UGANDA BIOTRADE PROGRAMME

OPPORTUNITIES AND STRATEGIES FOR WILDLIFE TRADE SECTOR IN UGANDA

Ministry of Tourism, Trade and Industry/United Nations Conference on Trade & Development (UNCTAD) Export Development Programme
Implemented by UEPB
EXECUTIVE SUMMARY

Wildlife trade in Uganda was officially recognised as one of the wildlife use rights in the Wildlife Act (2000). The main institution charged with regulating wildlife trade is the Uganda Wildlife Authority (UWA). Uganda, as a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), has two other important authorities that regulate trade in wildlife. The Management Authority (MA) for CITES in Uganda is in the Ministry of Tourism Trade and Industry (MTTI), and the Technical Authority (TA) is the Uganda National Council of Science and Technology (UNCST).

Internationally, wildlife trade is booming. The major exporters are largely from the Asian continent and they include: Malaysia, Singapore, China and others, while the major importers are the United States, the European Union and Japan. The international wildlife trade was valued at US$15 billion in 2001, excluding the trade in fish and timber, which are included in the mainstream economic activities usually under the agriculture sector for many countries, certainly for Uganda.

In Uganda, wildlife trade largely consists of the trade in birds, amphibians and reptiles. Even though, trade in Non-Wood Forest Products (NWFPs) occurs at a fair scale it is largely unregulated or monitored and the actual volume or value of trade in unknown. Regulated wildlife trade brings in less than US$ 3 million per year making the wildlife sector very small indeed as compared to even small components of the agricultural sector like cotton, which fetches US$ 16 million, and much smaller than tourism, which records over US$ 160 million. In fact, the Uganda Investment Authority has not indicated the wildlife sector as one of the key sectors for investment; except the commercial rearing of crocodiles, which again is considered under skins and hides another component of the agricultural sector (livestock products).

Future opportunities for wildlife trade in Uganda lie in diversification into other commodities such as ornamental fish and NWFPs, and intensification (farming) of crocodiles, tortoises, birds, chameleons and others. However, the present challenges largely include: the limited human resource capacity among regulators of the industry and the traders and business service providers and business regulators (Uganda Revenue Authority and Uganda Export promotions Board and Uganda Investment Board and others); Infrastructure in Uganda is inadequate roads and poor electricity supply in several areas where wildlife farms could be located; Poor data management and monitoring of trade in some wildlife products especially NWFPs. In addition, the costs of operation in a landlocked country, where wildlife trade depends on air transport are rather high.

However, there is an even stronger need that is to ensure that whatever the motivation and profitability of wildlife trade the standard of wildlife conservation has grown over the years should not be compromised.

WORK-IN-PROGRESS REPORT

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COVER PICTURES
African grey parrot, crocodile, elephant (Google pictures)
## ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CBO</td>
<td>Community Based Organisation</td>
</tr>
<tr>
<td>CEC</td>
<td>Centre for Environment Cooperation</td>
</tr>
<tr>
<td>CITES</td>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation of the United Nations</td>
</tr>
<tr>
<td>IERCL</td>
<td>International Environmental Law Research Centre</td>
</tr>
<tr>
<td>IFAW</td>
<td>International Fund for Animal Welfare</td>
</tr>
<tr>
<td>IED</td>
<td>International Institute On Environment and Development</td>
</tr>
<tr>
<td>IISD</td>
<td>International Institute for Sustainable Development</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for the Conservation of Nature</td>
</tr>
<tr>
<td>MAAIF</td>
<td>Ministry of Agriculture Animal Industry and Fisheries</td>
</tr>
<tr>
<td>MTTI</td>
<td>Ministry of Tourism Trade and Industry</td>
</tr>
<tr>
<td>MUIENR</td>
<td>Makerere University Institute of Environment and Natural Resources</td>
</tr>
<tr>
<td>NAWEG</td>
<td>North American Wildlife Enforcement Group</td>
</tr>
<tr>
<td>NFA</td>
<td>National Forestry Authority</td>
</tr>
<tr>
<td>NWFPs</td>
<td>Non-Wood Forest Products</td>
</tr>
<tr>
<td>UBTP</td>
<td>Uganda BioTrade Programme</td>
</tr>
<tr>
<td>UEPB</td>
<td>Uganda Export Promotions Board</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UWA</td>
<td>Uganda Wildlife Authority</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wide Fund for Nature</td>
</tr>
</tbody>
</table>
PART ONE:
SITUATION ANALYSIS
Introduction

1.1 Background

The United Nations Convention on Trade and Development (UNCTAD)'s Bio-Trade Initiative supports sustainable development through trade and investment in biological resources in line with the three objectives of the Convention for Biological diversity, to be pursued in accordance with its relevant provisions: the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources.

The initiative seeks to strengthen the capacity of developing countries to enhance the production of value-added products and services derived from biodiversity for both domestic and international markets. Bio-Trade efforts are directed towards:

- creating an enabling policy environment at national, regional and international level that promotes sustainable trade in bio-diversity products and services;
- increasing the supply capacity of developing countries of goods and services derived from biodiversity, requiring: increasing the levels of productivity, strengthening technical skills, improving technology, augmenting access to finance, and promoting alliances among actors; and
- improving market access and forging market creation for biodiversity goods and services, including enhancing the understanding of the market, facilitating commercial contacts and raising awareness among consumers (UNCTAD, 2005)

The Bio-Trade Programme was introduced in Uganda in May 2003 and the overall objective of the programme is to enhance trade and investment in biological resources while ensuring their sustainable utilisation. In addition, the programme is aimed at diversifying the country’s export base through the introduction of non-traditional high value products, for improved livelihoods and ultimately contributing to the overall economic development. The Uganda Bio-Trade Programme is implemented by the Uganda Export promotions Board (UEPB) under the supervision of ministry of Trade Tourism and Industry (MTTI).

A pre-assessment study carried out on the level and nature of trade and investment in biological resources in Uganda identified four initial sectors for intervention, that is, wildlife trade, natural ingredients, ecotourism and carbon trade. Officially, Uganda Wildlife Authority (UWA) permitted trade in wildlife in 2000 as accorded in the Wildlife Act 2000. The Uganda BioTrade Programme convened the first stakeholder workshop on wildlife trade in August of 2005 “a critical interface between trade and environment” to identify the key actors, processors and issues influencing the trade in wildlife in Uganda.

The outcomes of the workshop were the basis for a preliminary draft strategy for wildlife trade, which was endorsed by stakeholders in December 2005. However, the BioTrade Programme realised that there was a need to clearly develop and articulate Programme objectives such as supply-side issues (specifically: habitat and species conservation and current populations); controls and enforcement; external factors such as animal welfare and sanitary issues. There was also a need to provide more information on the areas of relevance to the BioTrade Programme and to design specific strategies to guide the development of wildlife trade sector in Uganda.

