

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

Eleventh meeting of the Conference of the Parties
Gigiri (Kenya), 10-20 April 2000

Strategic and administrative matters

Committee reports and recommendations

Plants Committee

REPORT OF THE CHAIRMAN

Introduction

1. This report covers the period from July 1997 to December 1999. During this period the Plants Committee met on two occasions (eighth meeting in Pucon, Chile, 3 – 7 November 1997; ninth meeting in Darwin, Australia, 7-11 June 1999).
2. The Plants Committee comprised the following representatives of the six regions:

Region	Regional Representative	Alternate
Africa	Mr Jameson H. Seyani (Malawi) Mr Rejdali Moh (Morocco)	Mr John Donaldson (South Africa) M. Pontien Ndabaneze (Burundi)
Asia	Mr Zulmukshar Shaari (Malaysia) Mr De-yuan Hong (China)	Mr Wichar Thitiprasert (Thailand) Mr Dwiatmo Siswomartono (Indonesia)
Central and South America and the Caribbean	Mrs E. Mora de Retana (Costa Rica) Mrs Lúcia Helena de Oliveira (Brazil)	Mrs Fatima Mereles (Paraguay) Mrs Marga C. Werkhoven (Suriname)
Europe	Mrs Margarita Clemente Muñoz (Spain) Mr Jan de Koning (Netherlands)	Mr Dieter Supthut (Switzerland) Mrs Hanna Werblan-Jakubiec (Poland)
North America	Mr Bertrand von Arx (Canada)	Mr Carlos Llorens Cruset (Mexico)
Oceania	Mr Greg Leach (Australia)	Mr Osia Gideon (Papua New Guinea)

PC Meetings

3. At an informal meeting during the 10th meeting of the Conference of the Parties, the newly elected members of the Plants Committee present in Harare provisionally nominated Mrs Margarita Clemente (Europe) as Chairman of the Plants Committee. This nomination was later confirmed by the other members of the Plants Committee. At its eighth meeting, the Committee elected Mr Bertrand von Arx (North America) as its Vice-Chairman.
4. Almost all members participated in the two meetings. At the eighth meeting one representative of Africa was replaced by his alternate, and one representative of Asia was replaced by his alternate. One representative of Asia was absent from the ninth meeting and replaced by the alternate; One

representative of Africa was at the latest moment prevented from coming, and could not be replaced by the alternate.

5. The minutes of the eighth and ninth meeting have been sent to the Parties; additional copies are available from the Secretariat.
6. It is pleasing to note that the increase in the number of observers from Parties and non-governmental organizations attending PC meetings, observed in the period 1992-1996 [see document Doc. 10.16 (Rev. 2)], has stabilized. The number of participants at the eighth meeting was 74 from 39 countries (35 Parties and 10 non-governmental organizations); the ninth meeting was attended by 72 participants from 28 countries (25 Parties and 14 non-governmental organizations).
7. The high number of Parties participating in the eighth meeting was a result of the fortunate fact that the Secretariat had been able to organize a training seminar of three days, preceding the meeting. Financial support for travel and subsistence for many Parties in the region was received from the Management Authorities of the Netherlands and the United States of America and from the Ministry of Foreign Affairs in the United Kingdom.
8. The Committee was very pleased to be able to meet for the first time in Oceania with simultaneous interpretation into the three working languages of the Convention after having had only simultaneous interpretation into English and Spanish at three earlier meetings. This will certainly increase the future participation of francophone Parties.
9. During its ninth meeting the Committee also adopted its Rules of Procedure. Identical ones were later also adopted by the Animals Committee.
10. During the ninth meeting of the Plants Committee the preparation of comments on the draft of the Strategic Plan of the Convention was given high priority. Great attention was also given to the preparation of the Action Plan for the Plants Committee and action points for others involved in the implementation of the Strategic Plan.

