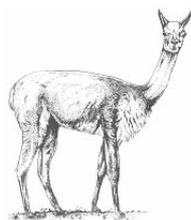


CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA



Twenty-second meeting of the Animals Committee  
Lima (Peru), 7-13 July 2006

Synergy between CITES and CBD

ADDIS ABABA PRINCIPLES AND GUIDELINES FOR THE SUSTAINABLE USE OF BIODIVERSITY

1. This document has been prepared by the Secretariat.
2. Decision 13.6, directed to the Animals and Plants Committees, states that the committees shall:

*identify those principles and guidelines [from the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity] of most relevance to CITES, taking account of case studies provided by the Parties on how these could be used in specific cases of exports of specimens of Appendix-II species, and report at the 14th meeting of the Conference of the Parties.*

3. At their 21st and 15th meetings respectively (AC21, PC15, Geneva, May 2005), the Animals and Plants Committees agreed on a format for the case studies to be provided by the Parties. This format was distributed by the Secretariat through Notification to the Parties No. 2005/052 of 1 September 2005. In addition to the Notification to the Parties, the committees also agreed on the need to select appropriate candidate species for case studies and invite Parties present at AC21/PC15 to undertake these. The following taxa were identified during AC21/PC15 with volunteer reviewers, where agreed, shown in brackets:

Fauna:

Antipatharia spp. (United States of America)

*Loxodonta africana* (Namibia)

Crocodylia spp. (AC representative of Central and South America and the Caribbean); and

Papilionidae spp.

Flora:

*Cyclamen* spp.

*Galanthus* spp.

*Hoodia* spp. and

*Panax quinquefolius*.

4. The replies and case studies submitted to the Secretariat in response to Notification to the Parties No. 2005/052 (Australia, Austria, Colombia, Indonesia, Kuwait, Mexico, Spain, Portugal, United Arab Emirates, United States of America) are presented in Annex 1 to this document in the language in which they were received.
5. These replies have been synthesized by Dr Greg Leach, Plants Committee regional representative for Oceania and Dr Siti Prijono, Animals Committee regional representative for Asia and their review is attached as Annex 2 to this document. The Colombian case study was received after the synthesis

had been completed and is not included in Annex 2. The Mexican case study is not fully covered in Annex 2 as the Committee representatives only had an English summary translation available. The Secretariat reminds the committees that the deadline for submitting the report mentioned in paragraph 2 of this document is 4 January 2007.

RESPONSES TO NOTIFICATION TO THE PARTIES NO. 2005/052 OF 1 SEPTEMBER 2005

**AUSTRALIA**

**From:** Hollingsworth, Katherine [mailto:Katherine.Hollingsworth@deh.gov.au]  
**Sent:** 29 March 2006 06:25  
**To:** Maritza Campos; Jonathan Barzdo; CITES  
**Cc:** Ellis, Neil  
**Subject:** Case study - Re. Notification No. 2005/052 [SEC = UNCLASSIFIED]

Dear CITES Secretariat,

Please find a case study attached from the Australian CITES Management Authority addressing 'How the Addis Ababa Principle and Guidelines could be used in specific cases of export of specimens of Appendix-II species'.

Kind regards,

***Katie Hollingsworth***  
CITES Liaison Officer  
CITES Management Authority  
International Wildlife Trade  
The Department of the Environment and Heritage  
Ph. (02) 6274 2296  
Fx. (02) 6274 1921  
katherine.hollingsworth@deh.gov.au

<<Case study - GWS AAPG v3.doc>>

**Notification No. 2005/052**

**How the Addis Ababa Principle and Guidelines could be used in specific cases  
of export of specimens of Appendix-II species**

**1. Introduction**

**a) Name of Party submitting study:**

Australia

**b) Appendix II species:**

Great white shark *Carcharodon carcharias*

**c) Species status:**

IUCN Classification – Globally Vulnerable (VU A1cd + 2cd)

National Classification – Vulnerable, Migratory (*Environment Protection and Biodiversity Conservation Act 1999*)

**d) Annual exports:**

No exports recorded, other than pre-CITES specimens.

**e) Levels and purpose of harvest for use other than international trade:**

None. The species is protected in Australian waters.

**f) Other factors influencing the conservation status of the species:**

Outside of areas in which the species is protected, the very high value of the great white shark's teeth, jaws and fins cause it to be targeted to supply the fin and curio trade.

The great white shark is occasionally caught as bycatch in fisheries.

**2. Case study analysis of Addis Ababa Principles and Guidelines**

CITES Decisions 13.6 and 13.7 relate specifically to the applicability of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity (AAPGs) to the management of exports of specimens of Appendix II species.

Australia considers that the primary objective of regulating trade under CITES is the protection of species that are threatened. While the AAPGs provide a useful framework to guide decision-making for non-threatened biodiversity, Australia considers that the AAPGs are not appropriate for the decision-making process under CITES, particularly with respect to making non-detriment findings. This can be demonstrated, for example, using the Appendix II listed species, the great white shark.

CITES works to protect endangered species threatened by international trade through species specific trade regulations. Other than species specific trade regulations, the Convention has no mandate for, and is not involved in, habitat protection, fisheries management, or other measures that may benefit the conservation status of threatened species. Therefore, as per Decisions 13.6 and 13.7, the case study presented below does not address the more general management part of question a) Applicability: "*Is this principle (and associated guidelines) applicable to the management of this species?*", instead focussing on how the AAPGs could be applied to the management of exports only.

**Practical principle 1: Supportive policies, laws and institutions are in place at all levels of governance and there are effective linkages between these levels.**

**Operational guidelines:**

- Consider local customs and traditions (and customary law where recognised) when drafting new legislation and regulations;
- Identify existing and develop new supportive incentives measures, policies, laws and institutions, as required, within the jurisdiction in which a use will take place, also taking into account Articles 8(j) and 10(c), as appropriate;
- Identify any overlaps, omissions and contradictions in existing laws and policies and initiate concrete actions to resolve them;
- Strengthen and/or create cooperative and supportive linkages between all levels of governance in order to avoid duplication of efforts or inconsistencies.

**a) Applicability:**

***Management of exports of great white sharks***

Linkages between levels of governance in Australia allow the Australian CITES Management and Scientific Authorities to carry out their work effectively. These linkages, as well as congruence between local, State and Federal policies, laws and institutions, help ensure that permits are only issued when scientific evidence demonstrates that the export of the Appendix II specimen will not be detrimental to the survival of the species, as per CITES Article IV 2 (a).

The Australian CITES Scientific Authority is currently unable to make non detriment findings with regard to trade in great white sharks and their derivative products. This is due to insufficient data on global, regional and local population sizes and trends for the species. The data that does exist demonstrate that great white shark population numbers have decreased by at least 20% over the last 60 years, and in some areas, populations have declined by 60-95% in the last 50 years. The great white shark is considered globally 'vulnerable' by the World Conservation Union's (IUCN) red List of Threatened Species, is listed on Appendix II of CITES, and on Appendices I and II of the Convention on Migratory Species (CMS). The species is also protected in Australian waters through the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC 1999), where it is listed as "vulnerable" and "migratory".

In response to the paucity of data on many aspects of the great white shark, such as accurate population data, the Australian Government has adopted a precautionary approach to the management of the species, including instituting strong domestic protection measures to assist the recovery of the species, and promoting its conservation internationally through CITES and CMS.

In summary, while Practical Principle 1 is an important goal to underpin sustainable use of non-threatened species, it is not directly relevant in the context of making non-detriment findings and issuing permits for the export of great white sharks and their derivatives.

**b) Action taken and comments:**

N/A

**Practical principle 2: Recognising the need for a governing framework consistent with international/national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.**

**a) Applicability:**

***Management of exports of great white sharks***

As per CITES Article IV 1, only recognised CITES Management and Scientific Authorities are entitled to participate in the regulation of trade in Appendix II species, including the great white shark. It is not appropriate for local users of biodiversity to be empowered with the responsibility to issue CITES permits and in particular to make non-detriment findings for threatened species such as the great white

shark, as it would seriously compromise the value of the CITES permit system.

Local users of biodiversity, however, are empowered through publicity and information availability to know that an export permit is required for trade in CITES listed species. They are also provided details to enable them to obtain further information on the export process should they wish to engage in trade in an approved CITES-listed species.

In this context, the Australian CITES Management Authority does not consider Practical principle 2 of the AAPGs to be appropriate or helpful in making non-detriment findings for the issuing of permits for trade in great white sharks or their derivatives.

**b) Action taken and comments:**

N/A

**Practical principle 3: International, national policies, laws and regulations that distort markets which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity, should be identified and removed or mitigated.**

**a) Applicability:**

***Management of exports of great white sharks***

Habitat management, including mitigation or prevention of habitat degradation, falls outside CITES' mandate, which is to regulate international trade in endangered species. Therefore, the Australian CITES Management Authority does not consider Practical principle 3 of the AAPGs to apply to the management of exports of great white sharks or their derivatives.

**b) Action taken and comments:**

N/A

**Practical principle 4: Adaptive management should be practiced, based on:**

- a) Science and traditional and local knowledge;**
- b) Iterative, timely and transparent feedback derived from monitoring the use, environmental, socio-economic impacts, and the status of the resource being used; and**
- c) Adjusting management based on timely feedback from the monitoring procedures.**

**a) Applicability:**

***Management of exports of great white sharks***

CITES Article IV 3 contains adaptive management measures on which the Australian CITES Scientific and Management Authorities base their decisions on making non-detriment findings and on whether to allow the export of Appendix II specimens, such as great white sharks. CITES Article IV 3 states: "...Whenever a Scientific Authority determines that the export of specimens of any [Appendix II] species should be limited in order to maintain that species throughout its range at a level consistent with its role in the ecosystems in which it occurs and well above the level at which that species might become eligible for inclusion in Appendix I, the Scientific Authority shall advise the appropriate Management Authority of suitable measures to be taken to limit the grant of export permits for specimens of that species".

Practical Principle 3 of the AAPGs is therefore not considered to add value to the process of managing exports of Appendix II species such as the great white shark.

**b) Action taken and comments:**

N/A

**Practical principle 5: Sustainable use management goals and practices should avoid or minimise adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.**

**a) Applicability:**

***Management of exports of great white sharks***

CITES Article IV 2 (a) states that exports of Appendix II species shall only occur when “a *Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species*”. In order to make a non-detriment finding for the export of great white sharks, accurate scientific data on population sizes and trends, as well as on the biology of the species is needed. Currently, there is insufficient scientific information to support a non-detriment finding. However, available data demonstrate that great white shark population sizes have declined by at least 20% over the last 60 years, and in some areas by 60-95% in the last 50 years. The Australian CITES Scientific and Management Authorities have therefore adopted a precautionary approach to enhance the conservation and management of the species.

As Practical Principle 5 of the AAPGs is not applicable where a species is protected and it does not assist in the determination of a non-detriment finding, the Australian CITES Scientific and Management Authorities do not consider it to be of use in the context of managing the export of great white sharks or their derivatives.

**b) Action taken and comments:**

N/A

**Practical principle 6: Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.**

**a) Applicability:**

***Management of exports of great white sharks***

As a general objective, research into all aspects of the use and conservation of biological diversity should be promoted and supported. However, Practical Principle 6 of the AAPGs is of no direct relevance to the determination of a non-detriment finding to allow for the management of the export of great white sharks or their derivatives.

**b) Action taken and comments:**

N/A

**Practical principle 7: The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use and its impact.**

**a) Applicability:**

***Management of exports of great white sharks***

As Practical Principle 7 is not applicable where a species is protected and it does not assist in the determination of a non-detriment finding, the Australian CITES Scientific and Management Authorities do not consider it to be of use in the context of managing the export of great white sharks or their derivatives

**b) Action taken and comments:**

N/A

**Practical principle 8: There should be arrangements for international cooperation where multinational decision-making and coordination are needed.**

**a) Applicability:**

***Management of exports of great white sharks***

Principle 8 is valid as a general objective. However, CITES Article IV 2 (a) states that exports of Appendix II species shall only occur when *“a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species”*. Practical principle 8 does not assist in making non-detriment findings, and as such the Australian CITES Scientific and Management Authorities do not consider that it is of relevance to the management of the export process..

**b) Action taken and comments:**

N/A

**Practical principle 9: An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance related to the use.**

**a) Applicability:**

***Management of exports of great white sharks***

CITES Article IV 2 (a) states that exports of Appendix II species shall only occur when *“a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species”*. In order to make a non-detriment finding for the export of great white sharks, accurate scientific data on population sizes and trends, as well as on the biology of the species are needed. Currently, there is insufficient scientific information to support a non-detriment finding. However, available data demonstrate that great white shark population sizes have declined by at least 20% over the last 60 years, and in some areas by 60-95% in the last 50 years. The Australian CITES Scientific and Management Authorities have therefore adopted a precautionary approach to enhance the conservation and management of the species.

As Practical Principle 9 of the AAPGs does not assist in making non-detriment findings, the Australian CITES Scientific and Management Authorities do not consider it applicable in the context of managing the export of great white sharks or their derivatives.

**b) Action taken and comments:**

N/A

**Practical principle 10: International, national policies should take into account:**

- a) Current and potential values derived from the use of biological diversity;**
- b) Intrinsic and other non-economic values of biological diversity; and**
- c) Market forces affecting the values and use.**

**a) Applicability:**

***Management of exports of great white sharks***

The Governments of Australia and Madagascar successfully listed the great white shark on Appendix II at CoP13 in 2004 due to its unfavourable conservation status and unregulated international trade in its derivatives (jaws, teeth, fins). As Practical Principle 10 does not assist the Australian CITES Scientific Authority in making non-detriment findings in the management of exports of great white sharks, the Australian CITES Scientific and Management Authorities do not consider that Practical Principle 10 is of relevance to the export process.

**b) Action taken and comments:**

N/A

**Practical principle 11: Users of biodiversity components should seek to minimise waste and adverse environmental impact and optimise benefits from uses.**

**a) Applicability:**

***Management of exports of great white sharks***

Practical Principle 11 is not considered relevant to managing exports of great white sharks.

**b) Action taken and comments:**

N/A

**Practical principle 12: The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation and sustainable use, should be reflected in the equitable distribution of the benefits from the use of those resources.**

**a) Applicability:**

***Management of exports of great white sharks***

The great white shark is not hunted by indigenous or local communities, however Practical Principle 12 does not assist the Australian CITES Scientific Authority in the management of exports of great white sharks, and therefore is not considered of relevance to the export process.

**b) Action taken and comments:**

N/A

**Practical principles 13: The costs of management and conservation of biological diversity should be internalised within the area of management and reflected in the distribution of the benefits from the use.**

**a) Applicability:**

***Management of exports of great white sharks***

Practical Principle 13 does not assist in managing exports of great white sharks, and therefore the Australian CITES Scientific and Management Authorities do not consider that Practical Principle 13 is of relevance to the export process.

**b) Action taken and comments:**

N/A

**Practical principle 14: Education and public awareness programmes on conservation and sustainable use should be implemented and more effective methods of communications should be developed between and among stakeholders and managers.**

**a) Applicability:**

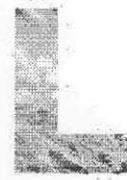
***Management of exports of great white sharks***

Public education and awareness programmes are important elements in the conservation of the great white shark. However Practical Principle 14 does not assist the Australian CITES Scientific Authority in making non-detriment findings in the management of exports of great white sharks, and therefore the Australian CITES Scientific and Management Authorities do not consider that Practical Principle 14 is of relevance to the export process.

**b) Action taken and comments:**

N/A

NATURE AND SPECIES PROTECTION, NATIONAL PARKS  
Division II/4



lebensministerium.at

To the  
CITES-Secretariat  
International Environment House  
Chemin des Anémones  
CH-1219 Châtelaine-Genève  
Schweiz

ACTION *David* COPY *24/2/06*

24. Feb. 2006

REPLY . . . FILE

Vienna, 23.02.2006

Your Reference/Your File Number  
Your letter dtd.

Our File Number

Official-in-charge/Ext.

BMLFUW-  
LE.1.5.5/0071-II/4/2006

Alfred Engl/1418

Subject: Notification Nr. 2005/052 of 1<sup>st</sup> September 2005  
Synergy between CITES and CBD-Addis Ababa Principles  
and Guidelines for the Sustainable Use of Biodiversity

Dear Sir,  
Dear Madam,

with reference to the above cited subject, the Federal Ministry of Agriculture, Forestry, Environ-  
ment and Water Management as the CITES-Management Authority of Austria herewith informs  
you that Austria has not any case studies for Appendix-II species.

enclosure

Best regards,  
For the Minister:  
DI Günter Liebel



Federal Ministry of Agriculture, Forestry, Environment and Water Management, A-1010 Wien, Stubenbastei 5  
Phone (+43 1) 515 22-0, fax (+43 1) 515 22-7402, e-mail: office@lebensministerium.at, www.lebensministerium.at  
DVR 0000183, Bank PSK 5060904, BLZ 60000, BIC OPSKATWW, IBAN AT 77 6000 0000 0506 0904, UID ATU 37979906



MISION PERMANENTE DE COLOMBIA  
ANTE LA OFICINA DE LAS NACIONES UNIDAS  
Y LOS ORGANISMOS INTERNACIONALES  
GINEBRA

ACTION *David COPY* *willem* *marcial (cover page)*  
24. April 2006  
REPLY . . . FILE

**MPC. 446**

La Misión Permanente de Colombia ante las Naciones Unidas y Organismos Internacionales con sede Ginebra, presenta atentos saludos a la Secretaría General de la Convención sobre el Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres- CITES, y tiene el honor de remitir la nota diplomática VAM/DAM/CAA No.14393, mediante la cual el señor Viceministro de Relaciones Exteriores en su calidad de punto focal político envía casos de estudio para la utilización sostenible de la biodiversidad en Colombia

La Misión Permanente de Colombia ante las Naciones Unidas y Organismos Internacionales con sede Ginebra aprovecha la oportunidad para reiterar a la Secretaría Ejecutiva de CITES las seguridades de su más alta y distinguida consideración.

Ginebra, 20 de abril de 2006.



Secretaría General  
**CITES**  
Ginebra.

