for international trade in the context of CITES is that exports should not be detrimental to the survival of the species in the wild - i.e. they should be sustainable. The Plants Committee provides scientific advice and guidance, deals with nomenclatural issues and assists the Secretariat with the implementation of the Resolution on the Identification Manual and Decisions related to it and, upon request of the Secretariat, reviews proposals to amend the Appendices with regard to possible identification problems.	Milena Sosa Schmidt
1	Review of Significant Trade (Plants and Standing Committee)	An overview of Significant Trade Review for CITES Appendix II plant species was presented and discussed during this session, with special reference to the case of *Aquilaria malaccensis*. The result of the Significant Trade Review process generally removes the need for importing countries to apply unilateral stricter domestic measures (such as import bans or externally-imposed export quotas for range States). The process can result in individual exporting countries being assisted to undertake field studies as well as to develop the technical and administrative capacity necessary to implement the requirements of Article IV if these are lacking.	Milena Sosa Schmidt

Days	Topic of the session	Session Deliberation	Resource person
1	Role of the CITES authorities with emphasis on the role of the Scientific Authority	The respective roles of CITES national authorities were discussed. The task of the Scientific Authority is to determine and advise the Management Authority whether the export of specimens of species included in Appendices I and II is detrimental to their survival and the key responsibility of the Management Authority is to issue CITES permits and certificates, *inter alia*, on the basis of advice from the Scientific Authority where this is required under the Convention. The Management Authority also has responsibility for recordkeeping and reporting, for communication with other Parties and the Secretariat and for the coordination of CITES implementation at national level. In this context, it should ensure that the Scientific Authority is informed about all relevant CITES issues.	Marceil Yeater and Milena Sosa Schmidt
1	Non-detriment findings.	This section started explaining the terms and concepts in the text of the Convention that relate to the impacts of trade on species. A non-detriment finding may be understood as a conclusion by a Scientific Authority that the export of specimens of a particular species will not impact negatively on the survival of that species in the wild. It was explained in which circumstances the non-detriment finding by a Scientific Authority is required. Key concepts to remember were presented. The Resolution Conf. 10.3, Role of the Scientific Authority, recommends that the NDF are based in : distribution; population status; population trends; harvesting techniques; other biological and ecological factors; and utilization and trade information. In the CITES Strategic Vision: 2008-2013 Parties set the Objective 1.5 as the Best available scientific information is the basis for non-detriment findings. With the initiative of Mexico and, through document CoP14 Doc. 35, the Parties decided to organize an international workshop with experts on NDF. The idea was to strengthen capacities of CITES Scientific Authorities, in particular related to methodologies, instruments, information, technical knowledge and other necessary resources to formulate NDF. The approach of an adaptive management was presented.	Milena Sosa Schmidt

Days	Topic of the session	Session Deliberation	Resource person
		Documents Doc. 16.2.2 on Report of the Animals and Plants Committees and, Doc. 16.3 on non-detriment findings for timber, medicinal plants and, agarwood, provide an overview of the work done on this matter by both Committees; they also present a complete list of reference documents that have been produced by the Committees on NDF. Decisiones 15.23 to 15.27 agreed at the last CoP, establish the procedure for Parties, the Animals and Plants Committees and, the Secretariat, to continue the work of revision of the current guidance as tools to make NDF in order to submitt the results for consideration at CoP16.	
2	NDF Exercises	Participating countries saw now in more depth: 1- The process of formulation of NDF followed in their countries; 2- The guidance proposed by the Plants Committee to make NDF proposed in document CoP15 Doc. 16.3; 3- The consultation by the Plants Committee per Notification to the Parties 2011/004. 4- Next steps: input to the PC. A country-based group exercise on NDF was carried out during the full second day of work in order to assess whether the participating countries considered the PC guidance applicable for their CITES plant species. The exercise used the form in Notification 2011/004 for evaluating the availability of information for making NDFs (i.e. to assess the level of risk which trade could present for the survival of the populations of the species in the wild).n annexfrce base. Each participating country then presented the results of its group exercise, which focused on one CITES Appendix II species found in its territory. Details of the group exercise results are given in Annex 3. Participants agreed to send their results to the PC through the regional report of Asia. The regional representative for Asia to the PC, agreed to liaise after the workshop with all present countries in order to include this information in the regional report to PC19.	Milena Sosa Schmidt

Days	Topic of the session	Session Deliberation	Resource person
3	Nepal's country presentation on *Taxus wallichiana*	Nepal presented the current trade status of the species. The trade has decreased in recent years due to the species' regulation under CITES and also a decline in the resource base..	Gopal Kumar Shrestha
	China's country presentation on *Cistanche deserticola*	This parasitic plant attaches itself to the root of Haloxylon sp. and is found in the desert ecosystem. Although the species is not considered to be 'endangered' under CITES, the species is categorized as 'endangered' in the IUCN Red List. China only issues permits for artificially propagated plantation products. Artificial propagation increased after the 1980s. The records of 2008 showed the plantations covered 900 hectares. Plantation production was 5600 tons in 2010	Dr. Haining Qin
	Bangladesh's country presentation on *Aquilaria malaccensis*	This is an exotic plant species for Bangladesh and the trees are 50-80 ft tall. It is used mainly for agarwood production. Plantations cover 200 hectares. Businessmen buy trees which are 8-10 yrs old or older. Ten year old trees have a girth of 20-30cm . The price of agarwood oil is 1000 US$ per litre. The life span of a natural tree is 30-50yrs and the lifespan of an artificially propagated tree is 10yrs. tAgarwood is produced by making wounds on trees and then inoculating them with Micorhiza, mixed with soil within a polyester bag.	Dr. Tapan Kumar Dey
	Bhutan's country presentation on *Aquilaria malaccensis*	No export from Bhutan is allowed. Old trees are used for experiemental purposes by the government institute of medicine. There has not been any research on the chemical component and ingredients. The plant is reported to be used only for religious purposes by Hindus and Buddhists. Bhutan has no data on the quantity of local consumption.	Sonam Tobgay
	Srilanka's country presentation on *Nepenthes distillatoria*	This is a tropical pitcher plant found in waterlogged open areas. It is distributed in patches and the population status is unknown. There is a high demand for the species in Japan and the UK as an ornamental plant. Sri Lanka issues export permits for cut flowers produced from tissue cultures.	Ratnayake Hitibandarale Dayawan

Days	Topic of the session	Session Deliberation	Resource person
	India's country presentation on *Pterocarpus santanalis*	India proposed this plant for inclusion in CITES Appendix II in 1997. No legal trade is allowed in India. The natural habitat has decreased from 20000 to 5000 hectares. Heartwood is used commercially after removal of sapwood. A national capacity building workshop on related NDFs was conducted recently. Cultivation is promoted in the original habitat, Andhra Pradesh has the best wood quality. The species is valued for Sanatalin, dye, wood powder, and its medicinal properties. Even the roots are dug out for use.	Dr. Maheshwar Hegde
	Myanmar's country presentation on *Rauvolfia serpentina*	The species is not protected by legislation in Myanmar. It has been difficult to make a NDF and therefore no CITES export permits have been issued. The annual harvest quota is fixed by the Department of Forests (both the Scientific and Management Authority).	Maung Maung Than
	Indonesia's country presentation on *Aquilaria malaccensis*	A field guidebook on this species was published and local management guidelines were formulated. It is characterized by fast growth and can reach 5m tall in 5 yrs time. The seed germination rate is 90%. Suspension inoculation to stem is used to artificially produce agarwood. It is called Black Magic Wood by Muslims. Quota calculation is based on 3yrs production at the national level. No critical problems have occurred Indonesia regarding its management There are problems in connection with inoculation as artificially produced agarwod is inferior to natural agarwood. The smell of agarwood oil varies from species to species. There have been attempts to produce artificial oil.	Dr. Tukirin Partomihardjo
	Findings and Recommendations.	The CITES Secretariat gave a short presentation on compliance and enforcement issues related to the medicinal plant trade and implementation of CITES in the region. Under the guidance of the chairperson, participants worked together to review and evaluate the workshop and then reached agreement on the Findings and Recommendations contained in subsequent sections of this report.	Mr. Gopal Kumar Shrestha, Marceil Yeater and Milena Sosa Schmidt
	Closing of the workshop	Mr. Gopal Kumar Shrestha, Chairperson of the third day's sessions finally closed the workshop with his concluding remarks	Mr. Gopal Kumar Shrestha

10. Financial statement

The total expenditures for the workshop totalled US$ 33298.00. A summary of the workshop's expenditures is given in Annex 5.