1.2 Study Objectives

The study objectives were derived from the terms of reference (TOR) provided and they were to:

1. Assess current wildlife trade and strategies in terms of socio-economic and community benefits, economic values, roles of the private sector, and illegal trade.
2. Review literature on the current conservation status for trade permitted species and their habitats.
including population surveys.
3. Compile information about market requirements that wildlife traders need to meet to offer products to international markets.
4. Analyse the critical external factors influencing wildlife trade such as animal welfare concerns (transportation of live animals) and sanitary issues (e.g. Bird flu).
5. Analyse the role of local government structures in conservation, monitoring and enforcement of legislative frameworks.
6. Develop specific strategies to guide the development of the sector and highlight possible areas of intervention for the BT programme.

1.3 Methodology

The methodology included two major aspects: gathering of information and data on international and Ugandan wildlife trade. And, in the second part, the consultants assessed the information and established a synopsis of Uganda's wildlife trade situation and developed a strategic framework for wildlife trade in Uganda.

The information provided in this study was generated through the review of literature from national and international institutions with a stake in wildlife conservation and trade; internet literature searches; and interviews and discussions held with key officials in Uganda's trade and wildlife institutions.

1. National Literature Reviews:
   Uganda Wildlife Authority;
   Uganda Export Promotions Board;
   Uganda National Bureau of Standards;
   Uganda Bureau of Statistics;
   Ministry of Finance Planning and Economic Development;
   Ministry of Tourism Trade and Industry; and
   Uganda Investment Authority
   National Biodiversity Data Bank

2. International Literature Reviews:
   1. United Nations Conference on Trade and the Environment (UNCTAD);
   2. The World Bank
   3. TRAFFIC
   5. Centre for Environment and Cooperation of North America (CEC)
   7. United Nations Environment programme (UNEP);
   8. International Union for the Conservation of Nature (IUCN);
   9. International Institute on Environment and Development (IIED);
   10. International Institute on Sustainable Development (IISD);
   11. Food and Agriculture Organisation of the United Nations (FAO); and
   12. World Trade Organisation (WTO)

3. Interviews were held with officials from:
   1. Uganda Export Promotions Board
   2. Uganda Wildlife Authority
   3. Makerere University - Zoology Department
   4. National Biodiversity Data Bank - Makerere University
   5. NatureUganda
   6. CITES desk officer - Uganda
   7. Private sector (Wildlife collectors, Wildlife farmers, Wildlife traders)
   8. Uganda Tourism Association
   9. Uganda Wildlife Society
   10. Advocates Coalition on Development and Environment

After which, the consultants developed a situation analysis of wildlife trade in Uganda and the specific strategic actions that need to be taken to ensure sustainable wildlife trade and utilization in Uganda.
1.4 Report Structure

The report is divided into three distinct parts. Part One: the Situation Analysis is a diagnosis of the international wildlife trade, the opportunities that exist and the requirements of the international market and key legislations regulating international wildlife trade and wildlife conservation concerns, and how they are operationalised. In addition, Part One discusses wildlife trade in Uganda, the current levels, conservation concerns, the stakeholders involved and level of institutional support available. The final section of Part One is a synopsis of the gaps in wildlife trade in Uganda; and the realistic opportunities that exist for wildlife trade in Uganda.

Part Two of the study is the strategic framework for the wildlife trade sector. The goals and objectives of the wildlife sector Trade strategy are stated. Then, the result areas and activities delineated, and the responsible institutions are stated.

Part Three contains References and Annexes on the Trade Data used and other useful documents and tables.
International wildlife Trade

2.1 State of the international wildlife trade

Wild species are traded internationally in many forms in order to produce a wide variety of products including: medicines, food, ornaments, clothing, pets and collector items, ornamental plants, manufacturing and construction materials. The trade in CITES-listed species reflects only a very small part of this much larger trade in wildlife resources (Roe et al. 2002). In general, the direction of wildlife trade flows is from developing to developed countries. Major exporters of non-wood forest products (NWFPs) include China, India, Indonesia, Malaysia, Thailand and Brazil while the EU, United States and Japan account for the majority of imports (FAO, 2004).

There are two main sources of data on the international wildlife trade: Customs data and annual reports compiled by Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Customs data includes information on trade volumes and declared values upon export and import. These data are compiled by national governments and organised according to commodity types, most often using the Harmonised Commodity Description and Coding System (HS). Much of the trade data compiled by the UN Food and Agriculture Organisation (FAO) and the UN Conference on Trade and Development (UNCTAD) are based on Customs data and therefore have the same limitations.

The trade in CITES-listed species is relatively well documented. Information on the different species and the number of specimens reported in trade by CITES Parties is compiled by the UNEP-World Conservation Monitoring Centre (UNEP-WCMC) on behalf of the CITES Secretariat. The number of species covered by CITES is small relative to the overall number of wildlife species in trade. Furthermore, CITES trade data are better for live animal specimens than for plants or for animal and/or plant products. Cross-border trade in many regions is likely to circumvent CITES or other trade control measures, e.g. Customs controls, and therefore is not accounted for within either Customs or CITES data. Illegal trade is largely undocumented, with the exception of information available for seized shipments that is sometimes reported in the media and/or CITES trade data. Problems with the accuracy of CITES trade reporting mean that trade data are indicative rather than actual.

2.2 Products, scale and participants in the international wildlife trade

2.2.1 Products in international trade

Wild species are traded internationally in many forms in order to produce a wide variety of products. Major uses include:

1. Medicines: Many medicines, both traditional and ‘western’, are based on wild plants or compounds extracted from them. Approximately 1000 plant species have been identified in international trade in East Asia alone and 700 imported for use within Europe. The global international trade in medicinal and aromatic plants exceeded 440,000 tonnes in 1996, and was valued at US$1.3 billion (Lange 1998).
2. Food: Although most wildlife hunted or collected for use as food is consumed directly, there is a substantial international trade in a variety of non-timber forest products, well-known examples including Brazil nuts, palm hearts, pine nuts, various mushroom species and spices. The trade in fisheries products dominates the food trade in animal species.
3. Ornaments and furnishings: A wide variety of wildlife products are used for decoration and ornamental purposes, including ivory, coral, turtle and mollusc shells, reptile and other skins and feathers. Tourist items are often crafted from local wildlife, including jewellery and ornaments crafted from corals and shells, curios such as insects.
4. Wearing apparel: Skins, furs, feathers and fibres from many mammals, reptiles, birds and fish species are traded internationally to make clothing, boots and shoes, bags and other items.
5. Pets/hobbies: The increased availability of air transport around the world has greatly expanded the variety and numbers of wild species traded for use as pets or as hobbies. The international trade is dominated by: (i) Reptiles; (ii) Birds; (iii) and ornamental fish. But includes invertebrate species such as scorpions and spiders.