Archivo: CITES

Chemin du champ d'Anier 17-19 1209 Genève  
Tel ++ 41 (0) 22 798 45 54 ++41 (0) 22 798 47 18 Fax ++ 41 (0) 22 791 07 87



**REPUBLICA DE COLOMBIA**  
Ministerio de Relaciones Exteriores

VAM/DAM/CAA No.14393

Bogotá D.C., 23 de marzo de 2006

Doctor  
**WILLEM WIJNSTEKERS**  
Secretario General  
Convención sobre Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres  
Ginebra, Suiza

Señor Secretario General:

En mi calidad de punto focal político de Colombia para la Convención sobre Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres (CITES), para su información y fines pertinentes me permito enviar los Casos de Estudio- Principios y Directrices de Addis Ababa para la utilización sostenible de la Diversidad Biológica en Colombia, Notificación a las partes No. 2205/052 de septiembre 1º de 2005.

Cordialmente,

  
**ALEJANDRO BORDA ROJAS**  
Viceministro de Asuntos Multilaterales

Anexo: Lo Anunciado



**APLICACIÓN DE LOS PRINCIPIOS DE ADDIS ABEBA Y VINCULOS CON LAS EXPORTACIONES DE  
ESPECÍMENES DE ESPECIES INCLUIDAS EN EL APÉNDICE II**

La normatividad en materia de uso y aprovechamiento de fauna silvestre en Colombia, permitía el establecimiento de zocriaderos o de granjas en ciclo cerrado, a finales del 2005, se expidió el decreto 4688, por el cual se reglamenta el Código Nacional de los Recursos Naturales Renovables y de Protección al Medio Ambiente, la Ley 99 de 1993 y la ley 611 de 2000 en materia de caza comercial.

Con la expedición de la mencionada Ley 661 de 2000, se creó un nuevo marco jurídico para regular el uso sostenible de la fauna silvestre y acuática en el país, el cual se puede efectuar a través de cosecha directa del medio o de zocría de ciclo cerrado y/o abierto tal y como lo señala en su artículo 4.

Para efectos de que los particulares puedan establecer proyectos de aprovechamiento de cualquier especie de fauna silvestre a través de zocría ya sea de ciclo cerrado y/o abierto, se deberá establecer la viabilidad y las condiciones mínimas de carácter científico, técnico y biológico tanto para desarrollar las actividades de caza con fines de fomento como para el establecimiento del zocriadero (artículos 9 y 13).

En este sentido se debe entender que la viabilidad de establecer un proyecto de zocría con cualquier especie no está supeditado a que esta se encuentre incluida en algún listado con dicho fin, si no exclusivamente a la demostración por parte del usuario de la viabilidad biológica de desarrollar la actividad de caza de fomento sin que se afecte la estabilidad de las poblaciones silvestres sobre las que se pretenda desarrollar la extracción.

De acuerdo a la mencionada Ley, el desarrollo de las actividades de caza con fines de fomento y el establecimiento de un zocriadero cerrado y/o abierto requieren la obtención de una licencia ambiental (artículos 11 y 15), para cuyo trámite se debe acoger la reglamentación en la materia (Decreto 1753 de 1994 y demás) y la cual se debe entender dividida en varias etapas a saber:

Etapa de caza de fomento, para lo cual se debe desarrollar un estudio de impacto ambiental, encaminado a determinar la viabilidad biológica de esta actividad sin que se afecte la estabilidad de las poblaciones silvestres sobre las que se pretenda realizar la extracción, y para lo cual el Ministerio del Medio Ambiente ha generado unos términos de referencia que son aplicables ya sea que se este encaminada al establecimiento de un zocriadero de ciclo cerrado y/o abierto.

Etapa de instalación, en la cual de determinarse la viabilidad de la caza de fomento, se autoriza la construcción de la infraestructura requerida para el establecimiento del zocriadero, que debe corresponder a lo propuesto por el interesado en el proyecto presentado y que será verificado por la autoridad ambiental competente, teniendo en cuenta que el proyecto puede corresponder a un zocriadero de ciclo cerrado y/o abierto.



**Ministerio de Ambiente, Vivienda y Desarrollo Territorial**  
Dirección de Ecosistemas  
República de Colombia

Etapa experimental, de aprobarse las instalaciones de acuerdo al proyecto presentado se autorizará el desarrollo de la etapa de experimentación la cual tiene por objeto que el usuario demuestre que ha logrado la adaptabilidad y capacidad reproductiva de la especie a criar y de la viabilidad de la actividad desde el punto de vista biológico, técnico, científico y económico.

Etapa comercial, al demostrarse que se ha logrado el manejo de la especie en condiciones de cautiverio y en el marco del proyecto propuesto, se puede autorizar el paso a etapa comercial del zocriadero y fijar los cupos de aprovechamiento o de extracción para cada período reproductivo ya sea se trate de un zocriadero cerrado y/o abierto respectivamente.

**1. Información introductoria**

a) Presentado por la Autoridad Administrativa CITES de Colombia.

a) Especies Incluidas en el Apéndice II:

FAUNA	FLORA
Babilla ( <i>Caiman crocodilus fuscus</i> )	Orquídeas ( <i>Cattleya sp</i> )
Iguana ( <i>Iguana iguana</i> )	
Boa ( <i>Boa constrictor</i> )	
Lobo pollero ( <i>Tupinambis teguixin</i> )	

a) Situación especies de fauna

FAUNA	CATEGORIA NACIONAL
Babilla ( <i>Caiman crocodilus fuscus</i> )	LC (criterios de la UICN para reptiles)
Iguana ( <i>Iguana iguana</i> )	Bajo ningún tipo de amenaza
Boa ( <i>Boa constrictor</i> )	Bajo ningún tipo de amenaza
Lobo pollero ( <i>Tupinambis teguixin</i> )	Bajo ningún tipo de amenaza

Situación especies de flora

De acuerdo a la Resolución 0213 de 1977, expedida por el entonces INDERENA - Instituto Nacional de los Recursos Naturales Renovables y del Medio Ambiente, veda el aprovechamiento, transporte y comercialización entre otras especies de todas las especies provenientes del medio natural. Se exceptúan de esta veda, todas las propagadas en medio artificial.



Ministerio de Ambiente, Vivienda y Desarrollo Territorial  
 Dirección de Ecosistemas  
 República de Colombia

a) Cupos de exportación de especies criadas en cautividad y pesca para el caso de *Strombus gigas*.

AÑO	ESPECIES	CUOTA	OBSERVACIONES	
1995	REPTILIA			
	<i>Caiman crocodilus</i>	800.000	Pieles	
	<i>Iguana iguana</i>	700.000	Animales vivos	
	<i>Boa constrictor</i>	30.000	Animales vivos	
	<i>Tupinambis teguixin</i>	3.000	Animales vivos	
1996	REPTILIA			
	<i>Caiman crocodilus</i>	600.000	Pieles (partes y productos)	
	<i>Iguana iguana</i>	700.000	Animales vivos	
	<i>Boa constrictor</i>	30.000	Animales vivos	
	<i>Tupinambis teguixin</i>	3.000	Animales vivos	
	ACTINOPTERYGII			
	<i>Arapaima gigas</i>	5.000	Animales vivos	
1997	REPTILIA			
	<i>Caiman crocodilus</i>	660.000	Pieles (Partes y productos)	
	<i>Iguana iguana</i>	600.000	Animales vivos	
	<i>Boa constrictor</i>	30.000	Animales vivos	
	<i>Tupinambis teguixin</i>	3.000	Animales vivos	
	ACTINOPTERYGII			
		<i>Arapaima gigas</i>	5000	Animales vivos
	MOLLUSCA			
	<i>Strombus gigas</i>	285 Ton.	Carne	
1998	REPTILIA			
	<i>Caiman crocodilus</i>	558.200	Pieles (Partes y productos)	
	<i>Iguana iguana</i>	450.000	Animales vivos	
	<i>Boa constrictor</i>	25.000	Animales vivos	
	<i>Tupinambis teguixin</i>	2.500	Animales vivos	
	ACTINOPTERYGII			
		<i>Arapaima gigas</i>	5.000	Animales vivos
	MOLLUSCA			
		<i>Strombus gigas</i>	364776.52 kg.	Carne, conchas, cuota de perlas abierta.



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AÑO	ESPECIES	CUOTA	ESPECIMEN
1999	<b>REPTILIA</b>		
	<i>Caiman crocodilus</i>	660.000	Pieles (Partes y productos)
		36785	Pieles (partes y productos) mayores de 1.20 cm.
	<i>Iguana iguana</i>	400.000	Animales vivos
	<i>Boa constrictor</i>		
	<i>Tupinambis teguixin</i>	3000	Animales vivos
	<b>ACTINOPTERYGII</b>		
	<i>Arapaima gigas</i>	5000	Animales vivos
	<b>MOLLUSCA</b>		
	<i>Strombus gigas</i>	392923 kg	Carne
10.000		Conchas	
Abierta		Perlas	
2000	<b>REPTILIA</b>		
	<i>Caiman crocodilus</i>	660.000	Pieles (partes y productos)
		14586	Pieles (partes y productos) mayores 1.20cm
	<i>Iguana iguana</i>	400.000	Animales vivos
	<i>Boa constrictor</i>		
	<i>Tupinambis teguixin</i>	5000	Animales vivos
	<b>MOLLUSCA</b>		
	<i>Strombus gigas</i>	293.839 kg.	Carne
		9.000 kg.	Conchas
		Perlas	Abierta
2001	<b>REPTILIA</b>		
	<i>Caiman crocodilus</i>	690.000	Pieles (partes y productos)
		7551	Pieles (partes y productos) mayores de 1.20 cm
	<i>Iguana iguana</i>	192.393	Animales vivos
	<i>Boa constrictor</i>	6535	Animales vivos
	<i>Tupinambis teguixin</i>	3778	Animales vivos
	<b>MOLLUSCA</b>		
	<i>Strombis gigas</i>	126.000 kg	Carne
		Conchas	Abierta
		Perlas	



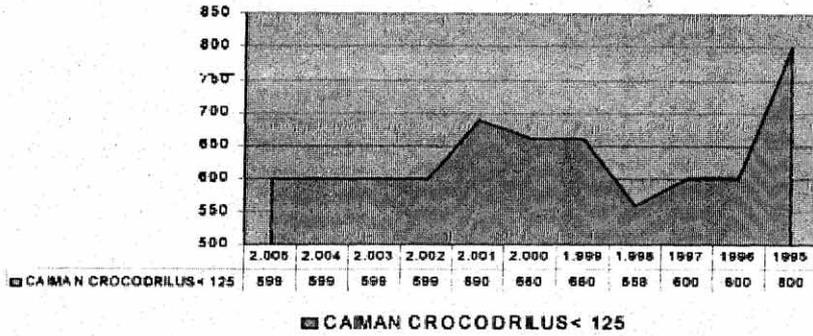
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AÑO	ESPECIES	CUOTA	OBSERVACIONES
2002	REPTILIA		
	<i>Caiman crocodilus</i>	599.000	Pieles (Partes y productos)
	<i>Iguana iguana</i>	300.000	Animales vivos
	<i>Boa constrictor</i>		Animales vivos
	<i>Tupinambis teguixin</i>	3778	Animales vivos
	MOLLUSCA		
	<i>Strombus gigas</i>	158.000 kg	Carne
		9000 kg	Conchas
Abierta		Perlas	
2003	REPTILIA		
	<i>Caiman crocodilus</i>	599.000	Pieles (partes y productos)
	<i>Iguana iguana</i>	30000	Animales vivos
	<i>Boa constrictor</i>	18000	Animales vivos
	<i>Tupinambis teguixin</i>	3800	Animales vivos
	MOLLUSCA		
	<i>Strombus gigas</i>	158000	Carne
		9000 kg	Conchas
Abierta		Perlas	
2004	REPTILIA		
	<i>Caiman crocodilus</i>	599.000	Pieles (partes y productos)
		12315	Pieles (partes y productos) mayores de 1.20 cm
	<i>Iguana iguana</i>	180.000	Animales vivos
	<i>Boa constrictor</i>	18.000	Animales vivos
	<i>Tupinambis teguixin</i>	3.800	Animales vivos
	MOLLUSCA		
	<i>Strombus gigas</i>	148.000	Carne
9.000		Conchas	
Abierta		Perlas	
2005	REPTILIA		
	<i>Caiman crocodilus</i>	599.000	Pieles (partes y productos)
	<i>Iguana iguana</i>	180.000	Animales vivos
	<i>Boa constrictor</i>	18.000	Animales vivos
	<i>Tupinambis teguixin</i>	3.800	Animales vivos



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HISTORICO CUOTAS DE EXPORTACION Babilla (*Caiman crocodilus fuscus*) 1995 2005



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Libertad y Orden

**Principio práctico 1. Se dispone de políticas de apoyo, leyes e instituciones de apoyo a todos los niveles de gobierno y hay vínculos eficaces entre estos niveles.**

a) Aplicabilidad y medidas adoptadas:

En Colombia, el manejo ambiental del país está organizado en una estructura compuesta por el conjunto de orientaciones, normas, actividades, recursos, programas e instituciones que permiten la puesta en marcha de la política nacional ambiental, el cual está inmerso en la Ley 99 de 1993 la cual crea el Sistema Nacional Ambiental.

Como fundamento, de éste, está el Código Nacional de los Recursos Naturales y Protección al Medio Ambiente, conocido como el Decreto 2811 de 1974.

El Sistema Nacional Ambiental lo componen, por un lado las entidades responsables de la gestión ambiental, es decir, el Ministerio del Medio Ambiente, las 33 Corporaciones Autónomas Regionales, el Sistema Nacional de Parques Nacionales Naturales, las Autoridades Ambientales de los Grandes Centros Urbanos, las entidades de investigación, las universidades y cinco institutos de investigación: El Instituto Alexander von Humboldt, el Instituto de Hidrología, Meteorología y Estudios Ambientales IDEAM, el Instituto de Investigaciones Marinas y Costeras - INVEMAR, el Instituto Amazónico de Investigaciones Científicas - SINCHI.

Así mismo el Sistema Nacional Ambiental está integrado por la sociedad civil organizada, la comunidad y los gremios. También lo conforman las políticas y las normas que lo regulan y los recursos financieros que la componen.

En Colombia esta pregunta no se aplica a este principio dado que el 100% de las actividades de uso y aprovechamiento con fines comerciales de la fauna y flora silvestre se hace en cautividad en (ciclo cerrado) y que la Ley 84 de 1989, prohíbe la caza comercial. Solamente está autorizado la caza de fomento, para dichas actividades. La reglamentación con respecto a la caza comercial fue expedida mediante el Decreto 4688 de diciembre 21 de 2005 "Por el cual se reglamenta el Código Nacional de los Recursos Naturales y de Protección al Medio Ambiente y la Ley 99 de 1993 de 2000 en materia de caza comercial.



**Principio práctico 2. Al reconocer la necesidad de un marco de gobierno consistente con la leyes internacionales y nacionales, los usuarios locales de los componentes de la diversidad biológica deben estar suficientemente dotados de poder y apoyados por derechos para asumir la responsabilidad del uso de los recursos concernientes.**

a) Aplicabilidad y medias adoptadas

En Colombia la Constitución de 1991, en el Capítulo III "DERECHO COLECTIVOS Y DEL MEDIO AMBIENTE", artículo 80 señala: " *El estado planificará el manejo y aprovechamiento de los recursos naturales, para garantizar su desarrollo sostenible, su conservación, restauración o sustitución.*"

Así mismo, el artículo 103 de la Constitución política de Colombia, establece los mecanismos de participación de la comunidad entre los cuales y para el caso en particular que nos atañe esta la consulta popular y el cabildo abierto. De igual manera dicho artículo contempla la contribución del Estado en la organización, promoción y capacitación entre otras, de las asociaciones profesionales, cívicas, comunitarias juveniles, con el objeto de que de que constituyan mecanismos democráticos de participación, concertación, control y vigilancia.

Es importante mencionar que la Ley 99 de 1993, "*Por la cual se crea el Ministerio del medio ambiente y se organiza el Sistema Nacional Ambiental*", tiene entre otros los siguientes principios de la Política Ambiental Colombiana, señalados en el artículo 1º de la mencionada Ley:

Numeral 2. La biodiversidad del país, por ser patrimonio nacional y de interés de la humanidad, deberá ser protegida prioritariamente y aprovechada en forma sostenible.

Numeral 3. Las políticas de población tendrán en cuenta el derecho de los seres humanos a una vida saludable y productiva en armonía con la naturaleza.

Numeral 6. Las políticas tendrán en cuenta el de los derechos de los seres humanos a una vida saludable en armonía con la naturaleza.

La formulación de las políticas ambientales tendrán cuentan el resultado del proceso de investigación científica. No obstante las autoridades ambientales y los particulares darán aplicación al principio de precaución con forme al cual, cuando exista peligro de daño grave e irreversible, la falta de certeza científica absoluta no deberá utilizarse como razón para postergar la adopción de medidas eficaces para impedir la degradación del medio ambiente.

Numeral 10. La acción para la protección y recuperación ambientales del país es una tarea conjunta y coordinada entre el estado, la comunidad, las organizaciones no gubernamentales y el sector privado. El Estado apoyará e incentivará la conformación de organismos no gubernamentales para la protección ambiental y podrá delegar en ellos alguna de sus funciones.



**Principio práctico 3. Las políticas, leyes y reglamentaciones internacionales, y nacionales que perturbaban los mercados, que contribuyen a la degradación de los hábitats o, además de eso, generan incentivos perjudiciales que socavan la conservación y utilización sostenible de la diversidad biológica deben identificarse y eliminarse o mitigarse.**

a) Aplicabilidad y medias adoptadas

Como una de las áreas estratégicas de la Política Ambiental (Bases para el desarrollo sostenible), esta la Eliminación de barreras normativas y comerciales a la producción y comercialización de bienes y servicios ambientales. Al respecto, se han revisado y ajustado la reglamentación, con el objeto de establecer un marco normativo acorde a las necesidades y oportunidades de los diferentes sectores.

Colombia ha expedido una serie de reglamentaciones con el fin de facilitar el acceso al uso sostenible de la biodiversidad en materia de fauna silvestre, entre las cuales podemos mencionar la propuesta de modificación del Código Natural de los Recursos Naturales en materia de fauna silvestre. Así mismo se expidió el Decreto 4688 de diciembre 21 de 2005 "Por el cual se reglamenta el Código Nacional de Recursos Naturales y de Protección al Medio Ambiente, la Ley 99 de 1993 y la Ley 611 de 2000 en materia de caza comercial".

Pesca Ilegal No declarada y No reglamentada.

Actualmente, Colombia está construyendo el Plan de Acción Nacional contra la Pesca Ilegal, No Declarada y No Reglamentada el cual será ejecutado en las aguas territoriales colombianas, esto es Mar Caribe y Océano Pacífico.