11. Findings

The three-day workshop concluded with the following findings:

- Information and specialized capacity for making NDFs for plant species are lacking in some of the South Asian countries
- Strengthening the technical capacity of the Scientific Authority working on plant species of certain countries is essential.
- Many countries in the region share similar challenges regarding the conservation, management, sustainable use and trade of CITES-listed plant species.
- National technical guidelines on methodologies to assess the sustainability of harvesting plant species from the wild (and from plantations) is often lacking.
- The workshop was meaningful for sharing experiences and learning about the management of, conservation of, sustainable use of and trade controls for CITES-listed plant species in the region.
- There is a need to designate Scientific and Management Authorities for plant species in each country which are independent of each other but which nevertheless work in close coordination.
- Information on biology, conservation and trade, of plant species sometimes exists but is often incomplete and out-of-date; up-to-date information of this nature is sometimes lacking.
- More effort is needed to ensure that the plants are given the same attention as animals in CITES. Often the animal species take the full dedication of the CITES authorities and plants species are relegated; this results in huge loses of revenue for the concerned Governments that could be gaining billions of dollars from a legal trade in their plant products. Activities should be designed to improve management plans, conservation strategies, national legislation and enforcement measures for plant species.
- The CITES Secretariat should help range States access the funds needed to conduct population surveys and other NDF-related studies and, also to organize national level workshops for raising awareness about CITES requirements. .
- All participants agreed that the workshop was successful and that, information-sharing should continue among countries through this kind of activities (e.g. organizing additional regional workshops on a periodic basis whenever possible)
- The conservation of plant species should be promoted through their sustainable use and responsible trade.

12. Recommendations

The workshop participants unanimously agreed on the following recommendations

- Develop and conduct more awareness-raising programmes on non- detriment findings for all plant species that are listed in CITES.
- Create a funding mechanism to assist countries in conducting surveys and research on NDF-related matters.

- Carry out more capacity building activities on NDF-related issues, for Scientific Authorities in range States of Appendix II plant species.
- Develop more robust rules and procedures for compliance monitoring and enforcement, and implement them effectively
- Undertake preliminary assessments of the status of the populations of CITES plant species in the wild; an interim measure can be the setting of cautious harvest and export quotas and, reconsider the utility and the need to keep an export ban in place with no strategy to lift it.
- Strengthen and promote regional cooperation mechanisms for a improving the implementation of CITES in the region.
- Consider the guidance proposed by the Plants Committee and other tools as the 'radar plot diagram' for plant species and, identify national level funding to undertake capacity building activities on NDFs.
- Encourage bilateral and multilateral collaboration on curbing illegal trade in plants, plant products and derivatives.
- Establish Biodiversity Detection Units at Customs border points.
- Enhance capacity to carry out research and development activities aimed at technology transfer and value added goods so that local communities can get more benefits from the CITES-listed species, which should help to decrease overexploitation pressure on wild populations.
- Future workshops should be held in different countries on a rotating basis. This will give all national authorities the opportunity to contribute to and to help attain effective cooperation and coordination between exporting and importing countries for legal and sustainable CITES trade and quick handling of any incidents of illegal trade.
- The CITES Secretariat should take the initiative to strengthen national capacity to formulate NDFs for plant species and to articulate CITES requirements for plant species with the national CITES legislation.
- Criteria and indicators for NDFs should be developed.
- Coordination and cooperation between national (including local), regional and international stakeholders on CITES-related matters should be strengthened.

13. Conclusions

Imposing permanent bans on the export of specimens of particular species may encourage illegal trade. Therefore, apart from banning the export of specimens of particular plant species, range States may take measures to produce missing biological and ecological information, gather existing information of this nature, adopt national strategies and management plans to conserve and ensure a sustainable harvest of the populations in the wild and, increase production from plantations when these can release pressure of harvesting the populations in the wild. Although illegal trade cannot be fully stopped, it can be controlled and kept to a minimum level if range States are committed to promote and ensure sustainable, legal and, traceable CITES trade in plant species. Each participating country benefited from the sharing of each other's experiences and, from the CITES Secretariat's presentations. In their final evaluation of the workshop, participants determined that they benefited a lot from this workshop and agreed that such workshops should be conducted

regularly to strengthen CITES capacity in the region to work on plant species.

It was agreed that all participating countries will now coordinate with the two Regional Representatives for Asia to the Plants Committee in order to submit - to the next meeting of the CITES Plants Committee (PC19, Geneva, April, 2011) - the results of the NDF exercise undertaken during the workshop, in accordance with Notification to the Parties No. 2011/004 [http://www.cites.org/eng/notif/2011/E004.pdf].

The participation of the Regional Representative for Asia to the PC, Dr. Tukirin, was found to be highly valuable for enhancing communications within the region and with the Plants Committee.

Annexes

Annex 1 : List of Participants

S.N	Participants Name	Organization	Two Highest Academic Qualification	Professional Experience (Years)	Country	Authority	Email
1	Mr. A. N. Shamsuddin Azad Chowdhury	Joint secretary (admin.) Government of the people's Republic of Bangladesh, Ministry of Environment and Forest	Post graduate in Management	25 years	Bangladesh	Management	jsadmin@moef.gov.bd, chowdhurynasim59@yahoo.com
2	Dr. Tapan Kumar Dey	Conservator of forests, Wildlife &Nature circle Department of Forest	Ph.D wildlife Biology,M. sc forestry,M. sczoology	25years	Bangladesh	Scientific	deytkcfwild@gmail.com
3	Mr. Sonam Tobgay	Sr, Forest officer, Head Bio-Diversity Inventory, Data & Management plan section, wildlife Division Department of Forests and Park Services, Ministry of agriculture & Forest	M.Sc Mountain Forestry	8years	Bhutan	Scientific	stobgay107@yahoo.com
4	Mr. Kinzang Gyeltshen	Chief forestry officer, Department of Forests and Park Services	Master in Environmental management.	16years	Bhutan	Management	kingyel@hotmail.com, k_lhazen@yahoo.com, jamkhar @ yahoo.com
5	Mr. Yuan liangchen	Division of flora affairs, C+C17hina cites management authority/the endangered species import and export management office, P.R China state forestry administration no.18 Hepinigli Dongji, Beijing 100714, P.R.China	Ph.D (Plant Biology)	4 Years	China	Management	Yuanlch@yahoo.com.cn
6	Haining Qin, Ph.D.	Specilists Group and red list focal point of china ,IUCN SSC, Research professor, Institute of Botany Academy of Science, Xiangdhan Beijing china 10093	Research Professor Ph.D	19 years	China	Scientific	hainingqin@ibcas.ac.cn

S.N	Participants Name	Organization	Two Highest Academic Qualification	Professional Experience (Years)	Country	Authority	Email
7	Ms. Chandra Rawat	Research officer, wildlife Division,Ministry of Environment and Forest,Room no.441 Parayavaran Bhawan , New Delhi	M.Sc (Geoology) Research Officer	12 Years	India	Management	rowlmef@yahoo.co.in
8	Dr. Maheshwar Hegde	Scientist, Institute of Forest Genetics and Tree Breeding(IFGTB), Coimbatore, India	Ph.D. M.Sc (Agriculture)	12 Years	India	Scientific	hegdem@icfre.org, mahesh-heg@yahoo.com
9	Dr. Tukirin Partomihardjo	Research centre for Biology, Indonesian Institute of Science Jajan Raya jakarta	Ph. D.		Indonesia		tukirin@indo.net.id
10	Mr. Maung Maung Than	Director, Training & Research Division, Forest Department,Building39,Nay Pyi Taw,			Myanmar	Management	nwcdfdmof@gmail.com, putoo911@hotmail.com
11	Mr. Thien Aung	Asst. Director, Nature and wildlife conservation Division Department, Ministry of Forestry, Nay pyi Taw	B.Sc. (Vetenary),	28 Years	Myanmar	Scientific	nwcdfd@gmail.com
12	Mr. Gopal Kumar Shrestha	Director General, Department Of Forest	M.Sc (Forestry)	34 Years	Nepal	Management	dgdof@dof.gov.np , sgk0245@gmail.com
13	Mr. Mohan Prasad Amatya	Officiating Director General, Department of Plant Resources	M.Sc. (Pharma.)	32 Years	Nepal	Scientific	dprdog@ntc.net.np
14	Mr. Harihar Sigdel	Deputy Director General, Department of Forests	M.Sc Forestry, M. Sc.Chemistry	31 years	Nepal	Management	harihar.sigdel@gmail.com
15	Dr.Sushim Ranjan Baral	Under Secretary, Department of Plant Resources	Ph. D.		Nepal	Scientic	
16	Mr. Ratnayake Hitibandarala Dayawan	Department of wildlife conservation	M. Ph (Plant Biology) M.Sc wildlife	22 Years	Sri lanka	Management	ratnayake2008@yahoo.com