Major Issues

Regional reports and regional representation

11. At its eighth meeting the Plants Committee agreed to a standard format for the presentation of regional reports.
12. At the ninth meeting, four regions (Central and South America and the Caribbean, Europe, North America and Oceania) presented their reports in the agreed format. A number of problems were identified with regard to the functions of the regional representatives, largely caused by the absence of a clear description of their tasks. Several of the representatives did not receive adequate financial support from their home country to carry out their work in a correct manner. The Plants Committee prepared a list of possible tasks which was submitted for consideration at the 42nd meeting of the Standing Committee. The Standing Committee requested the Secretariat to incorporate this in its document on the permanent committees, subject of discussion elsewhere on the agenda.
13. Equally important is the necessity for the regional representatives to maintain a fluid communication between themselves, and with their alternates. The Plants Committee considers it important that the work of a regional representative maintains continuity in time, so that information can easily be transmitted to the person who is going to succeed him or her.
14. Regional meetings are equally important, not the least for permitting the regional representative to maintain good contact with the Parties in the region that he or she is representing. This has been clearly demonstrated in Europe, where regional meetings were held in Bulgaria and in the Czech Republic.
15. With respect to the budget, the Plants Committee has already asked the Conference of the Parties at its 10th meeting for additional funds to support the regional representatives and regional activities. The Committee therefore felt it appropriate to request the Standing Committee to allow some

flexibility in using the funds allocated to it in case these were not all used for the organization of the regular meeting. The Plants Committee reiterated its request for specific budget lines that could be used directly to support the regional representatives and regional meetings. At its 42nd meeting the Standing Committee responded positively to this request, and also agreed to allocate some additional funds for the budget of the Plants Committee for the year 2000. See also the paragraphs 32 – 36 below.

16. The Plants Committee will continue to develop and maintain specific regional directories with details of the individuals in the Management and Scientific Authorities of each Party in the region that are dealing with CITES plant issues. These directories are essential for communication within each region. Manuals for two regions (Europe and North America) have now been completed. The Committee will consider mechanisms to include these on a Web site.

Significant trade

17. At its 10th meeting (Harare, 1997), the Conference of the Parties approved document Doc. 10.56 on significant trade in Appendix-II plant species. Part of the approved programme of work was a series of projects related to the study of particular taxa, patterns of trade, or trade from particular countries in particular taxa.
18. The information obtained from these studies was relevant for the development of a draft resolution on trade in wild-collected plants, for consideration at the 11th meeting of the Conference of the Parties.
19. Since the 10th meeting of the Conference of the Parties, five projects have been implemented by the Secretariat through various consultants
 - Survey of the orchid trade in Thailand
 - Survey of the orchid trade in China
 - Trade in *Galanthus* and *Cyclamen* in Turkey and Georgia
 - Implementation of the Appendix-II listing of *Aquilaria malaccensis*
 - Implementation of the Appendix-II listing of *Nardostachys grandiflora* and *Picrorhiza kurrooa*.
20. Summaries of these projects, prepared by the Plants Committee's co-ordinator for significant trade studies are included in the Annex to this document.
21. At its ninth meeting, the Plants Committee also discussed a draft resolution relating to trade in wild plants, having a structure similar to Resolution Conf. 8.9, and serving the same purpose, to assist Parties with the implementation of Article IV, paragraph 2(a) and 3. The Committee also agreed that it would be ideal to have only one resolution on plants and animals.
22. The final result on this subject is included in a separate agenda item of this meeting, but the Committee would like to indicate that the discussion on the subject at its ninth meeting was greatly facilitated by having the Chairman of the Animals Committee participate.

Review of the Appendices

23. At its eighth meeting the Plants Committee discussed and approved a programme of work for the Review of the Appendices. This programme was communicated to the Parties through Notification to the Parties No. 1009 of 19 December 1997.
24. More than 300 taxa were reviewed, and the results of the review were discussed at the ninth meeting, and recommendations made. The Committee is grateful to Australia, Canada, Italy, the Netherlands, the United Kingdom and the United States of America for their contributions to the process.
25. On behalf of the Plants Committee, the Secretariat has communicated the recommendations to the range States concerned.