El proceso de construcción del Plan esta acompañado por organizaciones de índole internacional como lo son FAO y la Comisión Permanente del Pacífico Sur – CPPS – de acuerdo con los conceptos emitidos por FAO en el Plan de Acción Internacional para Prevenir, Desalentar y Eliminar la Pesca Ilegal No Declarada y No Reglamentada, el cual se encuentra enmarcado por El Código de Conducta responsable para la Pesca.

La construcción del Plan de Acción y su futura implementación será coordinada por el Instituto Colombiano de Desarrollo Rural, y específicamente por la Subgerencia de Pesca y Acuicultura, quien de acuerdo con la normatividad actual es el ente rector de la pesca y acuicultura del País. Adicionalmente, este plan contempla no solamente fortalecer los aspectos normativos y administrativos del seguimiento y control de las actividades pesqueras sino además diseñar las alternativas de índole científica, técnica, económica y social que permitan desalentar la pesca ilegal realizada en las aguas jurisdiccionales colombianas.



**Principio práctico 4. Debe practicarse la gestión adaptable con base en:**

- a) La ciencia y el conocimiento tradicional y local
- b) La retroinformación iterativa, oportuna y transparente derivada de la **vigilancia del uso, los impactos ambientales, socioeconómicos** y de la situación del recurso que se está usando
- c) **El ajuste de una gestión basada en la retroinformación oportuna de los procedimientos de vigilancia.**

a) Aplicabilidad y medias adoptadas

Uno de los aspectos centrales de la Política Nacional de Biodiversidad está relacionado con el conocimiento de la riqueza biológica del país y el fortalecimiento de la investigación relacionada con sistemas de aprovechamiento sostenible de recursos naturales. Para tal fin se promueve dicha actividad con los institutos de investigación adscritos y vinculados al Ministerio de Ambiente, Vivienda y Desarrollo Territorial, las universidades, los centros de investigación, las Corporaciones Autónomas Regionales y las Organizaciones no Gubernamentales que realicen investigación en biodiversidad, las cuales debe estar respaldadas a través del Sistema Nacional de Ciencia y Tecnología.

En Colombia el Instituto Alexander von Humboldt es la entidad encargada de recopilar y validar la información existente nacional en materia de investigación de los diversos componentes de la biodiversidad identificando los requerimientos de información y las áreas críticas para Colombia. Así mismo este Ministerio y COLCIENCIAS impulsan la investigación en ecología, hostia natural de especies amenazadas y promisorias de fauna y flora, y en recursos genéticos, así como el fomento a la investigación sobre el conocimiento y prácticas de comunidades locales.

**Principio práctico 5. Las metas y prácticas de gestión de la utilización sostenible deben evitar o reducir al mínimo los impactos adversos en los servicios, la estructura y las funciones de los ecosistemas, así como en otros de sus componente.**

a) Aplicabilidad y medias adoptadas

A partir del conocimiento de la diversidad biológica, el Ministerio de Ambiente, con el apoyo de sus institutos adscritos y vinculados y las Corporaciones Autónomas Regionales, desarrolla y valida los diferentes sistemas de manejo sostenible de los componentes de la biodiversidad, considerando los sistemas utilizados por la comunidades tradicionales y los desarrollados por la investigación científica.

Utilizando criterios técnicos y sistemas de monitoreo, los institutos de investigación adscritos y vinculados al Ministerio de Ambiente y Vivienda, determinaran la oferta del medio natural y su capacidad de renovación, lo cual permitirá fijar los niveles de aprovechamiento de las especies o las vedas necesarias para garantizar su conservación. En particular, para evitar la sobre-explotación de los bosques naturales, el Ministerio de Ambiente y Vivienda establece los cupos globales y determina las especies para aprovechamiento forestal.



Así mismo, el sistema actual de concesiones y permisos de aprovechamiento forestal busca favorecer el uso sostenible del bosque para evitar un cambio en el uso del suelo. Para controlar la sobreexplotación de especies de fauna se establecen tallas y edades mínimas de caza, así como épocas y cotos de caza. Estas medidas se complementan con la delimitación de zonas importantes para el desarrollo de estas especies, donde se controlan las medidas de control de la explotación.

**Principio práctico 6. Debe promoverse y apoyarse la investigación interdisciplinaria de todos los aspectos de la utilización y conservación de la diversidad biológica.**

a) Aplicabilidad y medidas adoptadas

El desarrollo y la transferencia de tecnología son aspectos centrales para impulsar la investigación relacionada con la conservación y el uso sostenible de la biodiversidad, en este sentido este Ministerio, promueve la identificación de tecnologías apropiadas para el avance del conocimiento, la conservación y el uso sostenible de la biodiversidad continental, costera, pelágica e insular.

Este Ministerio, facilita el acceso de las tecnologías de punta, que faciliten la generación, validación y divulgación de ese conocimiento.

**Principio práctico 7. La escala espacial y temporal de la gestión debe ser compatible con las escalas ecológica y socioeconómica del uso y su impacto.**

a) Aplicabilidad y medias adoptadas

Este Ministerio en conjunto con otras entidades, realizan un análisis de la legislación en materia de biodiversidad, para aclarar las competencias de las entidades involucradas en su conservación y manejo sostenible y detectar la vigencia y los vacíos de la legislación en los diferentes aspectos que aborda el tema de la biodiversidad.

**Principio práctico 8. Debe haber arreglos para la cooperación internacional en los casos en los que se requiera la toma de decisiones y la coordinación multinacionales.**

a) Aplicabilidad

Este principio para las especies que son comercializadas y que están listadas en el Apéndice II de la convención sobre el comercio internacional de especies Amenazadas de Fauna y Flora Silvestre - CITES no tendría por la distribución de dichas especies aplicación en Colombia.



**Principio práctico 9. Debe aplicarse un enfoque interdisciplinario y participativo a los niveles adecuados de gestión y gobierno que se relacionan con el uso.**

**a) Aplicabilidad y medias adoptadas**

De acuerdo con los lineamientos establecidos en la Constitución Política de 1991, la conservación y uso sostenible, de la biodiversidad de Colombia es responsabilidad de todos los ciudadanos. Este Ministerio y la Corporaciones Autónomas Regionales desarrollan e implementan mecanismos para vincular de manera activa a la sociedad civil en el diseño y desarrollo de las actividades de la política de biodiversidad. Los cuales impulsan las iniciativas de las comunidades y organizaciones locales y regionales respecto a la conservación, vigilancia y manejo sostenible de la biodiversidad. Las comunidades locales tienen una amplia participación especialmente en lo relacionado con la recolección, análisis y generación de conocimiento de los componentes de la biodiversidad.

**Principio práctico 10. Las políticas internacionales y nacionales deben tomar en cuenta:**

- a) Los valores presentes y futuros que se derivan del uso de la diversidad biológica
- b) Los valores intrínsecos y otros valores no económicos de la diversidad biológica
- c) Las fuerzas del mercado que repercuten en el mercado.

**a) Aplicabilidad**

En Colombia, no existen beneficios tributarios para el aprovechamiento de las especies que son comúnmente exportadas incluidas en el Apéndice II de la Cites.

**Principio práctico 11. Los usuarios de los componentes de la diversidad biológica deben buscar reducir al mínimo los desechos y los impactos ambientales adversos y optimizar los beneficios de los usos.**

**a) Aplicabilidad y medias adoptadas**

El artículo 25 de la ley 611 de 2000 señala: "las autoridades ambientales ejercerá funciones de supervisión constante de las tierras, de la infraestructura y de las actividades relacionadas con el establecimiento, dispondrá las inspecciones y controles ( marcas o identificación, expedición de licencias entre otros) y realizará los estudios que estime necesarios.

**Principio práctico 12. Las necesidades de las comunidades indígenas y locales que viven de la utilización y la conservación de la diversidad biológica, y que se ven afectadas por estas, deben reflejarse, junto con sus contribuciones a esta conservación y utilización sostenible, en la participación equitativa en los beneficios que se derivan de esos recursos.**

**a) Aplicabilidad y medias adoptadas**



Al respecto el artículo 14 del decreto 1220 de 2005, señala. Participación de las comunidades, en lo casos en que se requiera, deberá darse cumplimiento a los dispuesto en el artículo 76 de la ley 99 de 1993, en materia de consulta previa con comunidades indígenas y negras tradicionales.

**Principio práctico 13.** Los costos de gestión y conservación de la diversidad biológica deben interiorizarse dentro del área de gestión y reflejarse en la distribución de los beneficios que se derivan del uso.

a) Aplicabilidad

El artículo 22 de la ley 611 de 2000 señala: La autoridad ambiental se reservará un porcentaje de la producción de cada zocriadero que será asignado en función del estado de conservación de la especie, que podrá ser recibido en recursos económicos, servicios ambientales y/o especímenes par ser utilizados en el manejo sostenible de la especie. Así mismo las autoridades ambientales adelantaran los estudios, acciones y seguimiento necesarios para garantizar el rendimiento.

**Principio practico 14.** Deben ponerse en práctica programas de educación y conciencia pública sobre conservación y utilización sostenible y desarrollarse métodos de comunicación más eficaces entre interesados directos y los gerentes.

En este contexto, este Ministerio, las Corporaciones Autónomas Regionales, las Autoridades Ambientales de los Grandes Centros Urbanos, las entidades territoriales, promueven la adopción de procedimientos que permiten el flujo de información y coordinación con grupos interesados en la protección del recurso (organizaciones no gubernamentales, asociaciones protectoras de animales, entre otros) y con gremios que agrupen usuarios de la fauna silvestre.

Este Ministerio en concertación con el sector privado fomenta las alianzas entre empresarios y comunidades, que permitan el aprovechamiento integral y conservación de la fauna y se determinaran criterios y regulaciones específicas que faciliten la adopción de sistemas de aprovechamiento sostenible por parte de las comunidades rurales.

## INDONESIA

### A. Introductory information

#### A.1 Species Status and Annual Export

Appendix-II Species	Species Status	Annual Export
Priam's birdwing butterfly, ( <i>Ornithoptera priamus</i> )	IUCN classification – generally common but some subspecies may require special consideration. National classification – protected.	In the past few years, captive bred specimens of this species has been exported. Annually CITES SA for Indonesia has given recommendation for 300 wild caught specimens of <i>Ornithoptera priamus</i> for adult breeding stocks. The F2 resulted from the adult breeding stocks can be partially harvested for export.

#### A.2 Level and purpose of harvest for use other than international trade; and other factors influencing the conservation status of the species

Appendix-II Species	Level and purpose of harvest for use other than international trade	Other factors influencing the conservation status of the species
Priam's birdwing butterfly, ( <i>Ornithoptera priamus</i> )	Specimens of this species have been used to supply the need in some butterfly gardens in Indonesia, such as in Jakarta (Taman Mini Indonesia Indah) and Bali (Taman Kupu Tabanan). Mounted specimens are also sold in local and national artshops.	None.

### B. Case study analysis of Addis Ababa Principles and Guidelines

<p><b>Practical principle 1: Supportive policies, laws and institutions are in place at all levels of governance and there are effective linkages between these levels.</b></p> <p><b>Operational guidelines:</b></p> <ul style="list-style-type: none"> <li>• Consider local customs and traditions (and customary law where recognised) when drafting new legislation and regulations;</li> <li>• Identify existing and develop new supportive incentives measures, policies, laws and institutions, as required, within the jurisdiction in which a use will take place, also taking into account Articles 8(j) and 10(c), as appropriate;</li> <li>• Identify any overlaps, omissions and contradictions in existing laws and policies and initiate concrete actions to resolve them;</li> <li>• Strengthen and/or create cooperative and supportive linkages between all levels of governance in order to avoid duplication of efforts or inconsistencies.</li> </ul>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b> The linkage between CITES SA and CITES MA for Indonesia and also with the quarantine institution has to be continually improved to work effectively.</p> <p><b>b) Action taken and comments:</b> We have established linkage between authorities through workshops and training courses.</p>

**Practical principle 2: Recognising the need for a governing framework consistent with international/national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.**

**Operational guidelines**

- Where possible adopt means that aim toward delegating rights, responsibility, and accountability to those who use and/or manage biological resources;
- Review existing regulations to see if they can be used for delegating rights; amend regulations where needed and possible; and/or draft new regulations where needed. Throughout local customs and traditions (including customary law where recognized) should be considered;
- Refer to the programme of work related to the implementation of Article 8(j) with regard to indigenous and local community issues (decision V/16), implement and integrate tasks relevant for the sustainable use of biodiversity components, in particular element 3, tasks 6, 13 and 14;
- Provide training and extension services to enhance the capacity of people to enter into effective decision-making arrangements as well as in implementation of sustainable use methods;
- Protect and encourage customary use of biological resources that is sustainable, in accordance with traditional and cultural practices [Article 10(c)].

**PRIAM'S BIRDWING BUTTERFLY, (*Ornithoptera priamus*)**

**a) Applicability:**

Registered users are generally aware of the importance of using the resource sustainably. They do not harvest all of the specimens resulted from the ranching.

**b) Action taken and comments:**

Users are invited to participate in workshops. Communication is also maintained through reports by users and through monitoring survey by scientific authority. In monitoring surveys to butterfly farm / ranch, authorities can ask local people or users about ways the species is being obtained and traded. When appropriate, we give them some suggestion to improve the breeding or ranching activities.

**Practical principle 3: International, national policies, laws and regulations that distort markets which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity, should be identified and removed or mitigated.**

**Operational guidelines**

- Identify economic mechanisms, including incentive systems and subsidies at international, national levels that are having a negative impact on the potential sustainability of uses of biological diversity;
- Remove those systems leading to market distortions that result in unsustainable uses of biodiversity components;
- Avoid unnecessary and inadequate regulations of uses of biological diversity because they can increase costs, foreclose opportunities, and encourage unregulated uses thus decreasing the sustainability of the use.

**PRIAM'S BIRDWING BUTTERFLY, (*Ornithoptera priamus*)**

**a) Applicability:**

Partly because of the complicated regulations, there are many non-registered users, who might even take the resources from the wild and do not have breeding / ranching sites.

**b) Action taken and comments:**

Management authority has to approach illegal users, and regulations need to be simplified.

**Practical principle 4: Adaptive management should be practiced, based on:**

**d) Science and traditional and local knowledge;**

**e) Iterative, timely and transparent feedback derived from monitoring the use, environmental, socio-economic impacts, and the status of the resource being used; and**

**f) Adjusting management based on timely feedback from the monitoring procedures.**

**Operational guidelines**

- a. Ensure that for particular uses adaptive management schemes are in place;
- b. Require adaptive management plans to incorporate systems to generate sustainable revenue, where the benefits go to indigenous and local communities and local stakeholders to support successful implementation;
- c. Provide extension assistance in setting up and maintaining monitoring and feedback systems;
- d. Include clear descriptions of their adaptive management system, which includes means to assess uncertainties;

<p>e. Respond quickly to unsustainable practices;</p> <p>f. Design monitoring system on a temporal scale sufficient to ensure that information about the status of the resource and ecosystem is available to inform management decisions to ensure that the resource is conserved;</p> <p>g. When using traditional and local knowledge, ensure that approval of the holder of that knowledge has been obtained.</p>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b> Sustainable use of <i>Ornithoptera priamus</i> has been managed adaptively, bearing in consideration the custom of local people and the geographical distribution.</p> <p><b>b) Action taken and comments:</b> <i>Ornithoptera priamus</i> for trade is managed through ranching (within its distributional range) and farming (outside its distributional range). In Arfak Mountain, WWF had initiated ranching activities, that is suitable for local people who do not have tradition of animal husbandry (Neville, 1994). In Bali, as the species does not occur naturally there, local people interested are involved in farming activities. The success of butterfly farms is supported by dedicated, talented and diligent workers.</p>
<p><b>Practical principle 5: Sustainable use management goals and practices should avoid or minimise adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.</b></p> <p><b>Operational guidelines</b></p> <ul style="list-style-type: none"> <li>• Ensure management practices do not impair the capacity of ecosystems to deliver goods and services that may be needed some distance from the site of use. For example, selective cutting of timber in a watershed would help maintain the ecosystem's capacity to prevent soil erosion and provide clean water;</li> <li>• Ensure that consumptive and non-consumptive use does not impair the long-term sustainability of that use by negatively impacting the ecosystem and species on which the use depends, paying special attention to the needs of threatened components of biological diversity;</li> <li>• Apply a <b>precautionary approach</b> in management decisions in accordance with principle 15 of the Rio Declaration on Environment and Development;</li> <li>• Identify successful experiences of management of biodiversity components in other countries in order to adapt and incorporate this knowledge in their efforts to resolve their own difficulties;</li> <li>• Where possible consider the aggregate and cumulative impact of activities on the target species or ecosystem in management decisions related to that species or ecosystem;</li> <li>• Where previous impacts have degraded and reduced biodiversity, support formulation and implementation of remedial action plans [Article 10(d)].</li> </ul>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b> Butterflies are not taken directly from the wild. Butterfly ranching or farming are encouraged. In this case, the specimens of <i>O. priamus</i> that are exported are taken from ranching or farming sites, and only adult breeding stocks taken from the wild after 4 generations or so. Models of ranching or farming sites have been introduced to local people who are interested in the effort. Planting and propagation of larval food plants are essential, so that the users do not take the plants from the wild.</p> <p><b>b) Action taken and comments:</b> In Indonesia, some butterfly farming and ranching were established</p>
<p><b>Practical principle 6: Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.</b></p> <p><b>Operational guidelines</b></p> <ul style="list-style-type: none"> <li>• Ensure that the results of research inform and guide international, national policies and decisions;</li> <li>• Invest in research into techniques and technologies of management of biodiversity components that promote sustainability in both consumptive and non-consumptive uses of biodiversity;</li> <li>• Encourage active collaboration between scientific researchers and people with local and traditional knowledge;</li> <li>• Encourage international support and technology transfer, relating to both consumptive and non-consumptive uses of biodiversity;</li> <li>• Develop cooperation between researchers and biodiversity users (private or local communities), in particular, involve indigenous and local communities as research partners and use their expertise to</li> </ul>

<p>assess management methods and technologies;</p> <ul style="list-style-type: none"> <li>• Investigate and develop effective ways to improve environmental education and awareness, to encourage public participation and to stimulate the involvement of stakeholders in biodiversity management and sustainable use of resources;</li> <li>• Investigate and develop means of ensuring rights of access and methods for helping to ensure that the benefits derived from using components of biodiversity are equitably shared;</li> <li>• Make research results available in a form which decision makers, users, and other stakeholders can apply;</li> <li>• Promote exchange programmes in scientific and technical areas.</li> </ul>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b> We encourage people, especially from Papua, to learn more about the species, so that we can have better understanding to manage the species.</p> <p><b>b) Action taken and comments:</b> We give training courses and disperse publication</p>
<p><b>Practical principle 7: The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use and its impact.</b></p> <p><b>Operational guidelines:</b></p> <ul style="list-style-type: none"> <li>• Link responsibility and accountability to the spatial and temporal scale of use;</li> <li>• Define the management objectives for the resource being used;</li> <li>• Enable full public participation in preparation of management plans to best ensure ecological and socio-economic sustainability;</li> <li>• In case of transboundary resources, it is advisable that appropriate representation from those states participate in the management and decisions about the resources.</li> </ul>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b> The establishment of butterfly ranching in Arfak invites participation of local people to benefit from the trade of this butterfly species. In Bali, similar approach was taken, where manager(s) and member participants cooperate in managing butterfly farming.</p> <p><b>b) Action taken and comments:</b> Young caterpillars are distributed to local people to be kept in captivity, which are ready with sufficient food plants for the caterpillars (see Fig. 3). When the caterpillars become chrysalis (pupae), they will be bought by the manager, who is dealing with export preparation process.</p>
<p><b>Practical principle 8: There should be arrangements for international cooperation where multinational decision-making and coordination are needed.</b></p> <p><b>Operational guidelines:</b></p> <ul style="list-style-type: none"> <li>• Make arrangements for international cooperation when the distribution of populations or communities/habitats being used span two or more nations;</li> <li>• Promote multinational technical committees to prepare recommendations for the sustainable use of transboundary resources;</li> <li>• Have bilateral or multilateral agreements between or among the States for the sustainable use of transboundary resources;</li> <li>• Establish mechanisms involving the collaborating states to ensure that sustainable use of transboundary resources does not negatively impact the ecosystem capacity and resilience.</li> </ul>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b> This species is distributed also in Papua New Guinea and Australia. However, international cooperation concerning this species has not been arranged.</p> <p><b>b) Action taken and comments:</b> International cooperation on the management of this species needs to be developed.</p>
<p><b>Practical principle 9: An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance related to the use.</b></p> <p><b>Operational guidelines</b></p> <ul style="list-style-type: none"> <li>• Consider providing mechanisms that encourage interdisciplinary cooperation in management of biodiversity components;</li> </ul>

- Set standards for resource management activities that promote interdisciplinary consultations;
- Facilitate communication and exchange of information between all levels of decision-making;
- Identify all relevant stakeholders and seek their participation in planning and executing of management activities;
- Take account of socio-economic, political, biological, ecological, institutional, religious and cultural factors that could influence the sustainability of the management;
- Seek guidance from local, traditional and technical specialists in designing the management plan;
- Provide adequate channels of negotiations so that potential conflicts arising from the participatory involvement of all people can be quickly and satisfactorily resolved.