S.N	Participants Name	Organization	Two Highest Academic Qualification	Professional Experience (Years)	Country	Authority	Email
17	Mr. Sarathnayake Ratna Bandra Dissanayake	Department of wildlife conservation	M. Ph (Birds)	27 Years	Sri lanka	Scientific	sarathdisa@yahoo.com
18	Ms Marceil Yeater	"Chief, Legal Affairs and Trade Policy CITES Secretariat "	BA Poltical Science, JD (Juns Doctor)	35 Years	Geneva	Lawyer	marceil.yeater@cites.org
19	Ms Milena Sosa Schmidt	"Scientific Officer CITES Secretariat "	Biology Plant (University)Master in Science, Ph.D (FM)	13 Years	Geneva	Botanist	Milena.Schmidt@cites.org
Observers (Organising Committee Members)							
1	Mr. Prakash Nath Pyakuryal	Under Secretary, Planning and Monitoring Division, Department of Forests	M.Sc Forestry(USA), Diploma Forestry (India)	27years	Nepal	Forester	ppyakuryal@yahoo.com
2	Mr. Ram Nandan Sah	Under Secretary CITES Section National Forest Division Department of Forests	B.Sc. (Forestry) M. S. (Natural Resource Management)	25 years	Nepal	Forester and Natural Resource Manager	ravisasi2@hotmail.com
3	Mr. Hem Aryal	Under Secretary, National Forest Division, Department of Forests	M.Sc Forestry, B.Sc Forestry	21years	Nepal	Forester	hemaryal@yahoo.com
4	Mr. Deepak Acharya	Assistant Forest Officer, National Forest Division, Department of Forests, CITES Section	M. A. Economics, I.Sc (Forestry)	22 years	Nepal	Forester	deepakacharya_2003@ hotmail.com
5	Mr. Achyute Tiwari	Assistant Botanist, Department of Plant Resources	M.Sc Botany	7years	Nepal	Botanist	achyut_18@yahoo.com
6	Mr. Diwakar Chapagain	Coordinator Wildlife Control, WWF- Nepal	M.Sc Degree,	25years	Nepal	Lawyer	diwakar.chapagain@ wwfnepal.org
7	Mr. Dinesh Satyal	Office secretary, WS organising Committee	B.Sc Forestry	Student	Nepal	Forester	dnshsatyal@gmail.com

Annex-2a Workshop working programme

Workshop Schedule		
1st day: 09 January		
Time	Activity	Facilitation
08h00-09h30	Break fast	
09h30-10h45	Registration and Opening	
	Milena	
10h45-11h00	Break (coffee-tea)	
11h00-11h30	Plants in CITES	Milena
11h30-12h00	Compliance with CITES	Marci
12h00-12h45	Science in CITES and the Plants Committee	Milena
12h45-13h30	Review of Significant Trade (Plants and Standing Committee)	Milena
13h30-14h30	Lunch	
14h30-15h30	Role of the CITES authorities with emphasis on the role of the Scientific Authority	Marci (MA, 30')- Milena (SA, 30')
15h30-16h00	Break (coffee-tea)	
16h30-18h00	Non-detrimental findings	Milena
18h30-20h00	Reception Dinner	
2nd day: 10 January		
08h00-09h00	Break fast	
09h00-10h30	Non-detrimental findings (exercise)	Milena
10h30-11h00	Break (coffee-tea)	
11h00-13h00	Non-detrimental findings (exercise)	Milena
13h00-14h00		Lunch
14h00-15h30	Non-detrimental findings (exercise	Milena
15h30-16h00	Break (coffee-tea)	
16h00-17h30	Non-detrimental findings (exercise	Milena
3rd day: 11 January		
08h00-09h00	Break fast	
09h00-10h30	Case examples from Bangladesh, Bhutan, China, India, Myanmar, Nepal, Pakistan, and Sri Lanka	Marci
10h30-11h00	Break (coffee-tea)	
11h00-13h00	Case examples from Bangladesh, Bhutan, China, India, Myanmar, Nepal, Pakistan, and Sri Lanka	Marci.

Workshop Schedule		
13h00-14h00	Lunch	
14h00-15h30	Conclusions and recommendations. Closing the workshop	Milena
15h30-16h00	Break (coffee-tea)	
16h00-17h30	Conclusions and, recommendations. Closing the workshop	Milena

Annex-2b Workshop working programme

Opening Ceremony		
Time	Activity	
10:00	Registration	All Invitees
	Chairing the Session	Dr. Krishna Chandra Paudel, Joint Secretary, Ministry of Forests and Soil Conservation
10:15	Welcome and objective of the work shop	Mr. Gopal Kumar Shrestha, Director General, Department of Forests
10:25	Inauguration	Chief Guest, Honorable Minister Mr. Deepak Bohara , Ministry of Forests and Soil Conservation
	Opening Remarks	
	Representative Cites Secretariat	Ms. Marceil Yeater, Chief,Legal Affairs and Trade Policy, CITES Secretariat, Geneva
	Guest	Mr. Yubraj Bhusal, Secretary, MFSC
	Chief guest	Honorable Minister Mr. Deepak Bohara , MFSC
	Vote of Thanks	Mr. Mohan Prasad Amatya, Officiating Director General, Department of Plant Resources
10:40	Closing Remarks	Chairperson, Dr. Krishna Chandra Paudel, Joint Secretary, MFSC
10:45	Tea and Snacks	

Annex-3a NDF Exercise Findings

THE AVAILIBILITY OF INFORMATION IN MAKING OF NDF TO ASSESS THE RISK LEVEL OF A SPECIES					
S. N.	Element	Indonesia	Bhutan	Bangladesh	
		Aquilaria malaccensis			
		wild	wild	wild	plantation
1	1. Distribution				
2	2. Abundance of the population				
3	3. Population trend in comparison with historical references				
4	4. Age structure of the population				
5	5. Biological cycle and reproductive strategy				
6	6. Habitat requirements and adaptability (specialist versus generalist)				
7	7. Impact of the disappearance of the species on the ecosystem				
8	8. Capacity for natural repopulation of areas where it has disappeared				
9	9. Is the species migratory?				
	USE				
10	10. Quantity of material harvested				
11	11. Stage of the biological cycle when the harvest takes place				
12	12. Extent and type of area being harvested (usually determined by ease of accessibility)				
13	13. Existence of a regulatory system, in particular limits to harvesting and areas where harvest is prohibited.				
14	14. Does harvesting destroy the whole specimen?				

THE AVAILIBILITY OF INFORMATION IN MAKING OF NDF TO ASSESS THE RISK LEVEL OF A SPECIES					
S. N.	Element	Indonesia	Bhutan	Bangladesh	
		Aquilaria malaccensis			
		wild	wild	wild	plantation
15	15. Level of demand for the species and value of product(s) in trade				
16	16. Is harvesting continuous, regular or other?				
17	17. Do the harvesting methods cause side damages?				
18	18. Does harvesting have conservation purposes for the species?				
19	19. Does the harvesting extend to other species?				
	OTHER FACTORS				
20	20. Probable extent of illegal trade				
21	21. Degradation and loss of habitat				
22	22. Effect of pollution				
23	23. Will harvesting in the area covered by the non-detriment finding have consequences for the species in other parts of its range?				
24	24. Competition from alien invasive species				
25	25. Diseases, meteorological incidents				
26	26. Risks associated with climate change				

Filled with one of the colours below according to the availability of information:

Detailed	Limited	Not available

THE AVAILIBILITY OF INFORMATION IN MAKING OF NDF TO ASSESS THE RISK LEVEL OF A SPECIES						
S. N.	Element	NEPAL	INDIA	SRILANKA	MYANMAR	CHINA
		Taxus walichiana	*Pterocarpus santalinus*	*Nepenthes distillatoria*	*Rauwolfia serpentina*	*Cistanche deserticola*
		Wild	Wild	Wild	Wild	Wild
1	1. Distribution					
2	2. Abundance of the population					
3	3. Population trend in comparison with historical references					
4	4. Age structure of the population					
5	5. Biological cycle and reproductive strategy					
6	6. Habitat requirements and adaptability (specialist versus generalist)					
7	7. Impact of the disappearance of the species on the ecosystem					
8	8. Capacity for natural repopulation of areas where it has disappeared					
9	9. Is the species migratory?					
	USE					
10	10. Quantity of material harvested					
11	11. Stage of the biological cycle when the harvest takes place					
12	12. Extent and type of area being harvested (usually determined by ease of accessibility)					

THE AVAILIBILITY OF INFORMATION IN MAKING OF NDF TO ASSESS THE RISK LEVEL OF A SPECIES						
S. N.	**Element**	**NEPAL**	**INDIA**	**SRILANKA**	**MYANMAR**	**CHINA**
		Taxus walichiana	*Pterocarpus santalinus*	*Nepenthes distillatoria*	*Rauwolfia serpentina*	*Cistanche deserticola*
		Wild	Wild	Wild	Wild	Wild
13	13. Existence of a regulatory system, in particular limits to harvesting and areas where harvest is prohibited.					
14	14. Does harvesting destroy the whole specimen?					
15	15. Level of demand for the species and value of product(s) in trade					
16	16. Is harvesting continuous, regular or other?					
17	17. Do the harvesting methods cause side damages?					
18	18. Does harvesting have conservation purposes for the species?					
19	19. Does the harvesting extend to other species?					
	OTHER FACTORS					
20	20. Probable extent of illegal trade					
21	21. Degradation and loss of habitat					
22	22. Effect of pollution					

THE AVAILIBILITY OF INFORMATION IN MAKING OF NDF TO ASSESS THE RISK LEVEL OF A SPECIES						
S. N.	**Element**	**NEPAL**	**INDIA**	**SRILANKA**	**MYANMAR**	**CHINA**
		Taxus walichiana	*Pterocarpus santalinus*	*Nepenthes distillatoria*	*Rauwolfia serpentina*	*Cistanche deserticola*
		Wild	Wild	Wild	Wild	Wild
23	23. Will harvesting in the area covered by the non-detriment finding have consequences for the species in other parts of its range?					
24	24. Competition from alien invasive species					
25	25. Diseases, meteorological incidents					
26	26. Risks associated with climate change					

Filled with one of the colours below according to the availability of information:

Detailed	Limited	Not available

Annex 4
Country Presentations

Bangladesh

A Case Study of CITES Plant Species Agarwood (Aquilaria malaccensis) in Bangladesh.