26. The Plants Committee is grateful to the Depository Government (the Swiss Confederation) for presenting most of the proposals resulting from the review, on its behalf, to the 11th meeting of the Conference of the Parties.
27. The Plants Committee is also pleased to note that the methodology it applied for this review is now being used by the Animals Committee.

Identification Manual for flora

28. At its meetings, the Plants Committee also paid attention to the development of the Identification Manual for flora.
29. It is a pleasure to note that the first volume was published in 1999, and the work on this manual is progressing well.

Training materials

30. With respect to the preparation of training materials, the Committee would like to draw attention to a special slide pack on CITES and plants prepared by members of the Scientific Authorities of the United Kingdom, Spain, Italy and the Netherlands. Financial support for this was received from the Management Authority of the United Kingdom and from the Trust Fund. The Secretariat has distributed the slide pack to all Parties. The Scientific Authority of Germany prepared a training manual on the identification of medicinal plants.
31. The Plants Committee wholeheartedly supported the initiative of Spain to organize a University Masters course, duration 500 hours, on 'Management, conservation and control of species traded internationally'. The first course (13 April to 4 July 1998) was attended by 25 participants from 14 countries, the second (4 October to 17 December 1999) by 28 participants from 14 countries.

Budget for the Plants Committee

32. The Conference of the Parties at its 10th meeting, approved a budget of CHF 50,000 for each of the years 1998, 1999 and 2000.
33. It also decided that the budget of the Plants Committee should be reviewed to provide simultaneous interpretation into the three working languages of the Convention. As a consequence CHF 21,000 was added to the Plants Committee budget by the Standing Committee at its 40th meeting.
34. At its 42nd meeting, the Standing Committee discussed some issues related to the cost of simultaneous interpretation and the need for some flexibility in the Plants Committee's budget in order to be able to accommodate costs related to activities other than the regular meetings. For that reason an additional CHF 20,000 was added to the Plants Committees budget for the year 2000.
35. The Plants Committee believes that with an annual budget of CHF 90,000 it can adequately carry out its work and equally ensure that expert interpretation into the three languages of the Convention can be provided at each regular meeting of the Committee.
36. The Plants Committee therefore recommends that the Conference of the Parties, at its 11th meeting, approves the annual budget of CHF 90,000.

Working programme of the Plants Committee until the 12th meeting of the Conference of the Parties

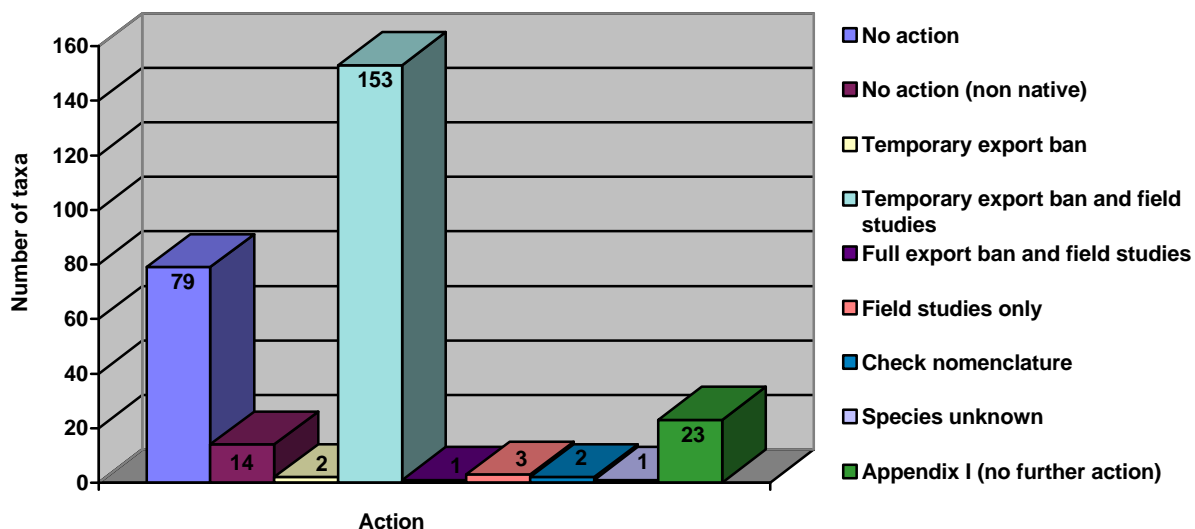
37. At its ninth meeting, the Plants Committee agreed to incorporate the following important tasks in its working programme until the 12th meeting of the Conference of the Parties:
 - a) To implement the Action Plan of the Plants Committee resulting from the adoption of the Strategic Plan for the Convention at the 11th meeting of the Conference of the Parties.