**PRIAM'S BIRDWING BUTTERFLY, (*Ornithoptera priamus*)**

**a) Applicability:**

Local people in Papua need to be aware that they should not catch butterflies for trade directly from the wild. Local university lecturers or researchers involve in nature conservation programs are best dealing with local collectors, as they understand the culture and social factors.

**b) Action taken and comments:**

A similar approach to establish butterfly ranches like the one in Arfak can be an option.

**Practical principle 10: International, national policies should take into account:**

**d) Current and potential values derived from the use of biological diversity;**

**e) Intrinsic and other non-economic values of biological diversity; and**

**f) Market forces affecting the values and use.**

**Operational guidelines:**

- Promote economic valuation studies of the environmental services of natural ecosystems; Incorporate this information in policy and decision making processes, as well as educational applications;
- Consider this principle in relation to land use/habitat conversion tradeoffs. Recognize that market forces are not always sufficient to improve living conditions or increase sustainability in the use of components of biological diversity;
- Encourage governments to take into account biodiversity values in their national accounts;
- Encourage and facilitate capacity building for decision makers about concepts related to economic valuation of biodiversity.

**PRIAM'S BIRDWING BUTTERFLY, (*Ornithoptera priamus*)**

**a) Applicability:**

Due to the size and the beauty, this species is highly sought after by collectors. This species is also easier to breed than other species of *Ornithoptera* and has wider distribution. Larvae of this species can feed on several species of *Aristolochia* so they are more tolerant and more adaptive. In relation to potential costs of replacing natural systems in which the species lives, we consider that with the ranching and farming methods, the use of this species does not generate negative impact. Butterflies in general have short life cycles, and wise management such as ranching and farming will ensure the existence of the habitat and do not affect balance in the nature.

**b) Action taken and comments:**

Planting of various species of *Aristolochia* as larval food plants is encouraged.

**Practical principle 11: Users of biodiversity components should seek to minimise waste and adverse environmental impact and optimise benefits from uses.**

**Operational guidelines:**

- Eliminate perverse incentives and provide economic incentives for resource managers to invest in development and/or use of more environmentally friendly techniques, e.g., tax exemptions, funds available for productive practices, lower loan interest rates, certification for accessing new markets;
- Establish technical cooperation mechanisms in order to guarantee the transfer of improved technologies to communities;
- Endeavour to have an independent review of harvests to ensure that greater efficiencies in harvest or other extractive uses do not have a deleterious impact on the status of the resource being used or its ecosystem;
- Identify inefficiencies and costs in current methods;
- Conduct research and development into improved methods;
- Promote or encourage establishment of agreed industry and third party quality standards of

<p>biodiversity component processing and management at the international and national levels;</p> <ul style="list-style-type: none"> <li>Promote more efficient, ethical and humane use of components of biodiversity, within local and national contexts, and reduce collateral damage to biodiversity.</li> </ul>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b> The management and scientific authorities have set regulation to limit the trade of this species.</p> <p><b>b) Action taken and comments:</b> Every year, management, scientific authorities and users hold meetings to set a certain number as export quota and for breeding stocks.</p>
<p><b>Practical principle 12: The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation and sustainable use, should be reflected in the equitable distribution of the benefits from the use of those resources.</b></p> <p><b>Operational guidelines:</b></p> <ul style="list-style-type: none"> <li>Promote economic incentives that will guarantee additional benefits to indigenous and local communities and stakeholders who are involved in the management of any biodiversity components, e.g., job opportunities for local peoples, equal distribution of returns amongst locals and outside investors/co-management;</li> <li>Adopt policies and regulations that ensure that indigenous and local communities and local stakeholders who are engaged in the management of a resource for sustainable use receive an equitable share of any benefits derived from that use;</li> <li>Ensure that national policies and regulation for sustainable use recognize and account for non-monetary values of natural resources;</li> <li>Consider ways to bring uncontrolled use of biological resources into a legal and sustainable use framework, including promoting alternative non-consumptive uses of these resources;</li> <li>Ensure that an equitable share of the benefits remain with the local people in those cases where foreign investment is involved;</li> <li>Involve local stakeholders, including indigenous and local communities, in the management of any natural resource and provide those involved with equitable compensation for their efforts, taking into account monetary and non-monetary benefits;</li> <li>In the event that management dictates a reduction in harvest levels, to the extent practicable assistance should be provided for local stakeholders, including indigenous and local communities, who are directly dependent on the resource to have access to alternatives.</li> </ul>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b> The manager(s) of butterfly farming or ranching should have high responsibility and maintain fair dealing with the members.</p> <p><b>b) Action taken and comments:</b> In Bali butterfly farm, the member participants come once a week to the manager to bring the chrysalis (pupae), and they are paid fairly. The pupae are then wrapped (see Fig. 5) and packed for export to butterfly gardens abroad.</p>
<p><b>Practical principles 13: The costs of management and conservation of biological diversity should be internalised within the area of management and reflected in the distribution of the benefits from the use.</b></p> <p><b>Operational guidelines</b></p> <ul style="list-style-type: none"> <li>Ensure that national policies do not provide subsidies that mask true costs of management;</li> <li>Ensure that harvest levels and quotas are set according to information provided by the monitoring system, not the economic needs of the management system;</li> <li>Provide guidelines for resource managers to calculate and report the real cost of management in their business plans;</li> <li>Create other alternative mechanisms to invest revenues from biodiversity management;</li> <li>Provide economic incentives for managers who have already internalized environmental costs, e.g. certification to access new markets, waiver or deferral of taxes in lieu of environmental investment, promotion of "green-labelling" for marketing.</li> </ul>
<p><b>PRIAM'S BIRDWING BUTTERFLY, (<i>Ornithoptera priamus</i>)</b></p> <p><b>a) Applicability:</b></p>

Management authority has issued regulations and set certain fees, such as entrance fee to National Parks and nature reserves, fee for capture permit, fee for breeding permit, and fee for export permit. The fees are to be used for maintenance of the area and the biological resources.

**b) Action taken and comments:**

Users have paid a certain amount of money to Management Authority for access to obtain the adult breeding stocks, and the permits.

**Practical principle 14: Education and public awareness programmes on conservation and sustainable use should be implemented and more effective methods of communications should be developed between and among stakeholders and managers.**

**Operational guidelines**

- Plan education and public-awareness activities concerning: management, values of sustainable use, changing consumptive patterns and the value of biodiversity in the lives of people;
- Ensure that public-awareness programmes also inform and guide decision makers;
- Target all levels of the chain of production and consumption with such communications;
- Report lessons learned about sustainable use activities to the clearing-house mechanism of the Convention on Biological Diversity;
- Encourage and facilitate communication of lessons learned and best practices to other nations;
- Ensure that resource users report to government on their activities in a manner that facilitates broader communications;

**PRIAM'S BIRDWING BUTTERFLY, (*Ornithoptera priamus*)**

**a) Applicability:**

We realize the importance of enhancing public awareness on conservation of biodiversity. For this birdwing butterfly species, attention has not been given appropriately.

**b) Action taken and comments:**

Given sufficient funding, we can prepare leaflets to give to public so that they can be familiar with the butterfly species and the importance of the species.

KUWAIT

FROM : DR. MOHAMMED AL-MUHANNA

PHONE NO. : +965 4721257

Sep. 28 2005 09:05AM P1

Affairs & Fish Resources



والثروة السمكية

Date : 27/9/2005 التاريخ :

Ref : المرجع :

To: The CITES secretariat.

Tel: +(4122)917-8139/40

Fax: +(4122)797-3417

From: PAAF

Tel: 4761116 / 7 / 8 / 9

Fax: 4765551

Subject: Synergy between CITES and CBD

ACTION *David* COPY

28. Sep. 2005

REPLY . . . FILE

Dear Sir

The Addis Ababa principles and guidelines provide an important frame work for governments to follow for the purpose of sustainable utilization of biological resources. We see the importance of the applicability of these principles and guidelines in our life to preserve our fragile resources.

However, and due to the fact that our extractable biological resources are too limited to be utilized, we have put strict measures to control the utilization of these resources. Until we are capable of determining the status of our resources and the underlying factors that can affect the sustainability of these resources, strict measures from our side on the use of our wildlife resources are still acting. Therefore, we apologize of not having any case study to be presented for the time being on the use of appendix II species that demonstrate the applicability of Addis Ababa principles and guidelines.

*Nabeela Ali Elkhalil*  
Director of Kuwait Zoo

Best regards

Yours sincerely,

/ Deputy director general

Tel.: 4761116 / 7 / 8 / 9 - Fax : 4765551 - www.pAAF.gov.kw - هاتفنا : ٤٧٦١١١٦ / ٧ / ٨ / ٩ فاكس : ٤٧٦٥٥٥١  
P.O. Box : 21422 Safat - 13075 Kuwait . - ص.ب. : ٢١٤٢٢ الصفاة - الرمز البريدي 13075 الكويت .

## MEXICO

From: "Jorge Álvarez Romero" <jorge.alvarez.romero@gmail.com>  
To: milena.schmidt@unep.ch  
Subject: Resp. Notificacion 2005/052: Estudio Caso Cicadas MX  
Cc: "Hesiquio Benitez Diaz" <hbenitez@xolo.conabio.gob.mx> ,  
"Jorge Alvarez Romero" <jalvarez@xolo.conabio.gob.mx> ,  
"Paola Mosig" <pmosig@xolo.conabio.gob.mx> ,  
"Alejandra García-Naranjo" <algarcia@xolo.conabio.gob.mx> ,  
"Patricia Davila Aranda" <pdavilaa@servidor.unam.mx>

Estimada Milena,

Hola, me refiero a la Notificación 2005/052 "Sinergia entre la CITES y el CBD: Principios y Directrices de Addis Abeba para la utilización sostenible de la diversidad biológica", en la que se solicita a las Partes el envío de estudios de caso sobre como pueden utilizarse los principios y directrices de Addis Abeba con base en lo dispuesto en el párrafo b) de la Decisión 13.7 para ayudar a los Comités a cumplir esta tarea.

En este sentido, la CONABIO, como Autoridad Científica CITES de México, solicitó el apoyo al Dr. Dr. Andrew P. Vovides (Investigador del Instituto de Ecología) para documentar un estudio de caso relacionado con viveros comunales que reproducen y exportan cicadas. El Dr. Vovides accedió a colaborar con la Autoridad Científica proporcionando toda la información que se presenta en el documento anexo a este correo.

Cabe mencionar que existieron algunas dificultades para llenar el formato, considerando necesario -en este sentido- la complementación o mejora del mismo, posiblemente con algunas guías (preguntas) que faciliten la comprensión de los principios y directrices y que ayuden a documentar adecuadamente los estudios de caso. Por lo anterior, consideramos que si bien el documento presenta información muy valiosa (que esperamos pueda contribuir en las discusiones), bien puede complementarse posteriormente en colaboración con el investigador.

Esperamos que la información enviada contribuya y enriquezca las discusiones sobre el tema durante la próxima reunión de los Comités Científicos y quedamos en espera de recibir confirmación sobre la adecuada recepción del documento.

Por último te comento que esta información se hará llegar oficialmente por correo convencional más adelante.

Un afectuoso saludo,

Jorge.

**Biól. Jorge G. Alvarez-Romero**

Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO)  
Dirección de Enlace y Asuntos Internacionales  
Coordinación Autoridad Científica CITES de México

Liga Periférico-Insurgentes Sur 4903  
Parques del Pedregal, Tlalpan, 14010  
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Internet: [www.conabio.gob.mx](http://www.conabio.gob.mx)

**Formato para la presentación de estudios de caso sobre la aplicación de los principios y directrices de Addis Abeba y vínculos con las exportaciones de especímenes de especies incluidas en el Apéndice II**

**Caso: *Dioon edule* (Tiotamal), Vivero Monte Oscuro, Ejido El Palmar, E. Zapata, Ver.**



a) *El nombre de la Parte que presenta el estudio:*

**Dr. Andrew P. Vovides**, Investigador Titular, Instituto de Ecología A. C. (INECOL), Xalapa, México.

b) *Especie incluida en el Apéndice II:*

***Dioon edule*** Lindl.

c) *Situación de la especie (por ejemplo, clasificación actual en la UICN, situación o clasificación nacional, si procede, y tendencias de la población, si se conocen).*

Se encuentra incluida en la norma oficial mexicana NOM-059-SEMARNAT-2001 como amenazada (A) y en la UICN en la categoría "bajo riesgo" (NT). La especie presenta poblaciones fragmentadas, algunas relictas y en declinación (Vovides 1990; González-Astorga 2003 a,b). En la versión de la Lista Roja de la IUCN de 1997 se consideraba como Rara (R), aunque de acuerdo con el autor de este estudio de caso la categoría de Vulnerable (V) sería más apropiada.

d) *Exportaciones anuales (en los últimos 5-10 años), y cupo de exportación, si procede.*

En el año 1994 se exportaron 30 plantas a EUA (\$300 mn), en 1995, 120 plantas a EUA (\$3,600 mn), entre 1998-2000 se exportaron 880 plantas a Alemania (\$500 US), en el 2005 se exportaron 10 plantas a Italia con apoyo del Gobierno Estatal de Veracruz para sondear el mercado y en 2005 se vendieron 160 plantas a nivel nacional (\$32,000 mn).

\* Actualmente \$10.9463 pesos equivalen a 1 dólar de EUA.

e) *Niveles y finalidad de la extracción para uso distinto del comercio internacional; por ejemplo, subsistencia, comercio interno, etc.*

Esta planta solo se utiliza como de ornato y el proceso es una actividad adicional (como una pequeña industria casera) que los campesinos productores realizan a la par de sus actividades tradicionales, como es el cultivo de limón, café y maíz.

Han sido utilizadas en la jardinería municipal de Xalapa.

Existe comercio local y nacional.

f) *Otros factores que influyen en el estado de conservación de la especie (por ejemplo, repercusión del uso no consuntivo, medidas de lucha contra las plagas, etc).*

La amenaza más fuerte para la especie es la destrucción del hábitat, el cambio de uso de suelo y el comercio ilegal (decapitación de plantas maduras para venta de penacho de hojas por vendedores ambulantes). La especie no presenta problemas graves de plagas.

## ANÁLISIS DE ESTUDIO

El vivero de Monte Oscuro es el precursor de las UMA's intensivas para plantas en el país (INE-SEMARNAP, 2000) y cuenta con registro ante la SEMARNAT desde 1991. Desde entonces se han impulsado cinco viveros en Chiapas en dos Reservas de la Biosfera para el manejo de cuatro especies de cícadas, un vivero en la Reserva de la Biosfera Tehuacan-Cuicatlán, Puebla para el manejo de *D. caputoi* y uno más en la Reserva de la Sierra Gorda, Querétaro para el manejo de *Dioon edule*. En gran medida todo esto ha sido posible gracias al apoyo del Jardín Botánico Clavijero (JBC), el cual ha impartido cursos y talleres teórico-prácticos en distintas fechas, a veces en los predios de los productores y en otras ocasiones en las instalaciones del JBC.



Se busca crear incentivos entre los campesinos productores para conservar el hábitat por medio de la utilización sostenible, a través de la extracción de semillas del medio silvestre, la siembra, el cultivo y su posterior venta. Además, para evitar la sobre explotación del recurso no se extraen semillas todos los años y existe un proyecto de reintroducción al hábitat de plántulas producidas en vivero.



Existen posibilidades de financiamiento a través de los programas sectoriales como CONACYT-SEMARNAT, Fondo Mexicano para la Conservación de la Naturaleza A.C. (FMCN) e instrumentos para establecer Unidades para el Manejo, la Conservación y el Uso Sostenible de la Vida Silvestre (UMA's) (INE-SEMARNAP 2000).

La exportación no ha sido eficiente debido a la competencia con otras especies de ornato, además de que el mercado nacional es todavía incipiente. Hay potencial para exportación pero actualmente no se está llevando a cabo.