9-10, January, 2011,
Katmandu, Nepal.

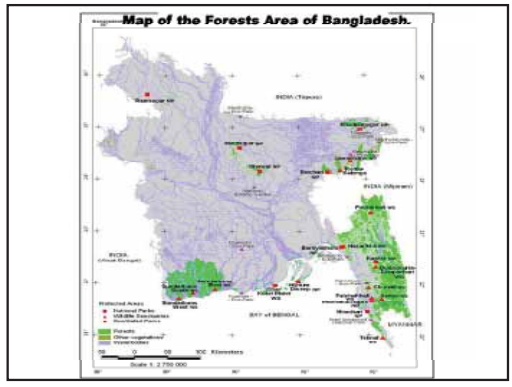
Ministry of Environment and Forests, Bangladesh.

AGARWOOD TREE

***Aquilaria malaccensis* Lamk, A. agallocha Roxb.)**

- Bangladesh is a member state of CITES Community since 1982. As a party Bangladesh has taken all appropriate measures to enforce the provisions of the present convention.
- Among the CITES listed plants(Appendix-II), *Aquilaria malaccensis, Rauvolfia serpentina, Swietenia macrophylla, Swietenia mahagoni* and some species of *Aloe* have international market for export from Bangladesh. CITES Management Authority, Bangladesh is maintaining the export record of Aquilaria malaccensis.
- Both species of *Swietenia* are exotic species in Bangladesh, but now they become common timber species. Khasia and Manipuri tribes traditionally used Agarwood agar oil and perfume production since last centuary.
- It is a tall evergreen tree.
- Leaves of Agarwood are alternate, leathery, 5-8.7 cm, lance-shaped, pointed with faint parallel nerves.

- **Wood scented due to the presence of a resinous substance.**
- **It is found in East Himalayan low hills, Assam, Bangladesh and Myanmar.**
- **The wood is scented and used as incense and commands a very high price.**
- **Diseased trees become infiltrated with a resinous substance. It is the diseased wood that is valuable, for the hard dark coloured masses are caused by a fungus, resulting in the eaglewood or agar wood of commerce.**
- **The light coloured wood in which the resin is embedded is distilled into an oil called `agar-attar' used in perfumes.**
- **Agarwood is mainly planted by the Forest Department and also by the local people of Molvibazar district. FD has raised 2000 ha. Plantation since 2000 in Sylhet and Chittagong.**



Agarwood trees

Nailing in Agarwood Trees for Fungal Inoculation

Bangladesh

Village Women are making Agarwood chips

Agarwood Chips

Sundrying of Agarwood Chips

Water Socking of Agarwood Chips

Agar oil Production in Factory

Agar oil

Bangladesh

Agar Products

Agar wood Products Exported from Bangladesh During the year 2009 and 2010.

Sl. no.	Exporter (Name and Address Country)	Importer (Name and Address)	Description	Purpose of the transaction	Security stamp no	Quantity, number of specimen	Year
01	02	03	04	05	06	07	08
01	**Bengal Perfumery House No: 64/2, Block-C Kumarpara Sylhet, Bangladesh.**	**Mobrook Perfume Co. Saud Bin A Aziz St. Saud Comm. Centrer, P.O Box : 495 Mubarakiya Souk Al-Dakhly 15255, Kuwait.**	**Agar Wood Chips.**	**Trade**	**BD 9118243**	**15,600 kg's**	**2009**
02	**Md. Badrul Islam M/S Almed Khan Perfumes Trade, Gangkul, Dakshinbag, Barlekha, Moulve Bazar, Bangladesh.**	**Abdullah Shab Ahned Thani M/S Almedkhan Perfume Trade Old Medaf Hotel, Murshed Bazar, Diere, Dubai, UAE**	**Agar Wood Chips.**	**Trade**	**BD 9118243**	**200 kg's**	**2010**

Plant Species which cannot fell, extract and trade without permission as per Wildlife (Conservation) Act-2011 (Proposed)

Vernacular/Common name	Scientific name
Tali Palm	*Corypha taliera* (Roxb.)
Civit	*Swintonia floribuonda* (Pierre.)
Boilam	*Anisoptera scaphula*
Gilla	*Entada phaseoloides*
Chal Mugra	*Gynocardia odorata*
Haritaki	*Terminalia chebula*
Ashok	*Saraca asoca/indica*
Jhum Alu	*Dioscorea pentaphylla*
Chundul	*Tetramelis nudiflora*
Kumbi	*Careya arborea* (Roxb.)

Amur	*Amoora cuculata* (Roxb.)
Udam Bet	*Calamus longisccus* (Griff.)
Dhup	*Canarium resiniferum* (Brace.)
Katalal Bana	*Castanopsis armafa* (Spach.)
Karpur	*Cinnamomum camphora*
Tajbahol	*Cinnamomum iners* (Reinew.)
Maniraj cycas	*Cycas pectinata*
Bandarhola	*Duabanga sonneratoidss (*Buch-Ham.)
Rangirata	*Dysoxylum bincetariferum* (Hook.)
Asphal	*Euphorbia longan* (Steud.)

Baichi	*Flacourtia indica* (Merr.)
Anantamul	*Hemidermus indicus*
Pipermint	*Mantha spicato* (Limn.)
Banspata	*Podoeurpus nerifolia*
Mao Alo	*Discorea esculanta*
Uriam	*Mangifera longipes*
Paduk	*Pterocarpus aeelbergioedes*
Rita	*Sapindus mukorosi* (Gaer.)
Kusum/ Joyna	*Schlciehera oliosa* (Okin.)
Udal	*Sterculia villosa* (Roxb.)
Harjora	*Vitis quadrangularis* (Will.)
Trikoni Bot	*Ficus triamgularis*
Lata Bot	*Ficus ripens*
Bansai Bot	*Ficus cyanthistipula*
Gaya Aswatha	*Ficus rumphii*

Raktan	*Lophopetalum fimbriatum*
Amhastia/Parijat	*Amhastia nobilis*
Uday Padma	*Magnolia grandiflora*
Jahari Champa	*Magnolia pumila*
Kunch	*Abrus precatorius* Linn.
Kamdeb	*Calophyllum polyanthum* Wall.
Khirpa	*Lumnitzera racemosa* Willd.
Kurchi	*Holarrhena pabescens* Wall.
Khalshi	*Aegiceras corniculatum* Blanco
Galgal	*Cochclospurmum religiosum*
Jat Batna	*Quercus lancaefolia* Roxb.
Shilbatna	*Quercus velutina* Lindl.
Jain	*Trachyspermum ammi* Linn.
Tali	*Dischopsis polyantha* Benth.
Tamal	*Diospyros cordifolia* Roxb.

Bangladesh

Narikeli/Buddha Narikel	*Pterygota alata*
Harina	*Vitex peduncularis* Wall.
Shingra	*Cynometra ramiflora* Linn.
Samundarphal	*Barringtonia racemosa*
Mailam	*Bonea oppositifolia* Meissn.
Banak	*Cretaeva nervosa*
Passur	*Xylocarpus mekongensis* Piere.

Orchids

Vernacular/Common name	Scientific name
Ornamental orchid	*Vandopsis gigantca* (Lindl)
Blue Vanda	*Vanda coerulea*
Kuth	*Saussurea lappa*
Ladies slipper	*Paphiopedilum* spp.
Pitcher plant	*Nepenthes khasiana*
Red vanda	*Ranantherа inchootiana*
Bulbo phyllum	*Bulbophyllum roxburghii* (Reich.)
Duthie	*Eulophia mackinnonii* (Duthie.)
Cymbidium	*Cymbidium aloifolium* (Linnaeus.)
Dendrobium	*Dendrobium maccarthiae*
Dendrobium	*Dendrobium macrophyllum*
Dendrobium	*Dendrobium nobile*
Dendrobium	*Dendrobium primulinum*

Some Recommendations :

- We need help of CITES secretariate for NDF study and field visit of Plant Committee allocation of quatos for agarwood plantation forest.
- We need capacity building training support on CITES activities.
- Employment of trained manpower in airport, sea port and land ports to stop illegal, hunting ,poaching and trade of animal and plants species.
- Institutional and logistic support for monitoring CITES implications.