6. Ornamental plants: A significant percentage of what are now considered common garden and indoor plants are the product of international trade that has been taking place for centuries. This includes many bulbous species e.g. snowdrops Galanthus spp. and crocuses Crocus spp., cyclamens Cyclamen spp., orchids, tree ferns, bromeliads, cycads, palms and cacti. Although much of the trade now involves artificially propagated plants, including a specialist trade in rare species.

7. Manufacturing and construction: Forest products including timber, rattan and bamboo for furniture making, plant oils and gums, dyes, resins, latex, etc. are all traded internationally in large volumes.

2.2 Key countries involved in the international wildlife trade

China as the exporter of the largest quantities of NWFPs, with other major suppliers being India, Indonesia, Malaysia, Thailand and Brazil (Iqbal 1995). However, China nor India dominate the international trade in CITES-listed species, while Indonesia, by contrast, is a major wildlife exporter. Approximately 60 per cent of all NWFPs in trade are imported by the European Union, United States and Japan. The general direction of wildlife trade flows is from developing to developed countries.

Wildlife trade presents both a threat and an opportunity to some. While wildlife products are rarely factored into estimates of contributions to national GDP (Nasi and Cunningham 2001) they make significant contributions to household economies in certain countries but at the same time wildlife trade is listed as a significant threat in some of the biodiversity hotspot countries such as Madagascar, Indonesia and Malaysia.

Table 1: Major sources for some commercially significant NWFPs

<table>
<thead>
<tr>
<th>Product</th>
<th>Declared imports (US$ million)</th>
<th>Major source</th>
<th>Major markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant used in pharmacy, perfumery, insecticide and fumigants</td>
<td>1112 (of which ginseng roots are 389, liquorice roots 33)</td>
<td>China, Korea, USA, India, Chile, Egypt, Argentina, Greece, Poland, Czech Rep., Hungary, DRC, Albania</td>
<td>Japan, USA, EU, Malaysia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ginseng - USA, S. Korea, Canada, China</td>
<td>Ginseng - Japan, China, Taiwán, Singapore, EU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Liquorice - China, Pakistan, Syria, Former USSR, Turkey, Afghanistan, Iran</td>
<td>Liquorice - Japan, USA, EU</td>
</tr>
<tr>
<td>Nuts</td>
<td>593</td>
<td>Brazil nuts - Brazil, Bolivia, Peru</td>
<td>Brazil nuts - USA, UK, Germany, Canada, Australia</td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>Walnuts - Pakistan, Syria, Afghanistan, China, India</td>
<td>Walnuts - EU, Japan, Canada, Switzerland</td>
</tr>
<tr>
<td></td>
<td>216</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential oils</td>
<td>421</td>
<td>China, India, Indonesia, Brazil</td>
<td>EU, USA, Japan</td>
</tr>
<tr>
<td>Product</td>
<td>Declared imports (US$ million)</td>
<td>Major source</td>
<td>Major markets</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------</td>
<td>---------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Cork</td>
<td>329</td>
<td>Portugal, Spain, Morocco</td>
<td>EU</td>
</tr>
<tr>
<td>Natural honey</td>
<td>268</td>
<td>CIS, China, USA, Mexico, Turkey</td>
<td>Germany, USA, UK, Japan</td>
</tr>
<tr>
<td>Gums and resins</td>
<td>194* (US$101 million)</td>
<td>Gum Arabic: Sudan, Nigeria</td>
<td>USA, UK, Europe, Japan</td>
</tr>
<tr>
<td>Live animals</td>
<td>184</td>
<td>Various depending sources</td>
<td>Various</td>
</tr>
<tr>
<td>Spices</td>
<td>176</td>
<td>Indonesia, Grenada, Sri Lanka, Seychelles, Madagascar</td>
<td>USA, Europe, Japan</td>
</tr>
<tr>
<td>Bamboo rattan</td>
<td>157</td>
<td>Southeast Asia, China</td>
<td>Europe, USA, Egypt, Japan</td>
</tr>
<tr>
<td>Ivory</td>
<td>28</td>
<td>Africa</td>
<td>Japan</td>
</tr>
</tbody>
</table>

Source: (Iqbal 1995) and UNCTAD (2003)

### 2.2.3 International wildlife trade chains

The journey of any given wildlife product from the collector at source to the final consumer can involve a wide range of intermediaries. While wildlife trade is often perceived as a predominantly rural activity, the urban dimension should not be underestimated. Barnett (2000) found that in Eastern and Southern Africa, complex rural to urban supply networks have developed for the wild meat trade, which is driven by urban demand and lucrative prices. There is evidence that much of the commercial trade in wild meat is in the hands of urban-based entrepreneurs who sub-contract rural hunters (Kasim and Long, 2000).

**Table 2: Total Number of plants and animals species listed in the CITES**

<table>
<thead>
<tr>
<th></th>
<th>Mammals</th>
<th>Birds</th>
<th>Reptiles</th>
<th>Amphibians</th>
<th>Fish</th>
<th>Plants</th>
<th>Totals</th>
</tr>
</thead>
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<tr>
<td><strong>Appendix I</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>228</td>
<td>146</td>
<td>67</td>
<td>16</td>
<td>63</td>
<td>298</td>
<td>827</td>
</tr>
<tr>
<td>Populations</td>
<td>13</td>
<td>2</td>
<td>4</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>19</td>
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<td><strong>Appendix II</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>369</td>
<td>1,401</td>
<td>508</td>
<td>90</td>
<td>2,080</td>
<td>28,074</td>
<td>32,540</td>
</tr>
<tr>
<td>Sub-species</td>
<td>34</td>
<td>5</td>
<td>3</td>
<td>--</td>
<td>1</td>
<td>3</td>
<td>49</td>
</tr>
<tr>
<td>Populations</td>
<td>14</td>
<td>1</td>
<td>4</td>
<td>--</td>
<td>--</td>
<td>6</td>
<td>25</td>
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<tr>
<td><strong>Appendix III</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>57</td>
<td>149</td>
<td>25</td>
<td>--</td>
<td>16</td>
<td>45</td>
<td>291</td>
</tr>
<tr>
<td>Sub-species</td>
<td>11</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Populations</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Wild meat sales have moved beyond local urban markets to the international arena. The concessionaire system frequently used in the past in Asia, where collection and marketing of high value wildlife products for export or processing was often under a government-granted concession system, with the concessionaire having the right to sell all of a specified product that was collected from a designated area.