**Principio práctico 1:** *Se dispone de políticas de apoyo, leyes e instituciones de apoyo a todos los niveles de gobierno y hay vínculos eficaces entre estos niveles.*

### a) Aplicabilidad:

SI APLICA

**b) Medidas adoptadas**

- i) **Asesores:** Jardín Botánico Francisco J. Clavijero (JBC) del Instituto Nacional de Ecología A.C., Xalapa Veracruz.
- ii) **El representante legal** del vivero Monte Oscuro es Cícadas Mexicanas, Sociedad de Producción Rural de Recursos Limitados (CYCAMEX S.P.R. de R.L.).
- iii) **Autoridades:** La Dirección General de Vida Silvestre de la Secretaría de Medio Ambiente y Recursos Naturales (DGVS- SEMARNAT) es la institución que controla la emisión de permisos de colecta y regula la operación de las UMA's.
- iv) **Vigilancia y control:** La lleva a cabo la Procuraduría Federal de Protección al Ambiente (PROFEPA).
- v) **Agencias financieras;** CONACYT, GTZ-Alemania, SEMARNAT, FMCN y otras.
- vi) Se necesita crear más agencias gestoras como CYCAMEX que den asesoría a los campesinos productores en asuntos de mercadotecnia y asistencia con los tramites necesarios para que el producto salga eficientemente al mercado nacional e internacional, por ejemplo, certificados fitosanitarios, permisos de exportación, certificados CITES, trámites aduanales, de transporte y de embalaje, etc.

Los puntos i, ii, iv y v han sido satisfactorios sin embargo con respecto al punto "iii", los trámites de actualización de permisos han causado problemas y se cree que se podrían simplificar. Se sugiere extender los períodos de actualización de la UMA a cada cinco años en lugar de cada año y simplificar o eliminar los permisos de transporte a nivel nacional.

En cuanto al punto "vi", en CYCAMEX existen ineficiencias en la gestoría de mercados debido a falta de presupuesto y personal, sin embargo CYCAMEX ha logrado algunas exportaciones y algo de mercado nacional, pero se podría mejorar mucho en este aspecto.

**Principio práctico 2:** *Al reconocer la necesidad de un marco de gobierno consistente con las leyes internacionales y nacionales, los usuarios locales de los componentes de la diversidad biológica deben estar suficientemente dotados de poder y apoyados por derechos para asumir la responsabilidad del uso de los recursos concernientes.*

**a) Aplicabilidad:**

SI APLICA

**b) Medidas adoptadas:**

Dentro del ejido, las comunidades tienen reglamentos y las decisiones se toman en asambleas comunales. La instalación del vivero y el aprovechamiento de la especie fue decidido en una asamblea general de ejidatarios.

El hábitat natural de donde se extraen las semillas fue declarado Reserva Ejidal por la comunidad Monte Oscuro (acuerdo de asamblea), para proteger y vigilar a las cícadas y otros productos forestales, entre ellos la palma *Brahea dulcis* (extracción de cogollo para el Domingo de Ramos en Semana Santa) y varios árboles maderables que la comunidad usa para autoconsumo.

En dos ocasiones los productores denunciaron a las autoridades saqueos ilegales en la zona de Monte Oscuro y gracias a esto han disminuido, sin embargo el saqueo ilegal continúa existiendo en zonas aledañas.

**Principio práctico 3:** *Las políticas, leyes y reglamentaciones internacionales, y nacionales que perturban los mercados, que contribuyen a la degradación de los hábitat o, además de eso, generan incentivos*

*perjudiciales que socavan la conservación y utilización sostenible de la diversidad biológica deben identificarse y eliminarse o mitigarse.*

**a) Aplicabilidad:**

SI APLICA

**b) Medidas adoptadas:**

- i) Las leyes nacionales instrumentadas por la SEMARNAT para la actualización anual de las UMA's y el inventario para renovar los permisos se considera excesivo. En el aprovechamiento de cícadas, el producto se mueve muy lentamente por lo que no es necesaria la frecuente actualización de las UMA's. Se sugiere que sea cada cuatro, cinco o seis años.
- ii) Se considera que las autoridades deberían de facilitar el funcionamiento de las UMA's con el mínimo de obstáculos ya que el exceso de trámites desalienta a los productores.
- iii) El requerimiento de un permiso adicional para el traslado plantas de vivero a cualquier lugar en la república se considera también innecesario y contraproducente. Basta tener copia del permiso de la UMA o la etiqueta foliada de las plantas para cualquier inspección durante el traslado.
- iv) En cuanto a la sobreexplotación, en este caso no se aplica dado que *Dioon edule* cuenta con estudios poblacionales y de genética poblacional que aseguran un buen manejo de la especie. Sin embargo existe saqueo ilegal en una zona adyacente (Jalcomulco).
- v) Se requiere mejorar la auto gestión de la comunidad del ejido para llevar acabo trámites y otros asuntos gubernamentales.

**Principio práctico 4:** *Debe practicarse la gestión adaptable con base en: a) La ciencia y el conocimiento tradicional y local; b) La retroinformación iterativa, oportuna y transparente derivada de la vigilancia del uso, los impactos ambientales socioeconómicos y de la situación del recurso que se está usando; y c) El ajuste de una gestión basada en la retroinformación oportuna de los procedimientos de vigilancia.*

**a) Aplicabilidad:**

SI APLICA

**b) Medidas adoptadas:**

Cualquier uso sustentable de un recurso silvestre debe de estar basado en resultados de estudios demográficos y ecológicos, debe de existir un monitoreo de las poblaciones y su hábitat, así como programas de reintroducción. En el caso de *Dioon edule* existen varios trabajos ecológicos/demográficos y de genética poblacional (Vovides & Peters, 1987; Vovides, 1990; González-Astorga *et al.*, 2003 a,b; González-Astorga *et al.*, 2005) y los productores están bajo asesoría del Jardín Botánico Francisco Clavijero del INECOL.

Las primeras extracciones de semillas del hábitat se efectuaron bajo supervisión del JBC para no dañar la población. Se han dado cursos y talleres sobre este tema y se publicó un manual (Pérez-Farrera & Vovides, 1997).

La extracción de semillas de *Dioon* del medio silvestre para su cultivo está basada en estudios poblacionales. Existe mortandad pre-germinativa por actividades de predadores, derrumbes y deshidratación (Pavón 1999); y mortandad post-germinativa durante el primer año de vida por deshidratación durante la primera temporada de estiaje, por lo que la estructura poblacional muestra una gran mortandad en las etapas tempranas de vida (Vovides, 1990).

La actividad de decapitación ilegal de plantas maduras perjudica la población dado que resta la producción de semillas a largo plazo. Estudios matriciales de elasticidad muestran que bajo la presente situación de extracción ilegal la población se encuentra decreciendo. Cuando en el modelo se considera la misma población sin el efecto de la decapitación de plantas maduras, la población crece (Octavio-Aguilar *et al.*,

en revisión Plant Ecology). Con el proyecto de reintroducción de plantas en el medio silvestre se espera poder contrarrestar esta tendencia.

Octavio-Aguilar *et al.*, (en revisión Plant Ecology) sugieren conservar todas las plantas maduras y evitar su decapitación debido a que esta etapa de la matriz de la elasticidad es la productora de reclutamiento.

Se han llevado a cabo varios cursos y talleres dirigidos a los productores .

### **Observaciones y perspectivas**

Durante el 2006 se quiere realizar un taller sobre mercadotecnia dirigido a los productores de Chiapas.



**Principio práctico 5:** *Las metas y prácticas de gestión de la utilización sostenible deben evitar o reducir al mínimo los impactos adversos en los servicios, la estructura y las funciones de los ecosistemas, así como en otros de sus componentes.*

**a) Aplicabilidad:**

SI APLICA

**b) Medidas adoptadas:**

Los impactos al ecosistema son mínimos. En el medio silvestre únicamente se colectan los conos maduros que tienen semillas y posteriormente son transportadas al vivero.

***Cuando se están colectando las semillas, se tiene mucho cuidado en no dejar basura, no hacer fogatas y no utilizar químicos.***

Dentro del vivero, la utilización de químicos es mínima (fertilizantes) y para el control de orugas y otras plagas en ocasiones se utiliza un insecticida sistémico.

Además de cuidar que los impactos en el ecosistema ocasionados por la extracción de semillas sean mínimos, desde hace seis años se están llevando a cabo experimentos de reintroducción que han resultado exitosos. Se encontró que las plántulas de dos años tienen una alta sobrevivencia en el medio silvestre, lo cual además baja los costos de mantenimiento de plántulas en el vivero.

**Principio práctico 6:** *Debe promoverse y apoyarse la investigación interdisciplinaria de todos los aspectos de la utilización y conservación de la diversidad biológica .*

**a) Aplicabilidad:**

SI APLICA

**b) Medidas adoptadas:**

Este proyecto se ha beneficiado con financiamiento tanto de instituciones como CONACyT, SEMARNAT y la CONABIO, como por agencias extranjeras (GTZ-Alemania).

La parte técnica-académica de la experiencia ha sido satisfactoria y se han asentado las bases a seguir. Esto ha sido posible gracias a la disponibilidad de un jardín botánico (JBC) con infraestructura suficiente

para lograr pruebas de germinación y de cultivo que permitan producir un paquete tecnológico transferible al campo. Con esto se cumple con tres artículos de la CDB en tanto al papel de los jardines botánicos:

- i) Artículo 13 en referencia a la educación y concientización (awareness).
- ii) Artículo 9 en referencia a la adopción de medidas de conservación *in situ* y propagación artificial *ex situ* de una especie amenazada en su país de origen.
- iii) Artículo 18 en referencia a la transferencia de tecnologías, el intercambio tecnológico y científico (Given 1997). Consideramos de suma importancia el hecho de que todos los participantes, (tanto los investigadores y técnicos, como los campesinos productores) realmente creen en el proyecto.

No solo se ha invertido recursos en la investigación biológica si no también y paralelamente en investigaciones socioeconómicas, sociales y de mercadotecnia.

### Observaciones y perspectivas

La falta de una asesoría eficiente sobre mercadotecnia hortícola al inicio del proyecto ha sido un punto débil, sin embargo los resultados han enseñado lecciones importantes (Vovides et al., 2002).

- i) El manejo sustentable de la especie debe de estar basado en el conocimiento claro de la biología de la especie y en especial el sistema reproductivo, la demografía y el estatus poblacional. En este caso existen varios artículos publicados sobre *D. edule* y sobre las medidas adoptadas que están basadas en estudios con miras hacia la sustentabilidad.
- ii) Los protocolos de germinación y cultivo deben ser establecidos y simplificados antes de iniciar el manejo en el medio silvestre. Los jardines botánicos (en este caso el JBC) tienen un compromiso a largo plazo con las comunidades locales y son agencias ideales para realizar estas tareas.
- iii) Los efectos de la utilización y el manejo de las poblaciones naturales de la especie deben ser evaluados periódicamente (monitoreo) con la finalidad de detectar tendencias y realizar los ajustes pertinentes de manejo.
- iv) Se necesita mantener la liga campesino/hábitat para obtener una efectiva conservación *in situ* del recurso. El productor debe ver el hábitat (fuente de semillas) como parte integral del vivero.
- v) El establecimiento de plantas madres o pie de cría *ex situ* en viveros lejos del hábitat podría resultar contraproducente si al mismo tiempo no se incentiva la conservación *in situ*.
- vi) El proyecto debe contar con la colaboración de expertos en el mercado hortícola para establecer una estrategia de mercado sólida.
- vii) Para difundir el concepto de manejo sustentable deben de implementarse programas de educación y conservación dirigidos a otras comunidades que tienen recursos similares. Esto es para diversificar los mercados y evitar la sobre-producción de una sola especie que pueda inundar el mercado y crear competencia entre los productores para obtener semillas de origen silvestre.
- viii) El JBC ha dado varios cursos y talleres dirigidos a productores y se publicó un manual de cultivo de cícadas (Pérez-Farrera & Vovides, 1997).
- ix) El financiamiento continuo, especialmente en las etapas tempranas del establecimiento de viveros, es esencial para la supervivencia a largo plazo de este tipo de proyectos. El Fondo para el Medio Ambiente Mundial (GEF) sugiere una inversión de por lo menos 10 a 15 años para tales proyectos (GEF, 1998).

**Principio práctico 7:** *La escala espacial y temporal de la gestión debe ser compatible con las escalas ecológica y socioeconómica del uso y su impacto.*

**a) Aplicabilidad:**

SI APLICA

**b) Medidas adoptadas:**

La realización de estudios demográficos sirvió para dar la pauta sobre la escala de manejo.

El ejido cuenta con la clara tenencia y posesión de los terrenos de donde se aprovecha el recurso y el manejo del vivero se ha dejado al criterio de los campesinos productores. Al inicio del proyecto (en el año 1991) uno de ellos proporcionó el terreno (1/2 ha sin costo alguno) y se turnaban entre ellos para cumplir las faenas semanales de limpieza, riego y otros asuntos relacionados con el cultivo. Este esquema hizo más eficiente la asesoría que recibieron en cuanto a los métodos de cultivo, manejo y control de plagas. Ahora con la experiencia que tienen en el cultivo decidieron dividir el vivero (las plantas) entre ellos ya que en los solares de sus casas les pueden dar una mejor atención.

**Observaciones y perspectivas**

Es recomendable que la SEMARNAT asegure que el recurso a manejar en UMA's existe en el/los predio/s o ejido/s de los interesados para evitar conflictos de colecta en predios ajenos cuando el permiso habiente no cuente con el recurso en sus terrenos.

Deben de existir acuerdos entre los productores participantes para la explotación de las semillas del medio silvestre pero esto no siempre se ha logrado. Los productores de *Zamia furfuracea* de la región de Los Tuxtlas tuvieron problemas de esta índole. El principal problema ha sido la colecta de semillas por parte de personas que no cuentan con el recurso en sus predios (Vovides et al., 2002).

Como ya se mencionó en otros principios, el JBC otorga asesoría en cuanto al manejo.

**Principio práctico 8:** *Debe haber arreglos para la cooperación internacional en los casos en los que se requiera la toma de decisiones y la coordinación multinacionales.*

**a) Aplicabilidad:**

NO APLICA. La especie es endémica de México, se distribuye en la vertiente del Golfo de México, desde Tamaulipas hasta Veracruz central.

**Principio práctico 9:** *Debe aplicarse un enfoque interdisciplinario y participativo a los niveles adecuados de gestión y gobierno que se relacionan con el uso.*

**a) Aplicabilidad:**

SI APLICA

**b) Medidas adoptadas:**

Los conocimientos del personal del JBC fueron indispensables al iniciar el proyecto y se pudo lograr gracias al apoyo del INECOL, después por el Consejo Nacional de Ciencia y Tecnología (CONACYT), la Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO), el GTZ-Alemania y últimamente de CONACYT-SEMARNAT (Sectorial).

Durante el financiamiento de la GTZ-Alemania se creó un vínculo con la agencia ProTrade la cual envió a un experto en mercadotecnia hortícola para investigar el posible mercado de las plantas en Alemania y para darle asesoría a los productores en busca de mejorar el producto. Se estableció un proyecto de riesgos compartidos con un viverista comercial (Sr. Botz) en Alemania y en colaboración financiaron un puesto en dos exposiciones de horticultura internacionales (Essen 1999 y 2000) para sondear el mercado alemán. Además financiaron el embalaje y transporte de varias plantas.

Durante la actual gestión del proyecto CONACYT-SEMARNAT se ha puesto énfasis en estudios poblacionales y genéticos para estimar el grado de amenaza y la "sanidad" de las poblaciones, se

pretende impulsar el mercado a través de la asociación CYCAMEX- Vivero La Curva- Parque Doña Falla, se está elaborando una página web se espera mejorar el cultivo y se quiere crear un centro de acopio para incorporar a los viveros de Chiapas.

### **Observaciones y perspectivas**

Se busca que CYCAMEX sea la agencia promotora de ventas del proyecto con miras a establecerse como una empresa comercial a largo plazo.

Se busca también establecer centros de acopio y puntos de venta.

Se requiere asesoría de cultivo y manejo de las plantas en vivero a los productores y a CYCAMEX en cuestiones de comercio internacional hortícola (GTZ-Alemania).

Se busca abrir camino en el mercado nacional mientras se mejora el producto para posteriormente poder entrar en el mercado internacional (un producto rural en competencia ruda con la floricultura altamente tecnificada).

### **Principio práctico 10:**

*Las políticas internacionales y nacionales deben tomar en cuenta: a) Los valores presentes y futuros que se derivan del uso de la diversidad biológica; b) Los valores intrínsecos y otros valores no económicos de la diversidad biológica; y c) Las fuerzas del mercado que repercuten en los valores y el uso.*

#### **a) Aplicabilidad:**

SI APLICA

#### **b) Medidas adoptadas:**

México es el segundo país a nivel mundial en diversidad de cícadas (Vovides, 2000) y tiene el 47% de las especies del neotrópico, siendo la mayoría endémicas con distribución restringida, en ocasiones a un solo cerro o a una micro-cuenca, con poblaciones pequeñas y muy vulnerables a la extinción. A pesar de estar incluidas en la NOM-059-SEMARNAT-2001 no se ha hecho la valoración del hábitat y su destrucción sigue sin freno.

El ejido no recibe pago por servicios ambientales de ningún tipo.

### **Observaciones y perspectivas**

Se sugiere el establecimiento de santuarios y micro-reservas (áreas naturales protegidas) como prioridad para garantizar su supervivencia *in situ* (INE-SEMARNAP, 2000).

Se podrían fomentar proyectos de ecoturismo como alternativa para algunas comunidades dado que muchas poblaciones de cícadas están en sitios de gran belleza natural.

**Principio práctico 11:** *Los usuarios de los componentes de la diversidad biológica deben buscar reducir al mínimo los desechos y los impactos ambientales adversos y optimizar los beneficios de los usos.*

#### **a) Aplicabilidad:**

SI APLICA

#### **b) Medidas adoptadas:**

Este proyecto no tiene problemas con los desechos y el uso de fertilizantes químicos y pesticidas es mínimo.

Se realizan monitoreos con la finalidad de evaluar las poblaciones naturales, detectar impactos negativos y modificar las prácticas de manejo. También se están llevando a cabo estudios de reintroducción. Se han publicado y están en proceso varios estudios de monitoreo de poblaciones en el medio silvestre.

Está en proceso un experimento que busca mejorar el cultivo, acelerar el crecimiento y mejorar la adaptación de *D. edule* al cultivo en maceta o contenedor.