Bhutan

NDF on *Aquilaria malaccensis*

BHUTAN

- Bangladesh, Bhutan, India, Malaysia, Myanmar, Philippines, Singapore & Thailand (Grierson & Long, 1991; CITES, 2003)
- Bhutan (Samdrup Jongkhar-Deothang, Gelephu, Sarpang, Pangbang
- Evergreen Tree (4om tall & 1.5-2.5m dia) & Flower and fruit at 7-9 years and medium sized trees produce 1.5kg seeds max, shade tolerant when young and may generate in pure patches under mother trees
- Mixed broadleaved (0-1000masl), rocky, sandy, calcareous, well drained slopes and ridges and land near swamps with rainfall:2000mm/annum

- No data on role of spp in the ecosystem
- No data on global population size: decreasing by 20% over last 3 gens (Hilton-Taylor, 2002)
- Global conservation status: VU (2002 IUCN Red list) & included in the world list of threatened trees (Oldfield *et al*, 1998)
- Bhutan-totally protected listed under schedule I of FNCA, 1995.
- Main threats-both legal and illegal harvesting and the scale of threat is unsure
- Utilization and Trade: The wood and the fragrant resin among the finest and the most valuable NTFP, numerous uses & include curative qualities & aromatic properties and even for religious & traditional Bhutanese medicine
- International trade with this species is prohibited in Bhutan
- Extractive harvesting through special permit from DoFPS

Implementation of the review of significant trade

- No exports have been recorded from Bhutan (Dr.Sangay Wangchuk, in Litt.to TRAFFIC South East Asia, 2003).

Legal acquisition findings

- FNCA, 1995-Chapter V,19 a &b and 20 on Transport and Trade (Import & Export) of Forest Produce states :
- 19(a) 'The Ministry may issue rules regulating the transport, import and export of forest produce including requirements that permits be obtained'.
- 19(b) 'Violation of rules issued under this section is an offence punishable with imprisonment which may extend to 3 months or a fine equal to the fair market value of the forest produce illegally transported, imported or exported, or both; and in addition any such forest produce, or the proceeds from the sale thereof, shall be confiscated'.
- 20.Unclaimed Timber- "Any timber found beached, stranded, or sunk, and any other unmarked or unclaimed timber or other forest produce shall become property of the Royal Government if no person can establish a valid right of possession within one month after a notification has been published of its being found".

Mgt & Compliance monitoring regarding use, conservation & trade

- ITMS staff trained in harvesting, ToT to the plant collectors group
- DoFPS staff & ITMS fully deployed in the field during the harvesting time

Permitting Practices

- Till date only special permits/ approval given to the ITMS for collection & use in traditional medicine annually by the Department of Forestry & Park Services

China

Cistanche deserticola

- a perennial , parasitic herb, on roots of *Haloxylon* ssp
- restrict range to NW China and Mongolia
- key species to local dessert ecosystem
- threat_status: CR A2c (2004), 906 tons of stems from natural population(MA 2009)
- population details: unclear

•Significant traditional medicinal plant for long time
• Wild plants was forbidden to collect and export permits only issued for cultivated specimens

Direct Exports of Wild-Sourced from China

Term (unit)	Reported by	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
derivatives	Exporter			2	60000						60002
	Importer										
derivatives (kg)	Exporter	4200		1145.75	5963.22	325.3	223.37	0.36	3.63	200.90	12064.53
	Importer			90							90
dried plants	Exporter										
	Importer				100						100
roots (kg)	Exporter							89.28			89.28
	Importer										
specimens	Exporter										
	Importer				2						2
stems (kg)	Exporter		3750	2500							6250
	Importer			178.56							178.56

Source: CITES Trade Database, UNEP-World Conservation Monitoring Centre, Cambridge, UK

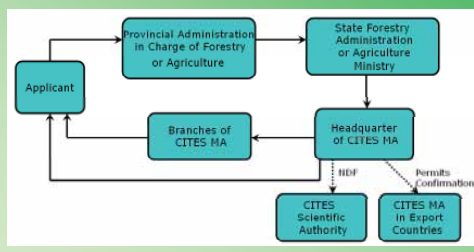
Legal Implements

C.deserticolar has been used as medicinal plants since 18 c

Now harvest of Wild *C.deserticolar* was banned
- Forest Law (1998 rev)
- Regulations on the Protection of Wild Plants (1997)
- State Council Notification(2000)
- XinJiang Reg.Regul.(2007)
- Inner Mongolia Reg.Regul.(2009)

Only cultivated products are allowed to export by law and regulations
- CITES framework
- Customs Law (1987)
- Regulations on the Import and Export Management of Endangered Wild Fauna and Flora (2006)

Procedure of Permits Issuance



Management and Compliance Monitoring

Survey on the wild population

Public aware and encourage of the sustainable use (join with other sector)

Registration of the export campony

Cooperation with other stake holds
Research Lab, SFA, Custom, Company

Global Amphibian Specialist Group

Asian Amphibian Conservation: Integrating Research and Protection

Photo: Jeet Sukumaran

Don Church, GASG Coordinator/CI
Claude Gascon, GASG Chair/CI

Simon Stuart, IUCN-SSC
Janice Long, IUCN-SSC
Neil Cox, IUCN-SSC

Indonesia

NDF OF AGAR WOOD (*Aquilaria* spp. & *Gyrinops* spp.) IN INDONESIA

T.Partomihardjo
Reseach Center for Biology, Indonesian Institute of Sciences
Jln. Raya Jakarta – Bogor Km. 46, Cibinong - Bogor
email: herbogor@indo.net.id

Agar wood producing species in Indonesia

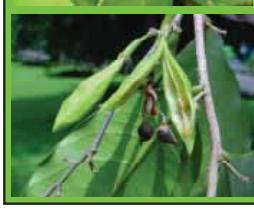
Species	Ecology (m asl) *	Distribution
A. beccariana van Tiegh.	Up to 825: primary forets	Sumatra, Borneo/Kalimantan, common
A. cumingiana (Decne) Ridl.	Medium altitude: in primary forest	South Borneo, Moluccas (Morotai & Halmahera),
A. filaria (Oken) Merr.	Up to 130: open swamp forest	Celebes, Moluccas: Morotai, Seram& Ambon, West New Guinea: Sorong & Babo)
A. hirta Ridl.	Up to 300: in hill slope from lowland forest	Riau, South Sumatra, Bangka, Belitung & other neighboring small islands (Bintan, Batam).
A. malaccensis Lamk.	Up to 270: common in primary forest	Sumatra, Borneo/Kalimantan &its surrounding small islands
A. microcarpa Baill.	Up to 200 at primary forest	Sumatra, Bangka-Belitung,Borneo/Kalimatan & other neighboring small islands)
G. decipiens nov. sp.	At 100 m, primary forest	Central Celebes (Warotoli, Palarabi)
G. ladermanii Domke	0 – 200 m: virgin forest – slope area, dense	New Guinea (Mt. Prince Laderman)
G. moluccana (Miq.) Baill.	± 100	Moluccas (Halamahera & Buru)
G. podocarpus (Gilg.) Domce	Up to 750, in primary forest	West Papua (Sorong, Monep)
G. salicifolia Ridl.	At 300 m, in fringing rain forest	Western New Guinea (Utakwa & Nabire)
G. verstigii (Gilg.) Domke	Up to 900	N.E. Celebes, Lesser Sunda Islands (Lombok, Sumbawa, Flores, Sumba) & West New Guinea)

Source of data: *Ding Hou, 1972, Wiriadinata, 1995, Soerhartono & Newton, 2001, Oyen & Nguyen Xuan Dung 1999.*

Density estimation of adult tree (> 10 cm dbh) of *Aquilaria* spp. in Sumatra and Kalimantan based on the analysis of NFI sample plots

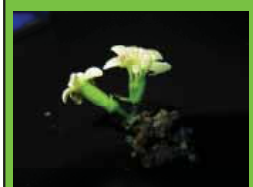
Location	No. of plots	Total area (ha)	Density per ha
SUMATRA			
Low land	15	135	0.47 ± 0.30
Up land	3	27	0.36 ± 0.17
KALIMANTAN			
Low land	24	216	0.83 ± 0.73
Up land	11	99	1.17 ± 1.09

Source data: *Soehartono & Newton, 2000*



Aquilaria beccariana

- Gaharu laut, mengkaras, puti, gumbil minyak
- Kalimantan, Sumatra
- Primary & secondary forest
- Lowland to 850 m asl.
- tree >40 m,
- Leaf ovate-wide elliptic 7,5 -12 x 5 cm
- Inflorescence umbel
- Flower 9-10 mm, tabung
- Fruit compress , acute at both ends 3-4 cm
- Seeds 2, brown, shining.
- Basal aril reddish brown, hairy



Aquilaria cumingiana

Gaharu

Celebes, Moluccas

Tree 10-20 m tall, 30 cm diam

Leaf elliptic oblong

Flowers tube 5-6 mm

Fruits ovate, yellow, mesocarp thick

Seeds (1) 2

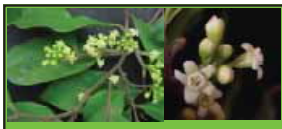
Aquilaria filaria

- Gaharu irian, lason (Seram), age (Sorong), bokuin (Morotai)
- Nusa Tenggara, Maluku, Papua,
- Lowland primary & secondary forest
- Tree >20 m, 30 cm diam
- Leaf elliptic oblong-lancet
- 10-20 x 3-6 cm
- Inflorescence umbel
- Flower tube,6-7 mm, lobes rounded
- Fruit ovate, yellow
- Mesocarp thick, 2,5 cm