This is the system currently exists for collection of edible birds nests (Warner, 1995). The concessionaire would need a number of collectors to ensure an adequate supply of the product, and these collectors would often trade the collected products to the concessionaire for food and manufactured goods. If the collectors were in debt to the concessionaire, the concessionaire could easily enforce product collection and hence maintain supply.

Even in systems where there is no concessionaire, few products are sold directly from collectors to wholesalers or processors because of the small quantities involved. Middlemen - often local traders - are generally involved and handle storage, transport and other aspects of trade (Edwards, 1993). The live bird trade in Tanzania usually has from two to three tiers (trappers, middlemen and exporters) with some trappers selling direct to exporters.

2.2.4 Scale of the international wildlife trade

<table>
<thead>
<tr>
<th>Fauna</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Over 1.5 million live birds</td>
<td></td>
</tr>
<tr>
<td>(250,000 App. II; I, 250,000 App. III)</td>
<td></td>
</tr>
<tr>
<td>640,000 live reptiles</td>
<td></td>
</tr>
<tr>
<td>300,000 crocodilian skins</td>
<td></td>
</tr>
<tr>
<td>(world trade is over 1,200,000 but mostly farmed)</td>
<td></td>
</tr>
<tr>
<td>1,600,000 lizard skins</td>
<td></td>
</tr>
<tr>
<td>1100,000 snake skins</td>
<td></td>
</tr>
<tr>
<td>150,000 furs</td>
<td></td>
</tr>
<tr>
<td>almost 300 tonnes of caviar</td>
<td></td>
</tr>
<tr>
<td>over 1,000,000 pieces of coral</td>
<td></td>
</tr>
<tr>
<td>21,000 hunting trophies</td>
<td></td>
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</tbody>
</table>

| Flora (1999)                |  |
| 19 million bulbs exported from Turkey |  |
| over 53,000 live wild-collected orchids expected from central America and Vietnam |  |
| over 200 tonnes of dried Cibotium barometz roots from Vietnam to the Republic of Korea |  |
| 360,000 cacti ' rainsticks' exported from Chile and Peru |  |
| 70 tonnes of Aloe ellenbeckii resin exported from Kenya to China |  |
| over 300 tonnes of Aloe ferox extract exported from Indonesia and Malaysia |  |
| 30 tonnes of American Ginseng Panax quinquefolius roots exported from the United States |  |

Source: J. Caldwell (2001)

The international wildlife trade is a massive, multibillion-dollar-a-year business. The two major categories of traded items are live specimens of wildlife species and products derived from wildlife species. The international trade in live specimens of wildlife species is dominated by reptiles, birds and ornamental fish, but it also includes mammals and invertebrate species such as scorpions and spiders. Trade in exotic animals for pets or hobbyist collections has expanded dramatically in recent decades, perhaps in part because farther-reaching air transportation now allows traders to move wild species around the globe.
Medicines derived from wild plants or compounds extracted from them also figure prominently in the international wildlife trade. The global trade in medicinal and aromatic plants exceeded 440,000 metric tons in 1996 and was valued at US$1.3 billion. And there is a substantial international trade in a variety of food products such as fruits, mushrooms, nuts, leaves and starches, as well as meat and fish. Although not usually thought of as wildlife, marine fish are the largest group of wild animals exploited for food. A wide variety of wildlife products are found in the ornamental and apparel trades, and are used in manufacturing and construction.

Items often associated with the ornamental trade are ivory, coral, turtle and molluscs shells, reptile and other skins, and feathers, as well as mounted insects such as butterflies and beetles. Tourist items are often fashioned from local wildlife such as jewellery and ornaments crafted from corals and shells, curios that consist of insects or other small animals encased in plastic and stuffed animals. Skins, furs and fibres from many mammal, reptile, bird and even fish species are traded internationally to make products ranging from clothing and accessories to ornaments and furnishings such as charms, rugs and trophies. Forest products, including timber, rattan and bamboo for house construction and furniture making, plant oils and gums, dyes, resins and latex, are all traded internationally in large volumes.

Attempts to quantify the scope and scale of the international wildlife trade have produced very different estimates; in 1989 the United Nations Environment Programme (UNEP) estimated the value of the international wildlife trade, not including timber and fisheries, at US$4-5 billion a year. In the early 1990s, TRAFFIC estimated an import value approaching US$15 billion for all wildlife products, excluding wild sourced timber and fish products (Broad et al., 2001).

Finally, Iqbal (1995; cited in Broad et al., 2001) estimated the value of trade in non-wood forest products (NWFPs) at US$11 billion. Another major complication in efforts to estimate accurately the scope and scale of the trade is the fact that wildlife products are both consumed directly and sold into the cash economy, sometimes by the same people at the same locations. Local use of wild plants and animals may account for the majority of global wildlife trade in terms of trade volume and perhaps even value, but the nature of the trade is such that it is often carried out through informal networks and seldom closely monitored. Such subsistence-level trade or bartering often does not show up in government trade statistics, even though it may account for a significant proportion of the world’s wildlife trade (Broad et al. 2001).

Figure 1: Global International Trade in wildlife in the early 1990s by percentage

- Non wood forest products: 74%
- Animal products for medicine: 5%
- Live trade: 6%
- Animal products for clothing and ornaments: 13%
- Live ornamental plants: 2%
- Animal products for food: 0%

Adapted from: Broad et al. (2001)
2.2.5 International wildlife trade regulations

CITES is the key international agreement relevant to controlling the international trade in wildlife. The trade controls established by the Convention require Parties to ensure that exports of species covered by the Convention are maintained within levels that do not threaten species survival, and that species considered to be endangered are not imported for 'primarily commercial purposes'. CITES Appendix I currently includes over 800 species while Appendix II contains over 4000 animal species and around 25,000 plant species.

CITES and other regulations that provide for controls on international trade in wildlife have governance implications for wildlife producing countries. Proposals to list species in the CITES appendices or to move species between appendices can be submitted by any Party, whether or not that Party is a range State for the species concerned. Proposals may be accepted via consensus or voted upon.1 One of the more contentious issues in the CITES decision-making process is provided for under CITES Article XIV, which allows Parties to take stricter domestic measures than those required under the Convention. Few have argued over the right of Parties to ban exports of native species but the right of Parties to unilaterally ban imports is less widely accepted. Stricter domestic measures may have WTO implications.