### **Observaciones y perspectivas**

Existe la potencialidad de llevar a cabo estudios de mejora en los métodos de cultivo en el JBC para mejorar las prácticas productivas en el campo, de asesoría y gestión de mercado.

Se busca establecer centros de acopio y puntos de venta del producto.

**Principio práctico 12:** *Las necesidades de las comunidades indígenas y locales que viven de la utilización y la conservación de la diversidad biológica, y que se ven afectadas por éstas, deben reflejarse, junto con sus contribuciones a esta conservación y utilización sostenible, en la participación equitativa en los beneficios que se derivan del uso de esos recursos.*

#### **a) Aplicabilidad:**

SI APLICA

#### **b) Medidas adoptadas:**

Existen incentivos Hacendarios por estar registrados como una S.P.R. de R.L. El vivero tiene el potencial para generar un mayor número de empleos directos e indirectos en la medida en que crezca el mercado, la remuneración sea adecuada y la producción sea eficiente.

El vivero se inició con la participación rotatoria de 24 ejidatarios (hombres), para 1992 quedaban 5, actualmente sólo participan 3 ejidatarios y los beneficios se reparten equitativamente (Vovides et al. 2002).

Actualmente CYCAMEX S.P.R. de R.L. está formada por los ejidatarios y un gestor legal.

La asociación CYCAMEX ha servido para promover las plantas y crear puntos de venta en algunos viveros comerciales y municipales (Vivero La Curva y Parque Doña Falla).

Se ha participado en eventos como la Feria Anual de las Flores, Xalapa y la Expo Forestal 2005 en Morelos.

**Principio práctico 13:** *Los costos de gestión y conservación de la diversidad biológica deben interiorizarse dentro del área de gestión y reflejarse en la distribución de los beneficios que se derivan del uso.*

#### **a) Aplicabilidad:**

SI APLICA

#### **b) Medidas adoptadas:**

Hasta la fecha el proyecto ha sido apoyado con financiamiento de distintas instituciones (CONACYT, SEMARNAT, CONABIO, etc.), sin embargo se está buscando la manera de convertir el proyecto en una empresa autosuficiente. La finalidad del proyecto es poder cerrar el círculo de colecta de semillas, siembra, cultivo, venta y reintroducción de plantas al medio silvestre con percepciones económicas para los productores y sin la necesidad de financiamiento externo.

El proyecto ha sido ineficiente en la gestión de mercados, no se ha conseguido tener ventas regulares nacionales ni de exportación.

En gran medida el que las ventas de las UMA's sean bajas se debe a que se compite con el comercio ilegal. Las autoridades deben de invertir más recursos en combatir el saqueo y la tala ilegal en lugar de ejercer un control excesivo sobre las UMA's legales.

Se tiene una aproximación de los costos de producción y el precio del producto tanto a menudeo como a mayoreo es acordado entre los productores y el comprador. A la fecha las ventas no han podido cubrir todos los costos y tener utilidades regularmente. Sin embargo, se están tomando medidas para optimizar la gestión administrativa (cursos y talleres de capacitación administrativa), mejorar el manejo y el producto para poder cumplir con las características y requerimientos del mercado.

### **Observaciones y perspectivas**

Se busca también mejorar la promoción, establecer ligas con agentes de ventas, centros de acopio, punto de ventas.

Se necesita simplificar y/o mejorar las leyes de permisos para traslado de este producto no forestal.

### **Principio práctico 14:**

*Deben ponerse en práctica programas de educación y conciencia pública sobre conservación y utilización sostenible y desarrollarse métodos de comunicación más eficaces entre los interesados directos y los gerentes.*

#### **a) Aplicabilidad:**

SI APLICA

#### **b) Medidas adoptadas:**

El conocimiento de las cícadas entre el público en general es aún muy pobre. Estas plantas son más apreciadas en el extranjero que en México, a pesar de que somos dueños del 20% de la cicadoflora del mundo y de casi el 50% del hemisferio. La educación y divulgación sobre este grupo de plantas se debe de dar a todos los niveles incluyendo programas, documentales, etc.

La labor del Jardín Botánico Clavijero es muy clara en este sentido, tiene 25 años de haber establecido la Colección Nacional de Cícadas y ha jugado un papel clave en este sentido ya que es un centro de estudios científicos de este recurso reconocido internacionalmente. Además, la iniciativa del JBC en llevar acabo este tipo de manejo para plantas ha sido pionero (Vovides & Iglesias, 1994).

Se han realizado actividades de difusión a todos los niveles y existen varias publicaciones sobre cícadas. Se han creado 2 versiones del CD-ROM interactivo sobre cícadas (Gómez-Pompa et al., 1994; 2000) financiadas por la Conabio y la Smithsonian Institution. También se han publicado varios artículos de difusión (Vovides & Peters, 1997; Vovides, 2000; Vergara-Silva et al., 2002).

Está en proceso la elaboración de una página web informativa y promotora.

### **Observaciones y perspectivas**

Apoyar a instituciones y jardines botánicos para establecer colecciones de conservación *ex situ* (cf. La Colección Nacional de Cícadas del JBC).

Rescatar especialmente las poblaciones de amenaza inmediata debido a obras de expansión agrícola o cambio de uso de la tierra.

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Ministério do Ambiente, do Ordenamento do Território e do Desenvolvimento Regional



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<b>De / From:</b>	CITES Management Authority - Portugal		
<b>Data / Date:</b>	20-03-2006	<b>Nº págs / No pages:</b>	1
<b>Assunto / Subject</b>	Synergy between CITES and CBD		

MENSAGEM / REMARKS:

Dear colleagues

Following Notification No. 2005/052 we hereby inform the Secretariat that Portugal has no case studies to refer about synergy between CITES and CBD.

Best regards

*The* Head of Division

(João Loureiro)





MINISTERIO  
DE INDUSTRIA  
TURISMO Y COMERCIO

Mº INDUSTRIA, I. D. S. G. INSPEC. CERTIFIC. Y ASIST. TÉCNICA COMERCIO EXTERIOR	SERVICIO	Nº. 200626100000637 10/02/2006 11:01:06
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SECRETARÍA DE ESTADO DE  
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SUBDIRECCIÓN GENERAL DE  
INSPECCIÓN, CERTIFICACIÓN  
Y ASISTENCIA TÉCNICA DEL  
COMERCIO EXTERIOR

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10. Feb. 2006

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DE	AUTORIDAD ADMINISTRATIVA CITES - ESPAÑA	REPLY	FILE
A	SECRETARÍA CITES		
ASUNTO	NOTIFICACIÓN A LAS PARTES Nº 2005/052 SOBRE "SINERGIA ENTRE LA CITES Y EL CBD"		
S/REF		N/REF RT/	
FECHA	8 de febrero de 2005		
Nº DE PÁGS. INCLUYENDO PORTADA	1		

En relación con la Notificación a las Partes de la Secretaría CITES nº 2005/052 sobre "Sinergia entre la CITES y el CBD" le comunico que nuestro país no puede proporcionar ningún estudio sobre casos en los que se utilicen las directrices y los principios de Addis Abeba para el uso sostenible de la diversidad biológica para la exportación de especímenes de especies incluídas en el apéndice II del CITES, debido a que las exportaciones de especímenes silvestres son muy escasas (se limitan a algunos trofeos de caza, especímenes para uso científico, y algunos ejemplares irrecuperables destinados a algún proyecto de cría o similar), y nunca en volumen suficiente para aplicar dichas directrices o, al menos, para plantear un estudio de caso que pueda servir de ejemplo significativo de su aplicación.

LA JEFE DE AREA CITES,

*M. Rosario Rubio*  
María Rosario Rubio-García



Premio a las  
Mejores Prácticas MAP  
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EN CASO DE PROBLEMAS EN LA RECEPCIÓN, POR FAVOR LLAME A NUESTRAS OFICINAS

United Arab Emirates  
Federal Environmental Agency



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أبوظبي - ص.ب : ٥٩٥١  
هاتف : ٦٧٧٧٣٦٣ ٢ ٩٧١ + فاكس : ٦٧٧٠٥٠١ ٢ ٩٧١ +  
البريد الإلكتروني : uaefea@emirates.net.ae

Date: 25 March, 2006  
Ref: FEA/4-27-5/199/06

Jonathan Barazdo  
Chief of Convention Support Unit  
Secretariat of the CITES  
International Environment House  
Chemin des Anemones  
CH-1219, Chatelaine  
Geneva - SWITZERLAND

ACTION david COPY *Jonathan* (cover page only)

03 April 2006

REPLY . . . FILE

**Subject : Synergy between CITES & CBD**

Dear Jonathan Barazdo,

I refer to Notification to the Parties No. 2005/052 regarding the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity regarding the export of Appendix II export case-studies.

Please find attached our case-studies as requested.

Yours sincerely,

Abdalnasser Al Shamsi  
CITES, Office Manager

Encl: UAE Synergy between CITES & CBD Case Study report

## Synergy between CITES & CBD - Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity

### **Introduction**

As per the Decision 13.7, paragraph b), the United Arab Emirates (UAE) provides below case-studies of specific cases of export of Appendix II species and their applicability to the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.

An analysis of past records shows that there are exports of Appendix II species comprising mainly mammalian and bird species and the details can be seen in the table below. Non-commercial exports of Eagle owl (*Bubo ascelaphus*) have been mainly captive-bred specimens which have been sent to a similar operation in the UK to provide new genetic material to rejuvenate their captive-breeding stock and introduce new blood lines. These operations are registered under the ISIS ARKS databases which provide information on captive holdings of species from registered zoos worldwide.

The other species are also non-commercial exports of salted skins and deep-frozen carcasses from a UAE based zoological institution which specializes in Arabian endangered wildlife. These specimens are mortalities which have been sent to a natural history museum in UK as a part of a research project on comparative anatomy so as not to waste valuable genetic material.

1.

a) **United Arab Emirates**

b) **The species are:**

**Class: Mammalia:** Blanford's Fox (*Vulpes cana*), Sand cat (*Felis margarita*), Wild Cat (*Felis silvestris*).

**Class: Aves:** Eagle owl (*Bubo ascelaphus*), Boneli's eagle (*Hieraaetus fuscatus*), Imperial eagle (*Aquila heliaca*) & Lesser-spotted eagle (*Aquila pomarina*).

c) **Species Status**

Class: Mammalia	IUCN Status	National Status	Threats & Trends
Blanford's Fox ( <i>Vulpes cana</i> )	VU C1	Protected by Federal law (Vulnerable)	The Trend is generally Declining and Threats are habitat loss due to urban expansion and associated developments and human activities, competition with red fox on food and space and decline of prey items.
Sand cat ( <i>Felis margarita</i> )	NT	Protected by Federal law (Endangered)	The Trend is generally Declining and Threats are decrease in habitat quantity and quality, disturbance, intensified human activities and decline of prey species.

Wild Cat ( <i>Felis silvestris</i> )	N/A	Protected by Federal law (Endangered)	The Trend is generally declining and Threats are interbreeding with domestic cats, Degradation of natural habitats quality and quantity, and decline in prey species.
All above species are protected by the Federal law. The recently declared hunting law prohibits hunting, killing or trading of these animals. These three species are listed in Appendix one of hunting law which strictly prohibits hunting of these species. (Appendices are still in preparation).			
<b>Class: Aves</b>			
Eagle owl ( <i>Bubo ascelaphus</i> )	LC	Protected under Federal law	The Population trend is Stable with known threats possible persecution on a very small scale
Boneli's eagle ( <i>Hieraetus fuscatus</i> )	LC	Protected under Federal law	The Population trend is Stable with known threats possible persecution on a very small scale
Imperial eagle ( <i>Aquila heliaca</i> )	VU	Protected under Federal law	The Population trend is Stable with known threats possible persecution on a very small scale
Lesser-spotted eagle ( <i>Aquila pomarina</i> )	LC	Protected under Federal law	The Population trend is Stable with known threats possible persecution on a very small scale

#### d) Annual Exports

Species	Year	Number Exported	Export Quota
<b>Class: Mammalia</b>			
Blanford's Fox ( <i>Vulpes cana</i> )	2004	8	Not applicable
Sand cat ( <i>Felis margarita</i> )	2004	4	Not applicable
Wild Cat ( <i>Felis silvestris</i> )	2004	2	Not applicable
	<b>TOTAL</b>	<b>14</b>	
<b>Class: Aves</b>			
Eagle owl ( <i>Bubo ascelaphus</i> )	2004	8	Not applicable
Boneli's eagle ( <i>Hieraetus fuscatus</i> )	2004	1	Not applicable
Imperial eagle ( <i>Aquila heliaca</i> )	2004	1	Not applicable
Lesser-spotted eagle ( <i>Aquila pomarina</i> )	2004	1	Not applicable
	<b>TOTAL</b>	<b>11</b>	

e) Levels and purpose of harvest for use other than international trade.

There is no other purpose of harvest besides international trade.

f) Other factors influencing the conservation status of the species.

There is the possibility of limited persecution to protect livestock and poultry from predation by these species.

## 2) Case study analysis of Addis Ababa Principles and Guidelines

<b>Practical Principle 1:</b> Supportive policies, laws, and institutions are in place at all levels of governance and there are effective linkages between these levels.
a) <i>Applicability:</i> n/a b) <i>Action taken and comments:</i> n/a
<b>Practical Principle 2:</b> Recognizing the need for a governing framework consistent with international <sup>(1)</sup> national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.
a) <i>Applicability:</i> n/a b) <i>Action taken and comments:</i> n/a
<b>Practical Principle 3:</b> International, national policies, laws and regulations that distort markets which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity, should be identified and removed or mitigated.
a) <i>Applicability:</i> n/a b) <i>Action taken and comments:</i> n/a
<b>Practical Principle 4:</b> Adaptive management should be practiced, based on: 1. Science and traditional and local knowledge; 2. Iterative, timely and transparent feedback derived from monitoring the use, environmental, socio-economic impacts, and the status of the resource being used; and 3. Adjusting management based on timely feedback from the monitoring procedures.
a) <i>Applicability:</i> n/a b) <i>Action taken and comments:</i> n/a
<b>Practical Principle 5:</b> Sustainable use management goals and practices should avoid or minimize adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.
a) <i>Applicability:</i> n/a b) <i>Action taken and comments:</i> n/a
<b>Practical Principle 6:</b> Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.
a) <i>Applicability:</i> This principle is applicable to the exports of these Appendix II listed species as in the case of Eagle owls captive-bred species ( <i>not taken directly from the wild</i> ) are helping maintain the genetic health of a global breeding program for this species. For the other species available material in the form of carcasses and/or skins are being used for further scientific research.  b) <i>Action taken and comments:</i> Improved information available and which is based on scientific research can be better used to make appropriate decisions regarding this species.

<b>Practical Principle 7:</b> The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use and its impact.
a) <i>Applicability: n/a</i> b) <i>Action taken and comments: n/a</i>
<b>Practical Principle 8:</b> There should be arrangements for international cooperation where multinational decision-making and coordination are needed.
a) <i>Applicability: n/a</i> b) <i>Action taken and comments: n/a</i>
<b>Practical Principle 9:</b> An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance related to the use.
a) <i>Applicability: n/a</i> b) <i>Action taken and comments: n/a</i>
<b>Practical Principle 10:</b> International, national policies should take into account:
1. Current and potential values derived from the use of biological diversity; 2. Intrinsic and other non-economic values of biological diversity and 3. Market forces affecting the values and use.
a) <i>Applicability: n/a</i> b) <i>Action taken and comments: n/a</i>
<b>Practical Principle 11:</b> Users of biodiversity components should seek to minimize waste and adverse environmental impact and optimize benefits from uses.
a) <i>Applicability: n/a</i> b) <i>Action taken and comments: n/a</i>
<b>Practical Principle 12:</b> The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation and sustainable use, should be reflected in the equitable distribution of the benefits from the use of those resources.
a) <i>Applicability: n/a</i> b) <i>Action taken and comments: n/a</i>
<b>Practical Principle 13:</b> The costs of management and conservation of biological diversity should be internalized within the area of management and reflected in the distribution of the benefits from the use.
a) <i>Applicability: n/a</i> b) <i>Action taken and comments: n/a</i>
<b>Practical Principle 14:</b> Education and public awareness programs on conservation and sustainable use should be implemented and more effective methods of communications should be developed between and among stakeholders and managers.
a) <i>Applicability: n/a</i> b) <i>Action taken and comments: n/a</i>

## Conclusion

As can be seen from the case-studies in section 2) above it is only **Practical Principle 6** which is valid for the exports mentioned. This is due to these exports being for non-commercial reasons and purely for scientific research. These exports are also not of a species that is commercially being exploited to fill a commercial demand.

**UNITED STATES OF AMERICA**

From: Roddy\_Gabel@fws.gov [mailto:Roddy\_Gabel@fws.gov]  
Sent: 31 March 2006 19:12  
To: David Morgan; Tom De Meulenaer  
Cc: Peter\_Thomas@fws.gov; Anne\_StJohn@fws.gov  
Subject: Addis Ababa Principles--case studies

(Embedded image moved to file: pic06334.jpg)(Embedded image moved to file: pic26500.jpg)

Dear David and Tom,

Attached is the U.S. response to Notification to the Parties number 2005/52 regarding the Addis Ababa Sustainable Use Principles. We hope the included U.S. case studies are helpful in the evaluation of these principles in their application to the work of the Convention.

Regards,

Roddy Gabel

(See attached file: CITES & CBD Synergy questionnaire - final to Secretariat.doc)  
Robert R. Gabel

Chief, Division of Scientific Authority  
U.S. Fish and Wildlife Service  
4401 North Fairfax Drive, Room 750  
Arlington, Virginia 22203 USA  
Phone: 703-358-1708  
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1. Introductory information including

- a) Name of Party submitting study:

**United States of America**

- b) Appendix-II species:

**Plant: American ginseng (*Panax quinquefolius*)**

**Animal: black corals (Order Antipatharia)**

- c) Species status (e.g. current IUCN classification, national status or classification if applicable and population trend if known):

**American ginseng**

American ginseng is a slow-growing, long-lived herbaceous perennial of the Araliaceae family. The species is endemic to eastern North America, occurring from southern Canada (Ontario and Quebec), west to South Dakota and Oklahoma, and south to Georgia (Small and Catling 1999; NatureServe 2005). Although American ginseng has a large geographic range, it occupies a narrow ecological niche, resulting in sparsely distributed populations across extensive areas (Lewis and Zenger 1983; Charron and Gagnon 1991; McGraw et al. 2003).