- b) To continue the process of the review of the appendices, applying the criteria included in Resolution Conf. 9.24. The family Orchidaceae and a number of succulent taxa were already selected at the ninth meeting of the Plants Committee.
- c) To implement the new resolution on significant trade in Appendix-II species, once adopted by the Conference of the Parties, at its 11th meeting and to continue the implementation of the programme of significant trade in plants, as adopted at the 10th meeting of the Conference of the Parties.
- d) To participate in the process of the revision of the criteria for the inclusion of species in the appendices (Resolution Conf. 9.24), as adopted by the Conference of the Parties, at its 11th meeting.
- e) To support the Secretariat in its work on the development of a programme to assist Scientific Authorities in making non-detriment findings in accordance with the provisions of Article IV of the Convention.
- f) To take responsibility for the scientific analysis of problems related to the international trade in plants, in order to provide scientifically based findings for the drafting of proposals that could be presented to meetings of the Conference of the Parties.
- g) To collaborate with the Identification Manual Committee, when requested, in the preparation of sheets on the identification of plants.
- h) To collaborate with the Nomenclature Committee, when requested, in the preparation of checklists.
- i) To promote the organization of regional meetings, and to improve the co-ordination between regional representatives.
- j) To strengthen the work of the regional representatives by developing and maintaining regional directories to: (1) identify more botanists in the Parties that can be contacted on CITES plants issues; (2) inform Management Authorities about the importance of plant issues and the need for proper scientific expertise and budget; (3) stimulate Parties to identify at least one botanist for their Scientific Authority; and (4) to tighten links between the Scientific Authority and the Management Authority.
- k) To improve representation and participation of French speaking Parties at Plants Committee meetings.

Summary of projects carried out as part of the working programme of the
Plants Committee on significant trade in plant species

Orchid trade in Thailand (CITES project S-57)

1. This project was developed in close consultation between the CITES Secretariat, the CITES Management Authority of Thailand and the Royal Botanic Gardens, Kew, United Kingdom – the CITES Scientific Authority for Plants of the United Kingdom.
2. The objectives of this project were the following:
 - a) analysis of the data available on international trade in wild-collected specimens of orchids from Thailand;
 - b) review of the distribution in Thailand of orchid species common in international trade and preliminary survey of the conservation status of Thai orchid species reported in trade;
 - c) collection of information on the current structure of the trade via the central point of orchid trade in Thailand, the Bangkok Flower Market, and on the possible sources of the orchids traded there;
 - d) collection of information on the chain of trade from collector to exporter and, if the study referred under c) has demonstrated that such is the case, on sources outside Thailand;
 - e) collection of information on the volume of national trade in orchid species already studied with respect to item b) above;
 - f) collation and review of data on the import and re-export of orchid species from neighbouring countries;
 - g) analysis of existing conservation measures for wild orchid species in Thailand and current mechanisms for the implementation of CITES with respect to trade in orchids and other species of flora;
 - h) provision of assistance and information to help strengthen the role of the CITES Management Authority for plants in Thailand in the implementation of CITES;
 - i) development of a conservation strategy for Thai orchids with recommendations for species protection.
3. An expert workshop (held in Bangkok, Thailand, in July 1998) reviewed the results of the trade analysis carried out by the Royal Botanic Gardens, Kew, and the research carried out by the CITES Management Authority of Thailand. The workshop was organized by this Management Authority. Individual data sheets for each of the species under consideration were prepared. The bar chart below summarizes the result of the discussions and subsequent recommendations of the review process.