2.2.6 Illegal trade in wildlife

Most wildlife trade is legal, but some is not. It is for all practical purposes impossible to define the precise extent of the illegal wildlife trade worldwide. The International Criminal Police Organization (Interpol), however, estimates that wildlife smuggling is worth up to US$10 billion a year, ranking it third in illegal trade behind drug trafficking and arms dealing (CEC, 2005). All categories of wildlife products are traded illegally; the black market commerce continues even when trade is restricted or banned. For some products, the illegal trade parallels the legal trade. For example, alongside a legal, regulated international trade in caviar from the Caspian Sea region of the former Soviet Union to primary markets in the United States, Europe and Japan is a significant black market caviar trade that spans several continents. Similarly in North America, alongside the legal trade in live reptiles from South America for the exotic pet market, is an illegal one. Sometimes, the illegal trade is in species and products that are banned from legal trade, often with very serious implications for the species involved. For example, the illegal trade in tiger bone for the Asian medicinal market has had a devastating impact on wild tiger populations—their numbers have dropped by some 95 percent since the turn of the 20th century. Poaching for the black market trade continues to threaten the survival of remaining populations, which are now believed to number only 5,000-7,000 animals (Jackson and Kemf 1999).

2.2.7 Factors Driving the Illegal Wildlife Trade

The international trade in wildlife, both legal and illegal, is largely driven by market demand (Moyle, 1998). The demand for wildlife and wildlife products in developed country markets is so enormous that it often surpasses what the legal market can provide. Between 1990 and 2000, for example, the European Union, United States and Japan reported annual caviar imports averaging 288 metric tons a year, even as concern about the Caspian Sea fisheries led to the imposition of quotas on the catch and trade of sturgeon from the states of the former Soviet Union (Williamson 2003). The gap between demand and legally available supply has helped to open the door for significant illegal trade activity.

Box 2: Infection-Fighting Mycobacteria illegally obtained from Uganda

A mycobacteria collected in Uganda in the 1970s has been patented at least five times in the US. The latest is number 6,596,282, issued on 22 July 2003. It covers use of a Mycobacterium vaccae, called R877R, against chronic viral infections, including HIV. According to the patent, "R877R was originally isolated from mud samples from the Lango district of Central Uganda." The owner is SR Pharma, plc (formerly Stanford Rook, Ltd.), a British company.


1 While each Party has one vote, it would not be accurate to say that each Party has the same voice at meetings of the Conference of the Parties, since the size of delegations and experience with the Convention can vary enormously. Developed countries can generally afford to send significantly larger delegations than developing countries, and commit ongoing resources to following and influencing the development of the Convention's decision-making processes.
Beyond economic incentive, strong cultural elements are also driving some wildlife trade. A well-known example of this phenomenon is the trade in traditional Asian medicine, which has used ingredients derived from wild plant and animal species for thousands of years. But international trade in rhino horn, a substance once widely used in traditional Chinese medicine, has been banned since 1977. And trade in tiger bone, also once widely used in traditional Chinese medicine, has been banned since 1987. Yet TRAFFIC investigations since then have found such medicines claiming to contain rhino horn and tiger bone in Australia, Canada, China, EU countries, New Zealand and the United States, despite domestic and international trade bans. Although the factors driving this continuing trade are complex and include market demand and profit, the TRAFFIC findings seem to confirm research indicating that some people may not obey laws that contradict cultural traditions or what they believe is the greater human good. This observation is supported by statements from some specialists in traditional Chinese medicine, who believe that the bans have hampered their efforts to alleviate human suffering (Lee et al., 1998).

The wildlife trade, both legal and illegal, is also driven by diverse socioeconomic and cultural factors. After all, people need to secure a food supply and health care (from herbal remedies to ingredients of industrial pharmaceuticals), practice their religion (sometimes requiring live animals and a wide range of wild plants and animal parts), and obtain industrial and building materials. They also enjoy collecting things, including live plants and animals and a range of wildlife specimens and curios; buying clothing and fashions such as leather, furs and feathers; and engaging in sport, including trophy hunting and falconry (Broad et al., 2001).

### 2.2.8 How Illegal Wildlife Products Enter the Stream of Commerce

The illegal wildlife trade is by its very nature highly secretive. It is dominated by well-organized networks of poachers, wholesalers, middlemen, smugglers and retailers. Illegal wildlife products often enter the stream of commerce along this chain, with price mark-ups at each step. Beyond such organized efforts, illegal wildlife products sometimes enter the stream of commerce in yet another way—the "pocket" trade. In this aspect of the trade, tourists or other travellers often wittingly or unwittingly purchase wildlife items that are banned from international commerce and then transport them across borders to either keep or sell. In recent years, officials have seized products ranging from ivory, to illegal coral or other curios, to caviar and even live reptiles. Such trade is difficult to stop, because it is principally detected at airports or other ports of entry where the likelihood of inspection is extremely low.

Finally, the advent of the Internet may have opened the door to a new stream of commerce illegal trade through online auction sites or direct Internet sales. For example, a 2002 report on the US ivory market found that ivory dealers in China, Hong Kong (China) and Europe were willing to ship ivory items to the United States without proper documentation of its legality. Like the pocket trade, such trade is very difficult to detect and combat, because sellers find it easy to ship small items across borders and because of the immense scope of the Internet itself.

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**Box 3: A Mountain Gorilla illegally advertised on the Internet for sale**

"A gorilla currently needs a new home due to relocation of owner," the classified ad reads (27 January 2005). "It is located in London, UK. The asking price is 4,500 pounds. It is 7 years old and is currently in good shape. Health certificate also available."

Gorillas are the most highly endangered species on the planet. Mountain gorillas number just 650, while other sub-species such as Western lowland gorillas and their Eastern cousins survive in small fragmented populations. Habitat loss bush meat hunting and captive live trade have devastated this slow-growing species.

Like all Great Apes, gorillas are listed on CITES Appendix I, prohibiting international commercial trade by Parties. This case is particularly disturbing because of the welfare implications involved. Gorillas need highly specialist care and it is extremely unlikely the physiological and behavioural needs of an individual animal can be met in captivity.

Source: IFAW (2005)
2.2.9 Environmental Effects of Illegal Trade

The illegal trade in wildlife, for subsistence or commercial purposes, is leading to the depletion of populations of great whales, marine turtles, rhinoceroses, elephants and tigers, among other species, through overexploitation (Broad et al. 2001). For example, populations of the African black rhinoceros have plummeted dramatically in recent decades because of poaching for their horns, which are in demand as a component of traditional Asian medicines and for the manufacture of traditional dagger handles in Yemen.

Shot, snared and speared for their horns alone, black rhinoceroses saw their numbers decline from an estimated 65,000 in 1970, to 14,785 by 1980, to perhaps 2,000 by 1997. African white rhinoceroses, even though better protected in South Africa, also disappeared by the thousands in their northern range in Central Africa (Martin et al., 1997). According to the World Wildlife Fund (WWF), parrots, or psittacines, constitute a significant part of the global black market trade in wildlife. "Parrots' beauty, ability to mimic, and tendency to bond with humans make them among the most valued species in illegal trade.