Reproduction of the species is almost entirely by seed. Although vegetative propagation (asexual) by rhizome or root fragmentation is possible, it has rarely been observed in the wild (Lewis 1988; Charron and Gagnon 1991). American ginseng has a low reproductive potential due to delayed reproduction (plants usually begin to reproduce by 4 years of age), low seed production, and high seed and seedling mortality (Carpenter and Cottam 1982; Lewis and Zenger 1983; Lewis 1988; Charron and Gagnon 1991, Anderson et al. 1983; Dunwiddie and Anderson 1999; Farrington in litt. 2005). Fruit production gradually increases with age-class (i.e., 2 fruits by 2-leafed plants, 1–9 fruits by 3-leafed plants, and 9–15 fruits by 4-leafed plants) (Lewis and Zenger 1982).

American ginseng roots are commercially harvested primarily for medicinal purposes. Throughout its range, the distribution and occurrence of American ginseng has decreased considerably since European settlement, primarily because of extensive harvest of roots for international trade. There is a growing amount of empirical data that show a decline in the species' abundance and distribution in protected Federal and State public lands (e.g., National Park Service (NPS) and U.S. Forest Service (USFS)) and unprotected public lands (harvest with authorization); that populations are small with predominately young plants (2-leafed plants); and that older seed-producing plants (3- and 4-leafed plants) are absent from many populations (Carpenter and Cottam 1982; Schlessman 1985; Rock et al. 1999; Spira, in litt. 1999; Charron and Gagnon 1991; Van der Voort 1998; Dunwiddie and Anderson 1999; Hackney and McGraw 2001; Gagnon 2003; Jones 2003; Kauffman 2003; Cruse-Sanders and Hamrick 2004; Furedi and McGraw 2004; Albrecht in litt. 2005; McGraw and Furedi 2005; Van der Voort 2005; Young et al. 2005). Diggers and dealers also report that American ginseng is becoming increasingly hard to find, causing diggers to travel farther into forested and/or protected areas in search of American ginseng (Greenfield and Davis 2003, Barringer 2005).

Given the large number of permits issued by the U.S. Management Authority for the export of American ginseng, the Division of Scientific Authority (DSA) issues multi-year or annual findings on a State-by-State basis, instead of individual permits. Currently, wild American ginseng harvest programs exist in Alabama, Arkansas, Georgia, Illinois, Indiana, Iowa, Kentucky, Maryland, Minnesota, Missouri, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin. To determine whether or not to approve exports of wild American ginseng harvested in a particular State, the U.S. Scientific Authority (i.e., DSA) annually gathers information from a wide range of sources (other Federal agencies, State regulatory agencies, industry and associations, nongovernmental organizations, and scientific community) on the biology and trade status of the species. For further details, see

“Action taken and comments” section under Principle 1.

### **Black coral**

Black corals are colonial cnidarians in the order Antipatharia. There are over 200 described species. They are found throughout the world’s oceans, but are most common in tropical deep water habitats from 30-80 m depth. Although the taxon is widespread, species have a patchy distribution and generally occur at a low abundance.

All species of black coral are characterized by slow growth relative to other branching corals, delayed first reproduction, limited larval dispersal and low rates of recruitment, low natural adult mortality, and long life.

Black coral is commercially harvested primarily for the jewelry trade. More recently, a small trade in live specimens for aquarium organisms has been reported. Colonies are selectively harvested from up to 75m depth using SCUBA. Advanced diving techniques, including re-breathers, mixed gases and remotely operated vehicles (ROVs), allow selective harvesting from deeper water, but tangle net dredges have also been employed for non-selective harvest.

Black corals may be globally threatened as a result of over-harvesting in many parts of the world. However, data on status and trends are limited. These species may be vulnerable to overexploitation due to certain life history characteristics such as a slow rate of growth (relative to other branching corals), delayed reproduction, and limited dispersal capabilities.

The wild black coral exported from the United States of America originates from Hawaii, where 14 species of black coral have been identified. Unlike American ginseng, CITES findings for export of black coral are issued on a permit-by-permit basis. The DSA has determined that the current level of harvest is not likely to exceed the maximum sustainable yield determined for the species. Although there is no limit to participation in the black coral fishery and harvest reporting by commercial fishers (divers) is voluntary, harvest is limited by the extremely small number of commercial divers currently collecting black coral. The State of Hawaii has a mandatory 3/4" minimum base diameter on all harvested coral and has recently instituted a 48-inch length limit (R. Griggs, personal communication). Furthermore, black coral exists at depths below which scuba equipment can safely be used in most areas. Therefore, only coral at the upper limits of growth is currently harvested. In 1998, a study completed under contract to the DSA indicated that a voluntary minimum size limit of 36 inches for harvest of black coral colonies has resulted in little change in the status of black coral around Maui, the area subject to harvest, over the last 20+ years.

- d) Annual exports (for past 5-10 years), and export quota if applicable

### **American ginseng**

There is no harvest or export quota for American ginseng at either the national or State level. Harvest of American ginseng is regulated by the States. Annual exports from 1995 to 1994 are provided in Annex 1. We note that artificially-propagated and wild American ginseng roots are easily distinguished due to their distinct physical appearance. However, wild American ginseng may include roots originating from truly wild plants as well as those produced in semi-natural conditions (often referred to as woodsgrown or wild-cultivated American ginseng).

### **Black coral**

There is no harvest or export quota for black coral at either the national or State level. Currently, all exported black coral originates from the State of Hawaii, which regulates its harvest by limiting the number of harvesters and setting a minimum-size for harvest of specimens. Annual exports from 1995 to 1994 are provided in Annex 2.

- e) Levels and purpose of harvest for use other than international trade; e.g. subsistence, domestic trade, etc.

#### **American ginseng**

Most wild American ginseng harvested in the United States of America is exported to Asia (Annex 1). The domestic trade in American ginseng consists almost entirely of artificially-propagated roots.

- f) Other factors influencing the conservation status of the species (e.g. impact of non-consumptive use, pest control measures, etc.)

#### **American ginseng**

The negative impact of American ginseng over-harvest has been compounded in some States by white-tailed deer (*Odocoileus virginianus*) browsing. Research shows that repeated browsing of American ginseng by deer can result in a decline in the percentage of mature plants that produce inflorescences (Drees 2003). Furthermore, in some areas, age structure of American ginseng populations is being affected by the selective browsing of adult plants over seedlings and juveniles (Farrington in litt. 2005; McGraw and Furedi 2005).

The practice of using cultivated seeds to replenish and supplement existing wild populations may also have negative impacts on wild populations (Grubbs and Case 2004; McGraw, in litt. 2004; E. Schlag, in litt. 2005). Grubbs and Case (2004) found that wild American ginseng had over 2.5 times more genetic variation distributed among its populations than cultivated plants. The planting of cultivated and non-local genotypes into wild populations can reduce the fitness of progeny by diluting locally adapted gene pools, which over time may affect the long-term viability of the species (Grubbs and Case 2004; McGraw, in litt. 2004). Genetic research has revealed that wild American ginseng plants are distinct from cultivated plants (Boehm et al. 1999; Schlag, in litt. 2005). In addition, cultivated American ginseng seeds from commercial sources could be contaminated with fungal spores (e.g., *alternaria* fungus), which could infect wild populations (A. Hankins, Virginia extension specialist, pers. comm.).

#### **Black coral**

In addition to over-harvest, populations of black coral are impacted by harvest bycatch associated with trawling and other fishing activities, and habitat destruction.

## 2. Case study analysis of Addis Ababa Principles and Guidelines:

When filling in this table, apply these questions to all Practical principles and associated guidelines.

- a) Applicability: Is this principle (and associated guidelines) applicable to the management of this species? Is it applicable to management of exports of this species?
- b) Actions taken: If applicable, how is this principle (and associated guidelines) currently being used in making management decisions? If applicable to exports, how is it being used in making non-detriment findings? If applicable but not currently in use, how could it be used?

#### **General comments**

The United States of America strongly supports the concept of sustainable use. The case studies used for this questionnaire, American ginseng and black coral, are two of many U.S. species that are sustainably harvested in the country.

Although the United States of America is not a Party to CBD, we also support the objectives of the CBD, as stated in Article 3, participate broadly in its activities, and financially support the work of the CBD Secretariat.

However, we would like to note that the Addis Ababa Principles and Guidelines were developed to achieve the broad objectives of the CBD, and CITES was not formally consulted by CBD. Although the CBD and CITES are involved in the conservation of the world's biodiversity, the two conventions have different objectives and serve different purposes. Whereas CBD provides general guidance to Parties on how to address a broad range of biodiversity issues, through national implementation, CITES is regulatory in nature, species-specific, and focuses on international trade in wildlife. Thus, many of the Addis Ababa Principles and Guidelines are not pertinent or applicable to CITES, as described below.

PRACTICAL PRINCIPLE 1: Supportive policies, laws and institutions are in place at all levels of governance and there are effective linkages between these levels.

Operational guidelines:

- Consider local customs and traditions (and customary law where recognized) when drafting new legislation and regulations;
  - Identify existing and develop new supportive incentives measures, policies, laws and institutions, as required, within the jurisdiction in which a use will take place, also taking into account Articles 8(j) and 10(c), as appropriate;
  - Identify any overlaps, omissions and contradictions in existing laws and policies and initiate concrete actions to resolve them;
  - Strengthen and/or create cooperative and supportive linkages between all levels of governance in order to avoid duplication of efforts or inconsistencies.
- a) Applicability: We note that the idea of involving local communities in the drafting of laws pertaining to use of wildlife is already contained in the "*Checklist to assist in making non-detriment findings for Appendix-II exports*" developed and published by the IUCN (see Chapter 5, page 62, section 2.12).

Although the United States of America supports other ideas contained in Principle 1, the above underlined text is too broad as it makes recommendations about the drafting of national legislation and regulations beyond those pertaining to the implementation of CITES. Furthermore, they are not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

b) Action taken and comments:

In the United States of America, Amendment X of the U.S. Constitution states that "*powers not delegated to the [Federal Government] by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.*" One of the powers reserved to U.S states and territories is the management and conservation of their plants and animals, unless the specimen originates from Federal lands (e.g., U.S. National Forest, U.S. National Park, National Wildlife Refuge) or the species is protected by a Federal statute (e.g., U.S. Endangered Species Act, Eagle Protection Act, Marine Mammal Protection Act, Migratory Bird Treaty Act, etc.). Consequently, laws pertaining to the management, utilization, and conservation of many native species, including American ginseng and black coral, as well as the government agencies responsible for implementation of such laws often vary among U.S. States and Territories. Meanwhile, implementation of CITES, carried out through the U.S. Endangered Species Act, is the purview of the Federal Government, specifically the U.S. Department of Interior (which serves as the U.S. Management and Scientific Authorities, and inspects animal shipments) and U.S. Department of Agriculture (responsible for inspection of plant shipments). To strengthen implementation of CITES, the U.S. Management and Scientific Authorities hold regular coordination meetings with other relevant Federal and State agencies. Moreover, Federal law requires that federal agencies publish proposed regulations and consult with relevant stakeholders during the preparation of such regulations. Below are additional specific actions pertaining to American ginseng and black coral.

## **American ginseng**

To determine whether or not to approve exports of wild American ginseng harvested in a particular State, the DSA annually gathers information on the general status of the species in each State. Throughout the year, the DSA communicates with State botanists and biologists and other Federal agencies (e.g., NPS, USFS) through an American ginseng list serve. The DSA also seeks information from the public, the scientific community, the industry and trade representatives (harvesters, growers, buyers, exporters, and medicinal plant trade associations), and other interested parties. Public meetings have been held in several States where American ginseng is harvested, so that interested individuals can speak freely about the harvest and regulation of American ginseng, and also the biological status and impacts of harvest and international trade on wild populations of the species.

The information gathered and non-detriment findings are disseminated through the U.S. Fish and Wildlife website, the American ginseng listserve, etc. This information is then incorporated by the States and other Federal agencies, as appropriate, in their own management and harvest programs. For example, due to concerns about the decline of American ginseng from over-harvest, the USFS Eastern Region currently prohibits the collection of American ginseng on all but two of its National Forests (NF) and continues to list the species on the USFS list of rare species (Regional Forester's Sensitive List) for nine eastern NFs. Meanwhile, the USFS Southern Region prohibits and restricts the issuance of American ginseng permits on some of its NFs.

Since wild American ginseng rarely propagates asexually, it is critical that plants be allowed to reach reproductive age and produce seeds prior to their harvest so as to ensure replacement of the harvested plants and long-term survival of the species. Most States with wild American ginseng harvest programs already have regulations in place that prohibit the harvest of plants younger than 5 years old and require the planting of seeds at the site where plants are being collected. However, such regulations are difficult to enforce in the field. To assist the States in the enforcement of regulations pertaining to minimum age of plants harvested, since 1999 the DSA has requested that the U.S. Management Authority condition permits for the export of wild American ginseng roots so as to allow only export of roots that are 5 years of age or older.

Recognizing the need for better information on the status of the species in the wild, the DSA jump-started several American ginseng monitoring projects. Moreover, the DSA has helped some scientific researchers obtain funding for research projects on American ginseng, including the importance of timing of harvest season, the impact of various harvest practices on the species, the effects of deer browsing and dispersal of seeds by turkey, and development of a habitat prediction model for the species.

The responsibility for inspection of all plant imports and exports, including shipments of American ginseng, rests with the U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS). Policies on the inspection and clearance of plant shipments, including American ginseng, are made by APHIS. The U.S. Fish and Wildlife Service works closely with APHIS in the enforcement and implementation of American ginseng regulations.

## **Black coral**

The DSA funded a study, conducted by a researcher from the University of Hawaii, to examine the impact of black coral harvest on Hawaii.

PRACTICAL PRINCIPLE 2: Recognizing the need for a governing framework consistent with international/national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.

Operational guidelines:

- Where possible adopt means that aim toward delegating rights, responsibility, and accountability to those who use and/or manage biological resources;

- Review existing regulations to see if they can be used for delegating rights; amend regulations where needed and possible; and/or draft new regulations where needed. Throughout local customs and traditions (including customary law where recognized) should be considered;
  - Refer to the programme of work related to the implementation of Article 8(j) with regard to indigenous and local community issues (decision V/16), implement and integrate tasks relevant for the sustainable use of biodiversity components, in particular element 3, tasks 6, 13 and 14;
  - Provide training and extension services to enhance the capacity of people to enter into effective decision-making arrangements as well as in implementation of sustainable use methods;
  - Protect and encourage customary use of biological resources that is sustainable, in accordance with traditional and cultural practices (Article 10(c)).
- a) Applicability: We note that the idea of community involvement in wildlife use programs is already contained in the *“Checklist to assist in making non-detriment findings for Appendix-II exports”* developed and published by the IUCN (see Chapter 5, page 62-63, sections 2.12 and 2.16). However, the above underlined text is too broad as it makes recommendations about the drafting of national legislation and regulations beyond those pertaining to the implementation of CITES. Furthermore, such text is not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

It is also unclear what *“local users”* or *“indigenous and local communities”* are. In the United States of America, most of the wild American ginseng and wild black coral that is exported is harvested by non-indigenous harvesters acting independently, with no ties to a particular community.

Finally, the rationale for this principle, i.e., *“Resources for which individuals or communities have use, non-use, or transfer rights are usually used more responsibly because they no longer need to maximise benefits before someone else removes the resources,”* does not always hold true. In the case of American ginseng, many long-time harvesters have noted that the ethics of American ginseng harvesting has changed and a new generation of harvesters has emerged that may not have the same stewardship values to perpetuate the species. Because of the high prices paid for wild American ginseng roots, many of these new harvesters often harvest all plants they encounter to avoid having their plants harvested by other harvesters. There is also increasing anecdotal information suggesting that some American ginseng harvesters are harvesting wild seeds and young roots to transplant to other locations, including their own property, for subsequent harvests or to sell as transplants.

- b) Action taken and comments: To determine whether or not to approve exports of wild American ginseng, the DSA seeks information from the public, the scientific community, the industry and trade representatives (harvesters, growers, buyers, exporters, and medicinal plant trade associations), and other interested parties. See “Action taken and comment” section under Principle 1 for further details.

PRACTICAL PRINCIPLE 3: International, national policies, laws and regulations that distort markets which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity, should be identified and removed or mitigated.

Operational guidelines:

- Identify economic mechanisms, including incentive systems and subsidies at international, national levels that are having a negative impact on the potential sustainability of uses of biological diversity;
  - Remove those systems leading to market distortions that result in unsustainable uses of biodiversity components;
  - Avoid unnecessary and inadequate regulations of uses of biological diversity because they can increase costs, foreclose opportunities, and encourage unregulated uses thus decreasing the sustainability of the use.
- a) Applicability: Principle 3 addresses the impact of certain types of markets on biodiversity, an issue outside the scope of CITES. The above underlined text is also too broad as it makes

recommendations about the drafting of national legislation and regulations beyond those pertaining to the implementation of CITES. Furthermore, such text is not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

b) Action taken and comments: None.

PRACTICAL PRINCIPLE 4: Adaptive management should be practiced, based on:

- a. science and traditional and local knowledge;
- b. iterative, timely and transparent feedback derived from monitoring the use, environmental, socio-economic impacts, and the status of the resource being used; and
- c. adjusting management based on timely feedback from the monitoring procedures.

Operational guidelines:

- Ensure that for particular uses adaptive management schemes are in place;
- Require adaptive management plans to incorporate systems to generate sustainable revenue, where the benefits go to indigenous and local communities and local stakeholders to support successful implementation;
- Provide extension assistance in setting up and maintaining monitoring and feedback systems;
- Include clear descriptions of their adaptive management system, which includes means to assess uncertainties;
- Respond quickly to unsustainable practices;
- Design monitoring system on a temporal scale sufficient to ensure that information about the status of the resource and ecosystem is available to inform management decisions to ensure that the resource is conserved;
- When using traditional and local knowledge, ensure that approval of the holder of that knowledge has been obtained.

a) Applicability: The United States of America strongly supports and practices adaptive management of its natural resources. We note that the concept of adaptive management of natural resources based on monitoring and consultation with local communities is already contained in the *“Checklist to assist in making non-detriment findings for Appendix-II exports”* developed and published by the IUCN (see Chapter 5, page 62, section 2.11), as well as the CITES training presentations developed by the Secretariat.

However, the above underlined text referring to revenue distribution and rights of access to information is outside the scope of CITES. Furthermore, such text is not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

b) Action taken and comments: See “Action taken and comment” section under Principle 1.

PRACTICAL PRINCIPLE 5: Sustainable use management goals and practices should avoid or minimize adverse impacts on ecosystem services, structure, and functions as well as other components of ecosystems.