4. A table listing all the species discussed, with recommendations and comments, was included in the report of the workshop.
5. All the results of the project and the workshop, together with the recommendations and comments have been included in a report (400 pages) and a database. All data subsets and over 200 photographic images of Thai orchids have been given to the CITES Management Authority of Thailand. It is intended to continue the provision of information to develop and maintain the database.
6. Since 1998, the Management Authority of Thailand has permitted export of wild-collected orchids only if they have been collected with the appropriate permits and are not subject to export bans. Illegally collected wild orchids are confiscated regularly on the Bangkok Flower Market.
7. The Secretariat is developing a field project to study the population of certain orchid species in selected areas. An evaluation of the status of *Vanda coerulea* (currently included in Appendix I) is part of this project.

Trade in Chinese orchids

8. The objective of this project is to analyse trade in orchids from China in order to assist the Chinese Management and Scientific Authorities by providing recommendations on sustainable trade in wild-collected orchids and on commercial propagation of species of horticultural interest or those used for their derivatives.
9. The work is being carried out by the CITES Management Authority of China and the Royal Botanic Gardens, Kew, United Kingdom.
10. The trade data available in the CITES trade database held at the World Conservation Monitoring Centre have been transferred to a database created and maintained by the Royal Botanic Gardens, Kew. Further information on taxonomy, distribution and conservation has been gathered by a review of the literature and consultation with experts and included in the database. A copy of the database including all the information mentioned above has been sent to the Management Authority of China. A review has also been undertaken of catalogues, Web sites and price lists from Europe and Asia and information gathered on the species offered for sale and the price per plant. This information has also been sent to the Management Authority of China. The information from the review will be summarized in data sheets and draft recommendations prepared for consideration by a panel of experts at a workshop to be convened in China in the middle of the year 2000.

11. The Management Authority of China has conducted surveys and research on the following subjects:
 - a) artificial propagation and cultivation of orchid species (survey of 14 provinces);
 - b) distribution and conservation status of traded taxa (a database containing information on 251 species has been established);
 - c) species and quantities offered for sale on local markets; and
 - d) trade in medicinal orchids.
12. The extensive information from this review will be summarized and discussed at the project workshop. Based on the information gathered, the workshop will make recommendations to facilitate sustainable trade in the species concerned.