Illegal wildlife trade is a means of dispersing infectious-contagious diseases. The deliberate cross-border entry or movement of wildlife could be a form of dispersion of infectious-contagious disease, with fast zoonotic or anthropozoonotic dissemination among domestic and wild animal populations. A review by the National Technical Advisory Board on Animal Health in 2000 identified 203 infectious diseases in amphibians, reptiles, birds and mammals in Mexico. Of these, 25 are regarded as exotic species in the country, including 7 high-risk and 33 low-risk enzootic diseases, according to the International Office for Epizootic Diseases. These data indicate the extent of the potential risk to biodiversity in a country such as Mexico.

Finally, illegal wildlife trade may also represent a threat to ecosystems and economies as well as to species survival. Countries around the world have long recognized the need to keep their borders closed to invasive species - species that supplant native wildlife, change ecological relationships, and take an economic toll. Laws alone, however, cannot stem the tide of "bio invaders," particularly given the globalization of the world's economy and the resulting ease of species movement, not only from country to country but from continent to continent. Scientists report that the pace of "bio-immigration" is accelerating worldwide. Preventing the importation of species banned as invasive is another challenge for agencies tasked with regulating global wildlife trade.

2.2.10 Global Response and International Law

Legal fora throughout the world have been comparatively successful in pushing the agenda for increased protection for wildlife through international treaties. The principal international control on trade is CITES, one of the greater successes of the international community in terms of its membership and the measures it has implemented to govern wildlife trade. A considerable range of academic literature has analysed the workings and implementation of CITES, and the broad view of commentators is one of cautious optimism. CITES prescribes a system of joint control which is split between the states which export and those which import wildlife species and products. This legal trade is governed by the use of permits and certificates to trade in particular species, and divided between three listings (appendices) depending on the species vulnerability to trade and its conservation status.

In practice CITES:

a) prohibits all commercial international trade in plant and animal species (and derivatives) that are threatened with extinction and that are, or may be, affected by trade.

b) regulates approved non-commercial trade in the species and specimens listed in Appendix I to the Convention. For these species (including the tiger, all marine turtle species, and some orchid and cactus species), the only approved trade would be for scientific or conservation purposes.

c) regulates, through a system of permits, the trade in other less immediately endangered species listed in Appendix II, where those species are not currently threatened with extinction, but could become so if trade were not strictly regulated.

d) collaboratively regulates Appendix III species, in a way that allows parties to list specimens as being subject to control in their own jurisdiction so as to enable their protection from over-exploitation through cooperation from other parties to facilitate trade controls.
2.3 Impacts of wildlife trade

Wildlife trade is affected by a bundle of regulations governing access to resources as well as access to markets - some externally motivated, others long standing domestic requirements. The impacts of these and other regulations are further determined by the associated enforcement effort and effectiveness. Changes in trade volumes and related livelihood impacts can also be entirely independent of any concerns related to the trade itself, e.g. as a response to changing fashion trends or economic conditions in countries of export or import. Nevertheless, it is possible to observe some general effects of increased trade controls on trade patterns, including modes of production. Shifts in the trade have consequent impacts on the livelihoods of collectors and traders as well as on the status of the target species.

2.3.1 Impacts of wildlife trade on conservation

CITES and other trade measures have had mixed effects on the quantities in trade of many species. In some cases trade has declined while in others there appears to have been little change. Where demand is elastic increased trade controls for one species can have a knock-on effect on the trade in other species used for similar purposes, as one is substituted for another. Where species occur in more than one range State, increased trade controls and therefore reduced exports from one country may be offset by increased exports from another. A further impact can be a shift in wildlife production from wild capture or collection to ranching, captive-breeding, cultivation and artificial propagation.

Conservation-motivated trade controls assume that trade is or is likely to be a major factor causing the decline in a species. However, trade controls may be successful at halting or restricting the export of wild species, but will not necessarily address the root causes of decline with the result that their conservation impact may be limited. Although it is possible to draw attention to the fact that some species have declined in the wild despite being listed in the CITES appendices, it is not similarly possible to know what the situation would have been without added international trade controls. Similarly, it is not possible in most cases to attribute improvements (or at least reduced rates of decline) in species’ wild populations solely to international trade controls, as other factors, e.g. increased enforcement effort in range States or decreased demand, may also have played a role.

2.3.2 Impacts on people

Despite the dependence of many rural populations on wildlife very little documentation was found on impacts of wildlife trade controls on local livelihoods. Impacts on traders are likely to be more significant than on collectors since traders are likely to be more dependent on wildlife based-income, whereas collectors are likely to include wildlife trade as one element of a diverse livelihood strategy. However, for some of the poorest groups, especially in rural areas, wildlife trade may be one of the few opportunities to generate cash income. Much of the discourse around the issues of wildlife trade and livelihoods concerns restrictions on the trade in what some argue are abundant - or at least not threatened - species. What is generally overlooked, but potentially more significant given the number of species involved, is the livelihood impact of declining availability of wild populations of species that are important for subsistence use or income generation. In this case, the negative impact on rural livelihoods could stem from too little trade control, not too much.

A total ban on commercial international trade in wild species or wildlife products, whether as a result of national trade controls or CITES, can have rapid and significant impacts on the incomes of people dependent on access to external markets as a part of their livelihood strategies. For some species however, even if trade is banned outright, livelihood impacts are limited since the benefits of the trade have traditionally been captured by the state, or the trade is only a small part of a much wider livelihood strategy. In many cases there is insufficient information and/or widespread disagreement about both conservation and livelihood impacts - positive and negative - of trade bans. There is an increasing tendency within CITES processes to create measures to allow trade in species for which there is conservation concern to continue where there is clear evidence that it will not be detrimental to wild populations, and, more specifically, is likely to be beneficial.

The general lack of information regarding the livelihood benefits of harvest for export of wild species precludes any quantitative assessment of the impacts on livelihoods of a shift in production strategies,
which is often associated with increased trade controls, towards more highly managed and concentrat-
ed systems, e.g. captive breeding. However, such systems often result in a change in beneficiaries. 
Captive breeding programmes tend to be developed in consumer states rather than producer states 
and the benefits are thus captured by entrepreneurs in developed rather than developing countries.

There is no requirement that source countries for species produced in non-range States benefit from 
captive breeding or propagation programmes; the issues of access to genetic resources and benefit 
sharing, which are at the core of the Convention on Biological Diversity (CBD), have yet to be 
addressed in any significant way within CITES. While ranching programmes retain a greater share of 
economic benefits within range States than captive breeding, benefits seem likely to shift away from 
the original primary harvesters to land owners or farmers.