Indonesia

Aquilaria hirta

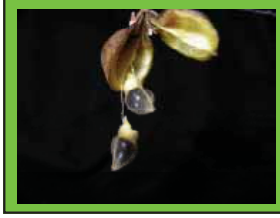
- Gaharu bulu, karas
- Sumatera, Malaysia
- Lowland
- Medium size tree15 m,
- Leaf and young branch densely vellous,
- Leaf widely ovate,15-16 x 8-10 cm
- Inflorescence umbel
- Flower 10 mm, tube green
- Fruit hairy, spindle shaped



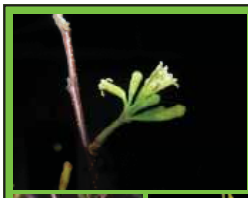
Aquilaria malaccensis

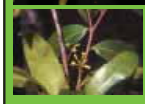
- Gaharu, karas, kekaras, mengkaras, galoop, halim
- India, Malaysia, Sumatra, Kalimantan, Philippines
- Primary & secondary forest, low-medium alt.
- Tree >40 m, > 60 cm diam
- Leaf elliptic oblong-lanceolate
- 7,5-12 x 2-5 cm
- Inflorescence umbel
- Flower cup-shaped 5-6 mm
- Stamen 10 (twice of petals)
- Fruit 3-4 cm, mesocarp thick

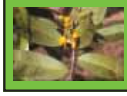
Aquilaria microcarpa



- Gaharu, karas, engkaras, mengkaras, galoop, halim
- Sumatra, Kalimantan
- Primary 7 secondary forest, low-medium alt.
- Tree >40 m,60 cm diam
- Leaf elliptic oblong-lanceolate
- 4-10 x 1,5-5 cm
- Inflorescences umbel to paniculate
- Flower 5 mm, cup shaped
- Fruit < 2 cm, mesocarp thin







Gyrinops versteegii

- Ketimunan, gaharu Lombok
- NTT, Maluku, Papua
- Lowland-submontane <1000 m
- Leaf elliptic
- Inflorescence umbel
- Flower calyx tube long, stamens 5
- Fruit ovoid oblong,
- Seed black, shining with white aril

TRADITIONAL MANAGEMENT OF AGARWOOD (*A.malaccensis*) IN EAST KALIMANTAN

Seedling of *A. malaccensis* under the mother tree

Mother tree grown in traditional garden

Traditional inoculation method

Nursery by local people

Agar wood products from traditional inoculation

UTILIZATION AND MANAGEMENT OF AGARWOOD (*A.malaccensis*) IN SUMATRA

Natural population of *A.malaccensis* in old traditional rubber plantation

Agarwood pilot project plantation

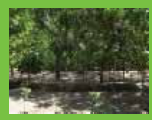
A.malaccensis nursery in Bengkulu, Sumatra

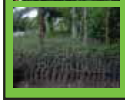
A big mother tree of *A.malaccensi in the village of Tasik Betung - Sumatra, with > 80 cm in diameter*

Indonesia

Cultivation

Fast growing trees, more than 5 m tall within 5 years
Germination from seeds 90%,
Monoculture or mixed with other plantations
Start flowering and fruitsing within 5-6 years

About 96 locations (total 2000 ha) of gaharu plantation are recorded ,
Sumatra: Riau: PT Budi Daya Perkasa (15 ha), CV. Megah Aroma Utomo (3 ha), CV. Subur Raya (3.5 ha); Jambi:Pulao Aro (30 ha); Lampung (10 ha); Mentawai (2 ha); Palembang Gerhan (300 ha)
Kalimantan: East: PT Sumber Alam Jaya (3 ha), CV Kuda Mas (2 ha), Local governments Pasir (50 ha), Kutai (26 ha), Samboja (20 ha); Central: (2 ha); West: Mandor (40 ha)
Java: Bogor (2 ha), Banten (19 Ha); Surabaya (2 ha)
L. S. Islands: Bali (4 ha); Lombok (300 ha)
Celebes: CV Wana Gubal (1 ha), Sinjai (5 ha), Toraja (2 ha)

Source: Asgarin 2006

Technics to stimulating agar wood production

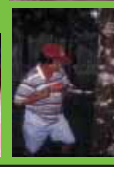
Agar wood or resin is result of a unique process called phyto- elecsine cause by some fungi such as *Fusarium, Pythium, Diplodia, Penicillium, Aspergilus*
Very slow process that takes years
New technology to stimulate the process faster



Research on agar-wood inoculation

In Bengkulu by University of Bengkulu
In Riau by Litbang Hutan, SEAMEO-Biotrop, LIPI
In Bogor by SEAMEO Biotrop- IPB, Litbang Hutan
In Lombok – by University of Mataram
In East & West Kalimantan by Forest Departments, LIPI as well





Grade / classification of quality:
Gubal gaharu- Super, AB, BC, TG, C1, Sabah,Tri

Kemedangan- C2,TA1,2,3, Abu, Tri B,C

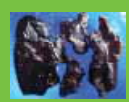
Dust
Oil

(Quality of incence depend on: Color, aromatic, size and shaped)





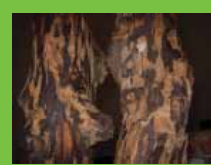



Export: Singapura, Taiwan, Malaysia, Japan, Arab Saudi, Uni Emirat, …

Other species which have potential value to produce aromatic resin

Thymeleaceae:
Aetoxylon sympetalum
Enkleia malaccensis
Wikstroemia polyantha
Wikstromia tenuiramis



Gonystylaceae:
Gonystylus macrophylla
Euphorbiaceae:
Exoecaria agallocha
Papilionaceae:
Dalbergia parviflora

Estimate of the total population of adult trees (> 10 cm dbh) of *Aquilaria* spp.in Sumatra and Kalimatan based on density estimation from NFI sample plots

Location	Forest area (x1000 ha)	Population size (a) (x 1000)	Population size (b) (x 1000)
SUMATRA			
Low land	13,934	6,548.9 ± 4,180.2	418.0 ± 418.0
Up land	3,348	1,205.3 ± 569.1	133.9 ± 133.9
KALIMANTAN			
Low land	31,199	25,995.2 ± 22,775.6	1,559.9 ± 1,559.9
Up land	1,790	2,094.3 ± 1,951.1	483.3 ± 129.6

Source : *Soehartono & Newton, 2000*

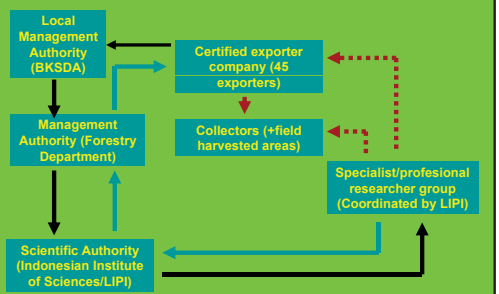
EXPORT QUOTA OF AGARWOOD

Years	Malacensis groups		Filaria groups		Remarks
	Kuotas	Realisation	Kuota	Realisation	
1996	300,000	299,986			
1997	300,000	341,497			
1998	150,000	124,313			
1999	300,000	74,616			
2000	225,000	52,194			
2001	75,000	72,426	125,000	125,000	Including Gyrinops spp.
2002	75,000	50,000	125, 000	125,000	Including Gyrinops spp.
2003	50,000	49,585	125, 000	125,000	Including Gyrinops spp.
2004	50,000	50,000	125, 000	124,500	Including Gyrinops spp.
2005	50,000	49,919	125,.000	125,.000	Including Gyrinops spp.
2006	50,000	50,000	125, 000	121,505	Including Gyrinops spp.
2007	35,000	35,000	65,000	65,000	Including Gyrinops spp.
2008	30,000	30,000	60,000	60,000	Including Gyrinops spp.
2009	173,250	29,520	455,000	128,327	Including Gyrinops spp.
2010	162,500	?	489,700	?	Including Gyrinops spp.