Trade in *Galanthus* and *Cyclamen* from Turkey and Georgia

13. The specific objectives of this project were the following:
 - a) to provide an overview of the current mechanisms implemented by Georgia for the application of CITES to the trade in bulbs;
 - b) to assess the resources and current harvesting patterns in Georgia as a basis for the determination of sustainable levels of trade in bulbs; and
 - c) to assist the Plants Committee in the evaluation of the current propagation techniques used in Turkey, in the context of the definition of artificially propagated contained in Resolution Conf. 9.18 (Rev.).
14. The activities in Georgia involved the active participation of botanists and trade representatives from that country.
15. Out of the 18 species of *Galanthus*, 12 are found in Turkey, 10 are found in Georgia.
16. The collecting of bulbs in Georgia involves many local people, including whole families. The bulbs are only collected from cultivated fields (cornfields, citrus and tea plantations). Collecting from natural plant communities is prohibited.
17. Although various species are collected for sale on the local markets, the species *G. woronowii* is mainly collected for export. There are some concerns that some of the rarer species may be collected inadvertently. Cultivation of *Galanthus* on a commercial scale is currently being developed. The specimens used for this propagation are small bulbs, mixed with soil from the collecting sites that also contains seeds. The production from these cultivated fields is high, and the area of harvest is rotated annually.
18. Ten of the 20 species of *Cyclamen* are found in Turkey, six species are found in Georgia. Harvesting of species of this taxon from the wild is prohibited in Georgia.
19. The bulb trade in Turkey involves probably thousands of collectors each year. Collecting takes place over a large part of Turkey and is very well regulated. The Plants Committee has recommended the Turkish regulatory system as an excellent example for other countries trading in the same type of species.
20. Artificial propagation of *Cyclamen* and *Galanthus* has been initiated in Turkey, although not everywhere with equal success. Some attempts have been abandoned, others demonstrated the great potential for some of these species to be propagated from seeds.
21. Production of *Cyclamen* is in accordance with the CITES definition of artificially propagated, because the mature tubers do not produce "daughter bulbs".

22. Propagation of *Galanthus* is more complex. Production from seeds under controlled conditions is in accordance with the definition. However, this technique is slow.
23. Over the past 10 years the artificial propagation has progressed to the use of vegetative means, and this technique was exported to Georgia in 1995.
24. Initially there was no cultivated mother stock used for this vegetative propagation. But traders started to plant damaged and undersized bulbs rather than discarding them. These were allowed to grow for two years and then harvested and sold. The starting material was clearly of wild origin.
25. This technique has now been taken one step further. The plants are left in the field for a third year, allowing the production of an average of one daughter bulb from each transplanted bulb. These latter are used as 'mother' stock for future generations, no longer needing the regular additions from wild populations.
26. The Plants Committee will further discuss this issue.
27. The report of the project has been provided to the range States concerned, but no comments have as yet been received by the Secretariat.

Implementation of the Appendix-II listing of *Aquilaria malaccensis*

28. *Aquilaria malaccensis* was included in Appendix II at the ninth meeting of the Conference of the Parties (Fort Lauderdale, 1994). Review of the implementation of the CITES listing for this species was identified by the CITES Plants Committee as a priority. The CITES Secretariat contracted TRAFFIC to review the CITES implementation in key range States. The main findings of the project are summarized below.
29. *Aquilaria malaccensis* is one of 15 species in the Indomalayan genus *Aquilaria*, many of which are exploited for their production of agarwood (a resinous type of wood, produced by the tree in response to a fungal infection). The species is widely distributed throughout south and south-east Asia. Information collected during this study indicates that overexploitation remains a significant concern, however.
30. The main product in international trade from *Aquilaria malaccensis* (and other *Aquilaria* species) is the fragrant agarwood and products made therefrom. Although fungally-infected trees apparently exhibit certain symptoms, e.g. yellowing leaves, it is not possible to identify agarwood-producing trees accurately based on visual inspection. It is therefore apparently common practice for numerous uninfected *Aquilaria* trees to be felled in the search for those containing agarwood.
31. The international trade in agarwood involves wood, wood chips, powder, oil, and, although not identified in available trade data, almost certainly finished products such as perfumes, incense and medicines. The classification (grading) of agarwood and therefore its value depends not on the species involved, but instead on a complex set of factors related to smell, colour, purity, oleoresin content, size and consistency.
32. Indonesia and Malaysia are likely to be the main source of agarwood (from all species) in international trade. Cambodia, the Lao Peoples Democratic Republic, Myanmar and Viet Nam are also considered to be important sources of agarwood in trade. The main consumers are countries in the Far and Middle East, with Singapore playing an extremely important role, importing wood originating from south and south-east Asia of which much is processed and re-exported.
33. The reporting of trade in *A. malaccensis* by the Parties is inconsistent and, because of the identification problems it is likely that some species have wrongly been recorded as *A. malaccensis* in annual reports. Identification of wood to the species level based on visual inspection is difficult and beyond the expertise of many enforcement personnel. Identification of products such as oil would seem to be impossible without the use of laboratory techniques. As a result, enforcement authorities in two of the main exporting range States, Indonesia and Malaysia, appear not to differentiate between agarwood from *A. malaccensis* and that from other *Aquilaria* species in trade. Some of these other species may also be threatened by overexploitation for international trade.