2.3.3 The remaining international challenges to wildlife trade

Levels of wildlife trade in general have risen in recent decades, indicating that the markets for 
wildlife and wildlife products are continuing to grow, both globally and in North America. Enforcement 
of CITES trade control measures and national wildlife laws is likely to become ever more complex and 
difficult as more species are added to the convention’s appendices. In this environment, enhanced 
cooperative efforts to monitor and control legal wildlife trade, to stem illegal trade, to enable prevent-
tive actions and to establish stricter mechanisms to control and track transboundary movements are 
likely to become an imperative.

One of the main challenges faced by Parties to CITES is making sure that trade in species listed in 
Appendix II of the Convention is 'not detrimental to the survival of the species', i.e., is maintained with-
in sustainable levels. Although the making of 'non-detriment findings' is central to CITES' effectiveness, 
a lack of information, capacity and in some cases political will on the part of some Parties has meant 
that exports of some species have exceeded sustainable levels. In the worst cases, this has meant that 
species have become so rare in the wild that the Parties have felt it necessary to introduce Appendix I 
trade prohibitions (CITES website).

Concerned at the lack of appropriate non-detriment findings and mechanisms to address these con-
cerns other than trade bans, the Parties established an ongoing review process to review trade vol-
umes and identify species for which trade volumes appeared to be 'significant', i.e. potentially detri-
mental. After some years of initial development the 'significant trade review process' for animal species 
was formalized in Resolution Conf. 8.9 (Rev.)1 Trade in specimens of Appendix II-listed species taken 
from the wild. In addition to providing for a CITES Animals and Plants Committee review of trade vol-
umes and the identification of species for which there are potential problems, the process allows for 
recommendations to be made to range States about information needs and/or proposed remedial 
actions such as reducing trade volumes. In cases where range States fail to respond adequately to 
these recommendations, Resolution Conf. 8.9 (Rev.) also provides for further measures under the aus-
pices of the CITES Standing Committee including, if necessary, the suspension of further imports.
CHAPTER THREE

Wildlife Trade in Uganda

3.1 Wildlife utilisation and wildlife trade in Uganda

Wildlife trade in Uganda involves the commercialisation of products from the various wild ecosystems (wetlands, forests, open water, farm land, etc.) by enterprises and communities. Officially, Uganda Wildlife Authority (UWA) permitted trade in wildlife in 2000 as accorded in the Wildlife Act 2000. Wildlife trade was encouraged as a strategy to promote conservation on land outside protected areas (PAs) and also contribute to the country’s development objectives.

Trade in fauna was initiated as a pilot initiative in 2000 by the Uganda Wildlife Authority, the Government regulatory body for wildlife activities. Companies are licensed for selected products and these collect the initial stock (based on predefined quotas) and using the collected species, breed for the export market. The initiative was primarily to promote conservation, and increase the social and economic benefits of wildlife utilisation.

3.1.1 Wildlife use rights in Uganda

The Wildlife Act (2000) vested ownership of wildlife with the state but makes provision for people to own any wildlife that had been lawfully taken. Part VI of the Wildlife Act (2000) provides for six different categories of "use rights". The assigning of use rights is intended to conserve wildlife through sustained extractive use.

Types of wildlife use rights
a) class A wildlife use right: Hunting;  
b) class B wildlife use right: Farming;  
c) class C wildlife use right: Ranching;  
d) class D use right: Trading in wildlife and wildlife products;  
e) class E wildlife use right: Using wildlife for educational or scientific purpose including medical experiments and developments; and  
f) class F wildlife use right: General extraction.

The above use rights can be granted in any wildlife management area or any other area so declared, but not in a national park or wildlife reserve. The Minister on the advice of the Board has the power to vary, revoke or create any use right. Section 30 of the Wildlife Act prohibits the utilisation of wildlife and wildlife products without a wildlife use right. However, sections 31 and 32 consider lawful ownership of wildlife through wildlife use right. Moreover, sections 65 and 67 also provides for export of wildlife resources. For instance, section 65 states that the Executive Director - UWA may, subject to section 67 of the Wildlife Act (2000), issue to any person a permit in the prescribed form to import, export or re-export any specimen.

In addition, under section 67, the minister may after consulting the minister responsible for trade, make regulations imposing additional restrictions on imports, exports, re-exports or transit of specimens; the minister may incorporate the requirements under any convention or treaty. Section 81 describes the provisions for dealing with illegal trading in wildlife and wildlife specimens. Illegal use of wildlife includes killing of wild animals, removal of protected plants from their natural habitat and the removal of eggs from their nest or other natural habitat with out permits as part of illegal trading.

Hunting: Trophy hunting can take place in Ankole ranches, Luwero and Karamoja. Animals for trophy hunting include buffalo, bushbuck, waterbuck, zebra, impala, reedbuck, Uganda Kob and lesser kudu. Licensed hunting of birds can be revived in areas where species abundance can allow. Bird which can be hunted for meat and/or sport, are guinea fowls, ducks, geese and Nahan’s francolin. The maximum number of birds for a hunter may be fixed according to the quota for the area.
Farming: The present levels of the wildlife populations in many areas are so low that it will be necessary to boost breeding herds by dislocating from other areas. Land owners owning large pieces of land may be encouraged to farm wildlife on such land. Short-term management should be encouraged to promote income generation from the resource. Use rights for this kind of management is given on the basis of the willingness to follow regulations like removing only mature wildlife and observing closed seasons and controlling marketing to minimise illegal taking and controlling marketing. However, the willingness expressed to manage pockets of wildlife in a decentralised system is hindered by general lack of resources and capacity to carry out the intended functions.

Ranching: The process involves rearing of crocodiles from eggs collected from the wild and possible rearing in future, of ostriches from eggs collected from the wild. A number of Ugandans have been exposed to ostrich ranches elsewhere and many are interested to import chicks and eggs from other producing countries.

Trading in wildlife or Class D use rights can be considered under both internal and external trade. For internal trade, only scheduled animals would require a use right; external trade being largely affected by and subjected to international treaties and the observance of strict standards required by the importing countries. The sale of meat should be subjected to international standards and other local laws governing: slaughter houses; methods of killing; shelter and disease control.

General extractive uses: The culture of using wild animals and plants in traditional medicine is well established in Uganda but the extent of collection of wild animals and plants is no documented. It is unclear to what extent traditional medicine has contributed to decline or extinction of wildlife as it is evident on the local markets where derivatives of wild animals and plants are commonly seen. There is need for UWA to regulate the use of wildlife for medicinal purposes and if endangered species and protected wildlife are used in traditional medicine, UWA should strive to encourage captive breeding programmes to minimise taking of wildlife from the wild.