Operational guidelines:

- Ensure management practices do not impair the capacity of ecosystems to deliver goods and services that may be needed some distance from the site of use. For example, selective cutting of timber in a watershed would help maintain the ecosystem’s capacity to prevent soil erosion and provide clean water;
- Ensure that consumptive and non-consumptive use does not impair the long-term sustainability of that use by negatively impacting the ecosystem and species on which the use depends, paying special attention to the needs of threatened components of biological diversity;
- Apply a precautionary approach in management decisions in accordance with principle 15 of the Rio Declaration on Environment and Development;

- Identify successful experiences of management of biodiversity components in other countries in order to adapt and incorporate this knowledge in their efforts to resolve their own difficulties;
  - Where possible consider the aggregate and cumulative impact of activities on the target species or ecosystem in management decisions related to that species or ecosystem;
  - Where previous impacts have degraded and reduced biodiversity, support formulation and implementation of remedial action plans (Article 10(d)).
- a) Applicability: We note that Article IV (paragraph 3) of CITES already requires a Scientific Authority of each Party to monitor exports of Appendix-II species and to advise the Management Authority of suitable measures to be taken to limit such exports in order to maintain such species throughout their range at a level consistent with their role in the ecosystem.

PRACTICAL PRINCIPLE 6: Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.

Operational guidelines:

- Ensure that the results of research inform and guide international, national policies and decisions;
  - Invest in research into techniques and technologies of management of biodiversity components that promote sustainability in both consumptive and non-consumptive uses of biodiversity;
  - Encourage active collaboration between scientific researchers and people with local and traditional knowledge;
  - Encourage international support and technology transfer, relating to both consumptive and non-consumptive uses of biodiversity;
  - Develop cooperation between researchers and biodiversity users (private or local communities), in particular, involve indigenous and local communities as research partners and use their expertise to assess management methods and technologies;
  - Investigate and develop effective ways to improve environmental education and awareness, to encourage public participation and to stimulate the involvement of stakeholders in biodiversity management and sustainable use of resources;
  - Investigate and develop means of ensuring rights of access and methods for helping to ensure that the benefits derived from using components of biodiversity are equitably shared;
  - Make research results available in a form which decision makers, users, and other stakeholders can apply;
  - Promote exchange programmes in scientific and technical areas.
- a) Applicability: The United States of America fully supports the use of interdisciplinary research in the management of its natural resources. However, the above underlined text pertaining to revenue distribution and rights of access to information is outside the scope of CITES. Furthermore, those issues are not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

b) Action taken and comments:

#### **American ginseng**

Recognizing the need for better information on the status of the species in the wild, in the late 1990s the DSA jump-started several American ginseng monitoring projects. Moreover, the DSA has helped some scientific researchers obtain funding for research projects on American ginseng, including the importance of timing of harvest season, the impact of various harvest practices on the species, the effects of deer browsing and dispersal of seeds by deer and turkey, and development of a habitat prediction model for the species.

#### **Black coral**

The DSA funded a study, conducted by a researcher from the University of Hawaii, to examine the impact of black coral harvest on Hawaii.

PRACTICAL PRINCIPLE 7: The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use and its impact.

Operational guidelines:

- Link responsibility and accountability to the spatial and temporal scale of use;
  - Define the management objectives for the resource being used;
  - Enable full public participation in preparation of management plans to best ensure ecological and socio-economic sustainability.
  - In case of transboundary resources, it is advisable that appropriate representation from those states participate in the management and decisions about the resources.
- a) Applicability: We note that the idea of involving local communities in wildlife use programs is already contained in the *“Checklist to assist in making non-detriment findings for Appendix-II exports”* developed and published by the IUCN (see Chapter 5, page 62-63, sections 2.12 and 2.16). However, the above underlined text refers to issues outside the scope of CITES. Furthermore, such text is not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.
- b) Action taken and comments: See “Action taken and comment” section under Principle 1.

PRACTICAL PRINCIPLE 8: There should be arrangements for international cooperation where multinational decision-making and coordination are needed.

Operational guidelines:

- Make arrangements for international cooperation when the distribution of populations or communities/habitats being used span two or more nations;
  - Promote multinational technical committees to prepare recommendations for the sustainable use of transboundary resources;
  - Have bilateral or multilateral agreements between or among the states for the sustainable use of transboundary resources;
  - Establish mechanisms involving the collaborating states to ensure that sustainable use of transboundary resources does not negatively impact the ecosystem capacity and resilience.
- a) Applicability: Principle 8 is already widely practiced within CITES (e.g., the so-called Paris agreement on management of sturgeon species in the Caspian and Black Sea; CITES-sponsored taxon-specific workshops and dialogues such as those for African elephants, hawksbill sea turtles, queen conch, sea horses, sea cucumbers, saiga, etc.).
- b) Action taken and comments: Since the late 1990s, the Scientific Authorities of United States of America and Canada have shared information and collaborated in several projects pertaining to American ginseng management.

PRACTICAL PRINCIPLE 9: An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance related to the use.

Operational guidelines:

- Consider providing mechanisms that encourage interdisciplinary cooperation in management of biodiversity components;
- Set standards for resource management activities that promote interdisciplinary consultations;
- Facilitate communication and exchange of information between all levels of decision-making;
- Identify all relevant stakeholders and seek their participation in planning and executing of management activities;
- Take account of socio-economic, political, biological, ecological, institutional, religious and cultural factors that could influence the sustainability of the management;
- Seek guidance from local, traditional and technical specialists in designing the management plan;

- Provide adequate channels of negotiations so that potential conflicts arising from the participatory involvement of all people can be quickly and satisfactorily resolved.
- a) Applicability: The United States of America strongly supports the use of an interdisciplinary, participatory approach in the management of natural resources. However, references to socio-economic, political, institutional, religious, and cultural factors are outside the scope of CITES. Furthermore, they are not directly relevant to the preparation of CITES non-detriment findings by Scientific Authorities.
  - b) Action taken and comments: See “Action taken and comment” section under Principle 1.

PRACTICAL PRINCIPLE 10: International, national policies should take into account:

- a. current and potential values derived from the use of biological diversity;
- b. intrinsic and other non-economic values of biological diversity; and
- c. market forces affecting the values and use.

Operational guidelines:

- Promote economic valuation studies of the environmental services of natural ecosystems;
- Incorporate this information in policy and decision making processes, as well as educational applications;
- Consider this principle in relation to land use/habitat conversion tradeoffs. Recognize that market forces are not always sufficient to improve living conditions or increase sustainability in the use of components of biological diversity;
- Encourage governments to take into account biodiversity values in their national accounts;
- Encourage and facilitate capacity building for decision makers about concepts related to economic valuation of biodiversity.

a) Applicability: Principle 10 addresses economic valuation of environmental services provided by natural ecosystems and the role of market forces on the use of biodiversity, issues that are both outside the scope of CITES. Furthermore, they are not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

b) Action taken and comments: None.

PRACTICAL PRINCIPLE 11: Users of biodiversity components should seek to minimize waste and adverse environmental impact and optimize benefits from uses.

Operational guidelines:

- Eliminate perverse incentives and provide economic incentives for resource managers to invest in development and/or use of more environmentally friendly techniques, e.g., tax exemptions, funds available for productive practices, lower loan interest rates, certification for accessing new markets;
- Establish technical cooperation mechanisms in order to guarantee the transfer of improved technologies to communities;
- Endeavour to have an independent review of harvests to ensure that greater efficiencies in harvest or other extractive uses do not have a deleterious impact on the status of the resource being used or its ecosystem;
- Identify inefficiencies and costs in current methods;
- Conduct research and development into improved methods;
- Promote or encourage establishment of agreed industry and third party quality standards of biodiversity component processing and management at the international and national levels;
- Promote more efficient, ethical and humane use of components of biodiversity, within local and national contexts, and reduce collateral damage to biodiversity.

a) **Applicability:** The United States of America supports the concept of minimizing waste and the adverse environmental impact of wildlife extraction. We also note that the issue of economic incentives is already being discussed within the Standing Committee. However, the above underlined text dealing with quality standards is outside the scope of CITES and is not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

b) **Action taken and comments:**

### **American Ginseng**

The DSA has helped some scientific researchers obtain funding for research projects on the impact of various harvest practices on the species.

PRACTICAL PRINCIPLE 12: The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation and sustainable use, should be reflected in the equitable distribution of the benefits from the use of those resources.

Operational guidelines:

- Promote economic incentives that will guarantee additional benefits to indigenous and local communities and stakeholders who are involved in the management of any biodiversity components, e.g., job opportunities for local peoples, equal distribution of returns amongst locals and outside investors/co-management;
- Adopt policies and regulations that ensure that indigenous and local communities and local stakeholders who are engaged in the management of a resource for sustainable use receive an equitable share of any benefits derived from that use;
- Ensure that national policies and regulation for sustainable use recognize and account for non-monetary values of natural resources;
- Consider ways to bring uncontrolled use of biological resources into a legal and sustainable use framework, including promoting alternative non-consumptive uses of these resources;
- Ensure that an equitable share of the benefits remain with the local people in those cases where foreign investment is involved;
- Involve local stakeholders, including indigenous and local communities, in the management of any natural resource and provide those involved with equitable compensation for their efforts, taking into account monetary and non-monetary benefits;
- In the event that management dictates a reduction in harvest levels, to the extent practicable assistance should be provided for local stakeholders, including indigenous and local communities, who are directly dependent on the resource to have access to alternatives.

a) **Applicability:** We note that the idea of involving local communities in wildlife use programs is already contained in the “Checklist to assist in making non-detriment findings for Appendix-II exports” developed and published by the IUCN (see Chapter 5, page 62-63, sections 2.12 and 2.16). However, the main issues addressed in Principle 12, revenue distribution and rights of access to information, are both outside the scope of CITES. Furthermore, they are not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

b) **Action taken and comments:** See “Action taken and comment” section under Principle 1.

PRACTICAL PRINCIPLE 13: The costs of management and conservation of biological diversity should be internalized within the area of management and reflected in the distribution of the benefits from the use.

Operational guidelines:

- Ensure that national policies do not provide subsidies that mask true costs of management;
- Ensure that harvest levels and quotas are set according to information provided by the monitoring system, not the economic needs of the management system;

- Provide guidelines for resource managers to calculate and report the real cost of management in their business plans;
- Create other alternative mechanisms to invest revenues from biodiversity management;
- Provide economic incentives for managers who have already internalized environmental costs, e.g., certification to access new markets, waiver or deferral of taxes in lieu of environmental investment, promotion of “green-labelling” for marketing.

a) Applicability: We note that the issue of economic incentives is already being discussed within the Standing Committee. However, the above underlined text pertaining to costs of management and investment of revenues are both outside the scope of CITES. Furthermore, they are not relevant to the preparation of CITES non-detriment findings by Scientific Authorities.

b) Action taken and comments: None.

PRACTICAL PRINCIPLE 14: Education and public awareness programmes on conservation and sustainable use should be implemented and more effective methods of communications should be developed between and among stakeholders and managers.

Operational guidelines:

- Plan education and public-awareness activities concerning: management, values of sustainable use, changing consumptive patterns and the value of biodiversity in the lives of people;
- Ensure that public-awareness programmes also inform and guide decision makers;
- Target all levels of the chain of production and consumption with such communications;
- Report lessons learned about sustainable use activities to the clearing-house mechanism of the Convention on Biological Diversity;
- Encourage and facilitate communication of lessons learned and best practices to other nations;
- Ensure that resource users report to government on their activities in a manner that facilitates broader communications;
- Increase awareness of the contributions of knowledge, practices and innovations of indigenous and local communities for the sustainable use of biological diversity.

a) Applicability: Principle 14 could be incorporated as part of the CITES capacity building program. However, it does not apply the preparation of CITES non-detriment findings by Scientific Authorities.

b) Action taken and comments: None.

### 3. References

## SUMMARY OF CASE STUDIES TO ASSESS THE RELEVANCE OF THE ADDIS ABABA PRINCIPLES AND GUIDELINES FOR THE SUSTAINABLE USE OF BIODIVERSITY TO CITES

This Annex has been prepared by Dr Greg Leach, Plants Committee regional representative for Oceania and Dr Siti Prijono, Animals Committee regional representative for Asia.

In compliance with Decision 13.7 paragraph b), Notification 2005/052 invited Parties to provide case studies in the requested format by 31 March 2006.

In response to this Notification, case studies were provided for Great white shark *Carcharodon carcharias*, Chesnut dioon cycad *Dioon edule*, American ginseng *Panax quinquefolius*, black corals Order Antipatharia, Blanford's Fox *Vulpes cana*, Sand Cat *Felis margarita*, Wild Cat *Felis silvestris*, Eagle Owl *Bubo ascelaphus*, Boneli's eagle *Hieraaetus fuscatus*, Imperial eagle *Aquila heliaca*, Lesser-spotted eagle *Aquila pomarina*. A case study from Indonesia relating to Priam's Birdwing Butterfly *Ornithoptera priamus* was also used.

The case studies provide a diversity of examples from terrestrial and marine environments, animal and plant kingdoms, mobile and sedentary fauna, vertebrates and invertebrates, fully protected and utilised species.

A summary of the responses are provided under each principle. As a general comment, the "Checklist to assist in making non-detriment findings for Appendix II exports" was recognised as already incorporating elements of Practical Principles 1, 2, 4, 7 and 12. Further analysis of the Checklist with the principles could be useful.

**Practical principle 1: Supportive policies, laws and institutions are in place at all levels of governance and there are effective linkages between these levels.**

CITES has requirements that generally meet the governance arrangements outlined in this principle although some case studies indicate ongoing improvement of linkages is required. This principle was considered not directly relevant for making non-detriment findings (NDFs) and issuing permits. The recommendations concerning legislative and regulatory provisions were beyond the scope of CITES.

**Practical principle 2: Recognising the need for a governing framework consistent with international/national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.**

There are CITES examples (e.g. Dioon, Priam's Birdwing) where local users are engaged in various stages of decision-making Workshops, reports and monitoring surveys are examples that enable communication between local users and authorities. This principle was considered to be not appropriate or helpful in making NDFs. The MA and SA were the appropriate bodies to be ultimately accountable under the provisions of CITES. The recommendations concerning legislative and regulatory provisions were beyond the scope of CITES.

**Practical principle 3: International, national policies, laws and regulations that distort markets which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity, should be identified and removed or mitigated.**

The reference to both habitat degradation and markets are outside the scope of CITES. This principle was not relevant to making NDFs. The recommendations concerning legislative and regulatory provisions were beyond the scope of CITES. The Priam's Birdwing example raised the issue of complex regulations as perhaps contributing to perverse incentives.

**Practical principle 4: Adaptive management should be practiced, based on:**

a) **Science and traditional and local knowledge;**

- b) **Iterative, timely and transparent feedback derived from monitoring the use, environmental, socio-economic impacts, and the status of the resource being used; and**
- c) **Adjusting management based on timely feedback from the monitoring procedures.**

CITES already recognises that any sustainable use of biological resources should be based on the best available knowledge of population dynamics and ecology and this was supported in some case studies e.g. Priam's Birdwing. Article IV 3 contains adaptive management measures so the principle does not add value to CITES. The reference to revenue rights and information rights are outside the scope of CITES and not relevant to making a NDF.

**Practical principle 5: Sustainable use management goals and practices should avoid or minimise adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.**

Examples such as Dioon and Priam's Birdwing demonstrate that harvest under CITES provisions can have minimal impact on the ecosystem. This principle is not applicable where a species is fully protected. Further, the principle does not assist in making a NDF. Article IV para 3 refers to maintaining the role of the species in the ecosystem and so the principle does not add value to existing CITES language.

**Practical principle 6: Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.**

The need for research to support better decision-making was promoted and evidenced in some case studies. However, the principle was considered of no direct relevance to making NDFs. Some of the language in the operational guidelines referring to rights of access and equitable sharing is outside the scope of CITES.

**Practical principle 7: The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use and its impact.**

Not considered relevant to making a NDF and also not relevant where a species is fully protected. Some language (e.g. socio-economic sustainability) is outside the scope of CITES.

**Practical principle 8: There should be arrangements for international cooperation where multinational decision-making and coordination are needed.**

This principle was recognised as a valid general objective. The principle is of less relevance where a species is endemic to a single party. The principle does not assist in making an NDF. Article IV 2 (a) assigns the State as the permit issuing authority. In general, the principle is already widely practiced within CITES e.g. through workshops, dialogue groups. It was further noted in the Priam's Birdwing case study that international cooperation could be better developed.

**Practical principle 9: An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance related to the use.**

Interdisciplinary work is apparent in some case studies and linkages between scientists and local collectors were seen as useful. However, it is not considered relevant to making an NDF. Language referring to socio-economic, political, religious and cultural factors is beyond the scope of CITES.

**Practical principle 10: International, national policies should take into account:**

- a) **Current and potential values derived from the use of biological diversity;**
- b) **Intrinsic and other non-economic values of biological diversity; and**
- c) **Market forces affecting the values and use.**

Not considered relevant to the NDF and export process. Market forces and economic evaluation of environmental services is beyond the scope of CITES.

**Practical principle 11: Users of biodiversity components should seek to minimise waste and adverse environmental impact and optimise benefits from uses.**

Not relevant to NDF. Economic incentives are already being discussed at SC. Language referring to quality standards is beyond scope of CITES.

**Practical principle 12: The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation and sustainable use, should be reflected in the equitable distribution of the benefits from the use of those resources.**

Some examples provide evidence that indigenous communities do benefit from the use of the resource. Other examples highlight that there are examples where no indigenous use exists. Not relevant to NDF. The issues of revenue distribution and rights of access to information are beyond the scope of CITES.

**Practical principles 13: The costs of management and conservation of biological diversity should be internalised within the area of management and reflected in the distribution of the benefits from the use.**

Not relevant to NDF or management of exports. Language referring to costs of management and investment of revenues is outside the scope of CITES. Economic incentives are already being discussed at SC. The Priam's Birdwing case study is an example of collected fees being used for maintenance of Parks and Reserves

**Practical principle 14: Education and public awareness programmes on conservation and sustainable use should be implemented and more effective methods of communications should be developed between and among stakeholders and managers.**

Recognised as an important element and well demonstrated in some cases or recognised that further effort in other examples. Comment made that it could be incorporated in capacity building programs. However, the principle does not assist in making a NDF.

Conclusion

1. Although CITES does not have a definition of sustainable use, the case studies show that elements of the Addis Ababa Principles are either already implicit in the language of CITES or are promoted by CITES.
2. From the case studies, the Addis Ababa Principles and Guidelines are not appropriate for the decision-making process under CITES, particularly with respect to making non-detriment findings.