Data source: *Cites-MA*

Indonesia

PROCEDURE FOR QUOTA SETTING OF AGAR WOOD BASED ON NON DETRIMENT FINDING

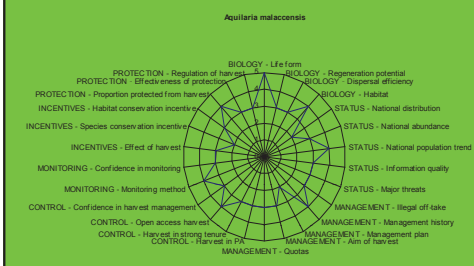


DATA SOURCES FOR QUOTA SETTING OF AGARWOOD (ANNUAL HARVEST)

- Field sampling by working group of agar wood in main producing areas
- Actual production data of Agar wood from exporters, forestry district offices, association, local traders, farmers
- Report data on target and realization of annual export

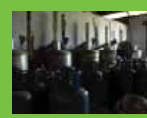

Mother tree of *A. malaccensis*

NDF radar diagram of *A. malaccensis*



Source: Indonesia CITES document

Processing, dissemination products

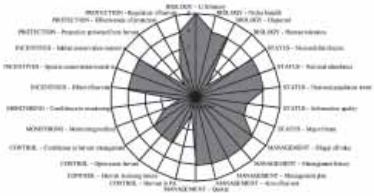


India

Non-detriment Findings &Review of significant Trade for *Pterocarpus santalinus*

Maheshwar Hegde
Chandra Rawat
INDIA

Pterocarpus santalinus NDF study-Radar Plot



GEOGRAPHICAL DISTRIBUTION OF RED SANDER

- The distribution of this plant species is restricted to an elevated position of parts of Chittoor, Cuddapah and Nellore districts of Andhra Pradesh, South India, particularly in the hill ranges of Seshachalam.
- Now the distribution reduced to < 5000ha area
- Populations are fragmented

POPULATION STATUS AND THREATS

- *Pterocarpus santalinus* was classified as *endangered* in the 1997 *IUCN Red List of Threatened* Plants (Walter & Gillett 1998) based on results of Conservation and Assessment and Management Plan (CAMP) workshops for plants of southern India in 1995 and 1997. The species is similarly assessed as *Endangered* in the *World List of Threatened Trees* (Oldfield & al.1998) and the 1994 IUCN Red List due to its small range, fragmented populations and continuing decline (IUCN 2006).

POPULATION STATUS AND THREATS

- Habitat in the Central Deccan Plateau is considered under severe threat from conversion to cash crop plantations, fuel wood collection, and overgrazing by cattle (Rawat & al. 2001).
- According to an Andhra Pradesh Forest Department, there are very few specimens of harvestable size in the State Forests. Illegal harvest continues to be considered a key threat.

REVIEW OF SIGNIFICANT TRADE

- 15th CoP held at Doha directed the Range State of ***Pterocarpus santalinus*** **that parties should ensure** the implementation of regionally co-ordinated actions to improve the management of the seven species and ensure that the trade therein is legal, sustainable and traceable.
- These measures could include, inter alia, the organization of regional capacity-building workshops, the improvement of methodologies to make non-detriment findings and determine legal acquisitions, the harmonization of management and compliance measures, and development of incentives to prevent illegal trade.

India

MEASURES TAKEN BY MANAGEMENT AUTHORITY OF INDIA

- Capacity building workshops have been conducted
- NDF studies with improved methodologies has been taken up for *Pterocarpus santalinus*
- Research institutes/Forest Departments are developing techniques to promote cultivation of the species in farm land.
- Inclusion of *Pterocarpus santalinus* under the Schedule of Wildlife (Protection) Act, 1972 is under consideration.

MEASURES TAKEN BY MANAGEMENT AUTHORITY OF INDIA

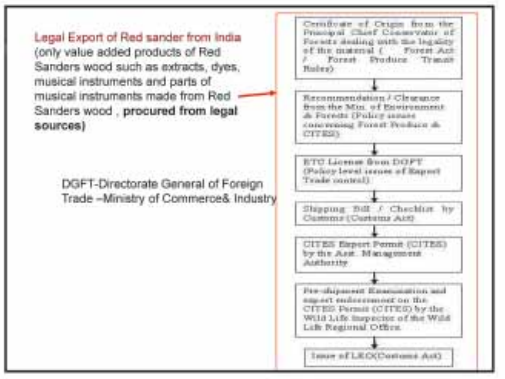
- Export of *Pterocarpus santalinus* wood in any form whether raw, processed or unprocessed obtained from wild or cultivated sources are prohibited.
- As per CITES provisions, export can only be allowed in the listed species of Appendix II, if a Non-Detrimental Finding (NDF) is conducted by a Scientific Authority. At present the NDF for this species is lacking in India.

LEGAL PROTECTION

1. Tamil Nadu Timber Transit rule
2. Andhra Pradesh Timber Transit rule
3. Wild Life (Protection) Act 1972 & amendments -Prohibit any removal of trees including *Pterocarpus santalinus* from Protected Areas
4. Indian Forest Act-Unauthorized possession, transportation of timber is a cognizable offence
5. The Foreign Trade Policy which is an instrument under the Customs Act, 1962 totally prohibits export of Red Sanders in any raw form such as logs, sawn timber, chips, powder etc. both from wild or cultivated variety (except value added products extracts, dyes and musical instruments)
6. Violations of export policy invite the punishment under the Customs Act such as imprisonment extending upto 7 years and fine or both.
7. Any seized/confiscated Red Sanders wood is allotted to the artisans through the Andhra Pradesh Handicrafts Development Corporation, Hyderabad with a direction that the material brought back should not be sold/auctioned to private parties

EXPORT OF *Pterocarpus santalinus* UNDER EXIM POLICY

- The export of ***Pterocarpus santalinus*** can be allowed if the NDF study is in place.
- Presently NDF study for ***Pterocarpus santalinus*** is under process.

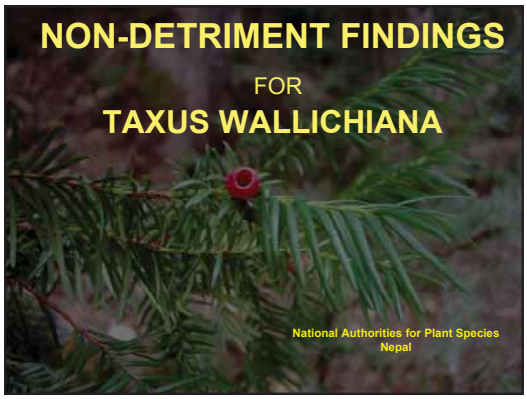


Nepal

NON-DETRIMENT FINDINGS

FOR

TAXUS WALLICHIANA



National Authorities for Plant Species
Nepal

BACKGROUND

Family - Taxaceae
***Taxus baccata* auct. non L.; *Taxus baccata* subsp. *wallichiana* (Zucc.) Pilg.**
English name - Himalayan yew
Local Name - Talispatra, Lauthsalla,
.

Distributed in the Northern hemisphere that includes North America, All Europe, Northwest Africa and North Asia from Iran to China.
at the elevation range of 1800-3300m.

BACKGROUND

- Reported to be distributed throughout 39 districts of Nepal. Found in association with Silver fir, Kharsu Oak and sometimes with Spruce as an understorey in Fir Forest.
- A strongly shade-tolerant, evergreen tree usually 6 to 20m in height with a trunk up 2m.
- Bark reddish brown, thin scaly, leaves distichious, linear with recurved margin, shining above, pale yellowish brown below.
- Diocious, male stobili stalked, globose arising from the axils of the leaves on the under side of the branchlets and female strobili solitary, axillary.
- Growth rate slow, woody is hard and durable.
- Conservation status is little known and vulnerable due to over exploitation

MANAGEMENT

- No detailed management plan for hill districts. Instead a five -year working schemes are prepared for the management.
- Management history of Taxus is not very old, importance recognized only in 1995 after Dabur Nepal was allowed collection and harvesting of 800 MT of leaves from 9 districts of Nepal. Management prescription included in the working schemes after 2000. No separate scheme or plan exists for the individual species.
- Management objectives include meeting the forest product needs of people and of industry on sustained basis, generating local employment and promoting natural and artificial regeneration.

MANAGEMENT

- Main elements of scheme include yield estimation of leafy biomass, fixation of lopping cycle and method of harvest, monitoring, seedling production and plantation, biodiversity conservation.
- Restoration measures includes protection of natural regeneration and promotion of artificial plantation. Officially negligible work done so far. Dabur Nepal has been producing seedlings and distributing farmers for cultivation in private lands since 1995.
- Field staff like forest guards and rangers responsible for monitoring but weak due to difficult terrain and paucity of staff in many districts as a result irregularities reported in harvesting leading to the death or heavy damage to trees in many places.

Legal framework and law enforcement

- Forest management, harvesting and sale of forest products are governed by the forest law.
- Illegal cutting of trees or harvesting leaves is a forest crime and punishable by the Forest Act, 1993.
- Trees are not allowed to cut on account of its medicinal value but needles can be harvested with permission of DFO.
- Export of Taxus leaves in unprocessed form is banned by the law and is punishable involving seizure of material with fine according to the value of product or 5 years imprisonment or both.
- Taxus baccata has been included in CITES, Appendix II and can be exported with CITES certificate. CITES implementation law is in pipeline.

Nepal

Harvest Regime

- Trees above 20cm diameter are selected for harvest. The main parts harvested are leaves and twigs below 1.5 cm
- Harvest takes place from March-June and Oct-December .
- Harvesting is done from secondary branches up to 2/3 portion of crown leaving upper 1/3 untouched.
- The yield of leaf clippings varies from 15-25 kg per tree (green weight).
- A three-year rotation has been fixed for harvesting.
- Clippings are gathered, bundled and taken to depots. Dried in shade for 4-5 days ensuring moisture level at 10%. Dried leaves are packed in jute sacks and sent to the factory.