34. The following issues are some of the many requiring further study or action:
- a) identification materials for *Aquilaria malaccensis* should be developed and provided to range and consumer countries;
 - b) Parties identified as producers or consumers of *A. malaccensis*, for which trade is not recorded in CITES annual report data should be encouraged to implement the listing if they are not already doing so, and to include records of trade in their CITES annual reports;
 - c) non-Parties involved in the international trade in *A. malaccensis* should be encouraged to implement trade controls comparable to those required under the Convention;
 - d) national legislation and regulations should be modified such that CITES controls on imports and re-exports of *A. malaccensis* and other medicinal plant species are implemented;
 - e) national export/re-export restrictions on agarwood should be clarified among various government departments charged with controlling exports;
 - f) further information is required regarding the basis for harvest/export quotas and non-detriment findings for *A. malaccensis* exports, and the extent to which these and export controls are being applied to agarwood exports in general as opposed to *A. malaccensis* specifically.
35. The report of this project has been provided to the range States concerned but, at the time of writing of this document (November 1999) several still had to provide their comments to the Secretariat. A more detailed account of this project will be published in the TRAFFIC Bulletin

Implementation of the Appendix-II listing of *Nardostachys grandiflora* and *Picrorhiza kurrooa*.

36. Kutki *Picrorhiza kurrooa* and jatamansi *Nardostachys grandiflora* were included in Appendix II at the 10th meeting of the Conference of the Parties. The roots of these two alpine region (3000-5000 m) perennial herbs of the Himalayas are used in several traditional medicine systems to treat a wide variety of ailments.
37. An early review of the implementation of CITES for these species was considered a priority by the CITES Plants Committee. The CITES Secretariat has contracted TRAFFIC to undertake this review.
38. Available information indicates that the main products in international trade of both species are rhizomes/roots, with smaller amounts of trade in finished products such as oil. Nepal is the primary country of export for both species, exporting a large volume of unprocessed roots, and a smaller volume of 'spikenard oil', an oil produced from the rhizomes of *Nardostachys grandiflora*. As well as being a range State itself, India is the primary country of import for roots/rhizomes exported by other range States. Most of the material imported into India is processed and consumed locally, with some being re-exported in the form of manufactured products, e.g. medicines. Smaller but potentially significant amounts of rhizomes/roots of *P. kurrooa* are traded between India and Pakistan. There also appears to be a relatively small trade in these species from Bhutan to India. No recent information has been obtained to indicate significant international trade involving China.
39. The following issues are some of the many requiring further study or action:
- a) clarification is required regarding the taxonomy of *Picrorhiza kurrooa* and *Nardostachys grandiflora*;
 - b) modification of the current annotation in the appendices to include the term 'rhizomes' in addition to roots should be considered, ensuring that the term 'root' is maintained in the annotation as it is more likely to be understood by Customs officials and others implementing CITES for these species;
 - c) further research is required to assess and ensure the sustainability of harvest for international trade in both species;

- d) trade between India and Pakistan should be investigated further and action taken to address any CITES trade control problems identified;
 - e) modifications in national legislation are an important first step toward more effective implementation of CITES for these species;
 - f) appropriate training materials and programmes should be developed in order to ensure that CITES Management and Scientific Authority staff within range States understand and are better able to implement their responsibilities under the Convention. Training should also be provided to Customs staff, who are largely responsible for CITES enforcement at international borders.
40. The report of the project has been provided to the range States concerned but, at the time of writing of this document (November 1999) several still had to provide their comments to the Secretariat.