Harvest Management/Control

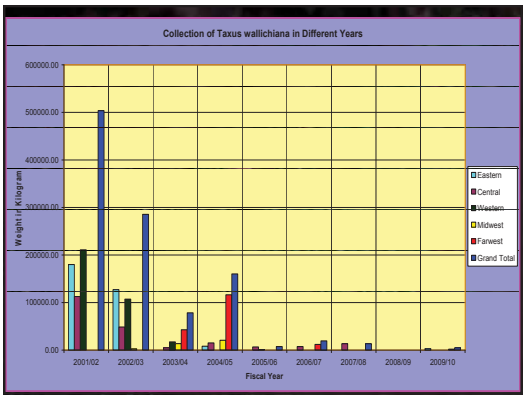
- At present non of the company has got quota for harvest from the government. Dabur Nepal has closed its factory while Machhapuchre Herbal and Natural Flower and Herbal Pvt. Ltd are still hopeful of getting agreement done between them and the govt getting quota fixed.
- First company to be established was Dabur Nepal in 1995. It received a quota of 800 MT/yr for 5 yrs which was extended for another 5 yr in 2000 but cancelled in 2003 due to failure in complying with the condition of harvest.
- Similarly, Machhapuchre Herbal established in 2001 and and Natural Flower and herbal established in 2002 got a quota of 800MT and 400 MT respectively for 5 yrs. Their quota not extended failing to prepare EIA reports in time.

Harvest Management/Control

- New Regulations stipulates that instead of providing quota to companies, the government will auction Taxus leaves through its DFOs according to the allowable cut prescribed in the schemes. CFUGs can also auction if OP permits.
- Company has to follow rules fixed for harvesting.
- District Forest Officers verify the quantity collected, collect associated fees, and issue a "release order", which is required to transport harvested products out of the district of origin.
- The release order should state: the species and quantity transported, the destination and the period in which transportation must take place.
- Department of forests provide export permit of semi-processed products.

Legal and Illegal

- Table 1 shows the total quantities sold through DFOs by the government between 2001-2010. However, it does not include small quantities sold by CFUGs from their community forests.
- From the table it can be inferred that collection was less that quota fixed and virtually no sale after 2007.
- Illegal harvesting of leaves is believed to exist in small quantities probably not exceeding 10 MT/yr especially from the eastern part of the country and most of these cross the boarder though different names.



CHALLENGES OR DIFFICULTIES FOR ELABORATION OF NDF

- Inadequate knowledge on the size of the present population and trends in the rate of resource decline (or if decline is taking place).
- Occurrence of this species in remote and inaccessible terrain makes management and monitoring of harvesting work difficult.

Myanmar

Capacity-building on 'Non-detriment findings and Review of Significant Trade for plant species'
Kathmandu City, Nepal,
from 9 to 11 January 2011.

Non-detriment finding on
Rauvolfia serpentina (L)Benth
in Myanmar

Mr. Maung Maung Than, Director, Training and Research Development Division, Forest Department.
Mr. Thein Aung, Assistant Director, Nature and Wildlife Conservation Division. Forest Department.

Rauvolfia serpentina (L)Benth

Biological data

- Common Name
  Rauvolfia root, Serpentine root, Snakewood (Eng.) Bon-ma-ya-zar (Mya.)
- Distribution
  Abundantly in natural Evergreen and Moist deciduous Forest of Myanmar as an understory species. (Kachin, Kayin, Shan, Sagaing, Bago and Mandalay)
- Population
  Unknown. (Abundant natural regeneration)
- Conservation status
  The species in not protected within national legislation.
- Management Plan
  There is no management plan for restoration or alleviation
- Utilization and trade
  The species is collected and traded mainly for domestic use in indigenous medicines.

Legal acquisition Findings

- The species is not yet protected within national legislation in Myanmar.
- Harvesting are controlled via the Forest Law and The Protection of Wildlife and Conservation of Natural Areas Law.
- Annual harvest quotas are set by the Forest Department based on information provided by foresters in their forestry operation reports.
- Regular forest operations are undertaken annually under Myanmar's Forest Management System.

Permitting practices

- CITES Management Authority have never issued export permits.
- FD allows collection as a non-timber forest product and issue bills.
- Just over 52,000 kg was recorded as harvested in the financial year 2006-07 and just over 16,000 kg between 1 April 2007 and September 2007. From 2001 to 2004 the FD allowed around 70 t (fresh weight) to be harvested for domestic use.

Briefly description

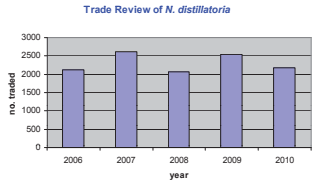
- Management
  - The species is not yet protected within national legislation, however harvests are controlled via the Forest Law and the Protection of Wildlife and Conservation of Natural Areas Law.
  - No scientific surveys have been undertaken of this species.
  - No monitoring system on the use of this species.
  - CITES Management Authority have never issued export permits.
  - No management plan.
  - Current level of harvest will not adversely affected population.
  - Some small-scale trial plantations for local medicinal supply have been established.

Sri Lanka

Nepenthes distillatoria

- a tropical pitcher plant endemic to Sri Lanka
- grown in waterlogged open scrub
- distribution is restricted to lowland rain forests
- conservation status: vulnerable (IUCN)
- population size: unknown

- Major threat: Habitat loss and invasive species
- Used for commercial purposes (ornamental plant)
- Permits issued only for artificially propagated specimens



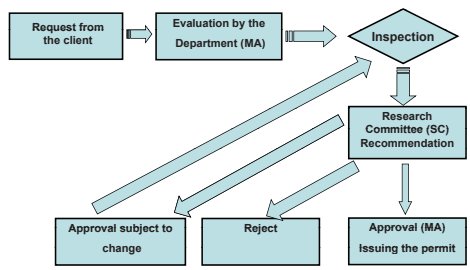
Legal acquisition

Before CITES came into effect the exporters had started business on *Nepenthes* spp. as ornamental plants.

Now wild collection is banned.

Only tissue cultured products are legally exported to other countries, all the data available at the CITES management authority

Permitting Practice



Monitoring

Biodiversity Protection Unit established by Sri Lanka Customs

Recent Detections

- Under-sized Chank Container Trapped
- Illegal Plants and Seeds Transporter Captured
- Illegal Export of Butterfly Cocoons
- Calamander seedlings, detected when smuggling out
- Sandalwood, detected at Departure lounge

Annex 5 : Statement of Expenditures

S.N.	Particular	Days	No. of Participants	RATE	Estimated Cost (US$)	Actual expenditure	Differeces	Remarks
1	**Allowances/Accomodation for Participants of the workshop**							
	Participants (international) daily allowance for pocketmoney 4 days	4	16	142	3180.80	2584.5	596.30	No participation from Pakistan but two additional Nepalese participants
	Participants (international) DSA 1 day	1	16	142	2272.00	1846	426.00	
	Accomodation with breakfast in five star hotel for international participants only	4	16	85	5440.00	5100	340.00	four night extra (two night for Bhutan and two night for China)
	Sub Total				**10892.80**	**9530.5**	**1362.30**	
2	**Two way air fare and transportation for participants**							
	Bangladesh		2	390	780	780		
	Bhutan		2	640	1280	1280		
	China including one regional representative		2	860	1720	1720		
	India		2	396	792	792		
	Pakistan		2	870	1740	870	870	one ticketed not refunded
	Myanmar		2	1613	3226	3226		
	Srilanka		2	1258	2516	2516		
	Indonesia (Regional representative)		1	1250	1250	1250		
	Airport transfer for international participants	2	18	5	180.00	180		
	transportation cost for all local participants for 3days		31	10	310.00	310		
	Sub Total				**13794.00**	**12924**	**870**	
3	**Stationary & Training Materials**							
	Bag packs for participants and observers		35	40	1400	1400	0	
	Stationary & Training Materials				500.00	500	0	
	Photo copies				300.00	300	0	
	Sub Total				**2200.00**	**2200**	**0**	
4	**Refreshment**							
	Break fast for national participants and organising committee members	3	8	10	240	340	-100	included 10 more
	Tea Coffe cookies for three days during ws		82	3	246	372	-126	42 more participated in Inaugural/opening session along with minister and secretary of ministry of Forest and Soil conservation
	Buffet Lunch for three days		82	10	820	820	0	
	Cocktail Reception Dinner	1	45	15	675.00	1500	-825.00	27more participated with drinks including invitees and drivers
	Sub Total				**1981.00**	**3032**	**-1051.00**	
5	**Equipments and publication**							
	Laptop with printer (purchase)	1		1000	1000	1000	0	
	Editing and Publication of ws Proceeding	1		1500	1500	1500	0	
	Sub Total				**2500**	**2500**		
	Total				**31367.80**	**30186.5**	**1181.3**	
6	**Secretarial Services, Management expenses and Miscelleneous**				**3136.78**	**3136.58**	0	
	Grand Total				**34504.58**	33323.08	1181.3	

	List of Participants in the Workshop	
1	Representative from 8 member countries (2 from each country)	16
2	Regional representatives	1
3	Representative from Geneva	2
4	Observers from hosting country including organising committee members	13
	Total no.of mandays during three work shop days	**82**

It varied on different days of ws

Total Estimate **34504.58**

Actual Expenditure : **33323.08**