3.1.2 Financial implications of various use rights options

There is limited potential for trophy hunting in which fee paying hunters from overseas pay premium prices to hunt a wide range of animals. However, there is some scope for hunters who want to collect otherwise unobtainable species such as Uganda Kob. Although wildlife can offer significant income to the land owner from trophy fees alone, there is little incentive for the safari operator to invest. It will only be economically viable for the hunter to invest in areas where there is a species mix that attracts high cost safaris. The alternative is for the operator to spread the overhead by hunting in two or three areas. This would limit the number of operators to one or two only and would be probably only attract those who have an existing hunting business outside Uganda.

The advantage of hunting over other forms of consumptive wildlife use is the high returns to the land owner for very low off-takes. In order to make hunting an attractive option there will be a need to set quotas on populations as low as 100-200. This would present very few animals hunted but would create awareness on the value of animals and might lead to concerted conservation measures as opposed to continued un controlled hunting.

Trading of wildlife in Uganda is largely restricted to Birds, Reptiles and Amphibians. There are six wildlife exporters in Uganda and the value of wildlife exports is estimated at US$ 3million. Often the value of exports is less and inconsistent, due to lack of proper organisation among the traders and sometimes delayed issuance of quotas and CITES permits. In addition, the value of the trade in Birds, Reptiles and Amphibians is small US$ 66 million worldwide. Compared to other commodities such as ornamental fish and animal reptiles skins products (US$ 750 million). There is only one crocodile ranch in Uganda and no commercial ostrich ranches. Although Ostriches are found on CITES Appendix 1, there is considerable financial return from game ranching. It is estimated that, it would take three to five years to reach full production for crocodile and ostrich ranches.

3.1.3 Level of wildlife trade in Uganda

While wildlife trade only legally started in 2000, Uganda is the already the world's leading exporter of
helmeted chameleon (Chamaeleo hoehneli). World wide, grey parrot (Psittacua erithacus) is the second most heavily traded parrot in the period 1982-1989 after Agapornis fisheri, with an average annual export from Africa of 47,357 birds. However the species suffer reductions in populations due to forest destruction especially the loss of large nesting trees. In addition to the capture for international trade, there is an active internal trade of live birds for pets and exhibition.

There is a very active international trade in ornamental plants. Even though many such plants are artificially cultivated in Europe, the United States and Japan, there remains a live demand for wild-collected specimens from Africa mainly some rare species which often fetch high prices which may be threatened by excessive trade as their cultivation in nurseries appear to be difficult. Biological resources have been illegally acquired by giant pharmaceutical and biotechnology firms from the west and a University in Israel in an ongoing international operation that blatantly disregarding the provisions of the international Convention on Biological Diversity (CBD). After illegally acquiring the resources from the different African countries, multinational firms have gone ahead to develop and patent products that generate hundreds of millions of dollars in revenue. For instance, in the 1970s, a bacterium called Microbacterium Vaccea was isolated from the Lango district of Uganda by a British company, SR Pharma (formerly Stanford Rook ltd). Since its isolation, the bacteria have been used effectively against chronic viral infections including HIV. Since being obtained from Uganda, the bacteria strain has been patented in the US at least five times -the latest being June 22, 2003 (Box 3).

Table 3: Gross exports of live wildlife products for Uganda

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<td>Chamaeleo bitteaniatus (Montane chameleon)</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>178</td>
<td>2089</td>
<td>640</td>
</tr>
<tr>
<td>Chamealeo hoehnelii (Helmeted chameleon)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>229</td>
<td>1749</td>
<td>710</td>
</tr>
</tbody>
</table>


3.2 National regulations and institutions involved in wildlife trade arrangements

3.2.1 Legal framework used in the management of wildlife in Uganda

Uganda has several statutes relating to the conservation and management of wildlife. These include the:

- Constitution of the Republic of Uganda (1995) which provides that the utilisation of natural resources of Uganda should be managed in such a way as to meet the development and environmental needs of the present and future generations of Ugandans;
- The National Environment Act (1995) section 73 (2) makes provisions for the protection and sustainable use of wildlife;

2 This section was developed based on work done by Kameri-Mbote (2005) Sustainable Management of Wildlife Resources in East Africa: A critical Analysis of the Legal, Policy and Institutional Frameworks, IELRC Working paper. www. ielrc.org/content/w0505.pdf, Geneva Switzerland.
further, the Land Act (1998) in sections 43 and 44 which read with Articles 27 and 237(2) of the Constitution provide that land can be acquired for the protection of wildlife. Moreover, the occupier of the land is enjoined by section 44 of the Act to use land in an environmentally sustainable manner which includes a requirement to conform to the Wildlife Act and other applicable laws;

the Wildlife Act (2000), a law dedicated solely to issues of wildlife management, aims at promoting the conservation and sustainable utilisation of wildlife for the benefit of the people of Uganda; enhancing benefit sharing through wildlife use rights and promoting public participation in wildlife management. Section 4 of the Act vests the ownership of wildlife in the Government in the trust for the people. Subsection 7 of section 4 gives the Minister power to allow the use of wildlife for cultural purposes by any community. It is however instructive to note that the Act defends narrowly so as to exclude wild plants or animals of a species not native to Uganda. Generally, the legislation regarding the management of wildlife takes a command and control approach entailing heavy presence of government to ensure compliance with the set standards;

the Water Act, Cap 152 provides for the use, protection and management of water resources and supply. The Act defines water to include surface waters whether contained in rivers, streams, lakes, swamps or elsewhere on the surface of land, ground waters and such water as the Minister may from time to time declare water.

the Local Governments Act, Cap 243 provides for the system of local governance. Local governments are described as units based at the district with lower local governments and administrative units as well. The chairman nominated committees of each council. The committees functions include: initiating and formulating policy for approval of the council include policy with regard to the use of local natural resource reserve areas. The local governments also oversee the implementation of government policies and coordinate the actions of non-governmental organisations. In addition, the councils receive and resolve disputes with regard to the use of natural resources including wildlife;

the National Forestry and Tree Planting Act (2003) states that all forest biological resources and their derivatives, whether naturally occurring or naturalised within the forest, shall be conserved and managed for the benefit of the people of Uganda. And, that the transfer of biological resources and their derivatives from the territorial jurisdiction of Uganda shall not diminish or extinguish the sovereignty of Uganda over those resources. The Act also prohibits several illegal activities in forest reserves or community forests. The prohibited activities include removal of forest; clearing or occupying land; livestock farming; recreational, commercial, residential, industrial or hunting purposes; collection of biotic and abiotic specimen; or construction of infrastructure.

the Agricultural Seeds and Plant Act Cap 29 was created to provide for promotion, regulation and control of plant breeding and variety release, multiplication, conditioning, marketing, importing, and quality assurance of seeds and other planting material and for other matters connected therewith. Under the regulations the Minister may after consultation with the National Seed Industry Authority, make regulations, for the control of breeding, multiplication, marketing and certification of seed and generally for better carrying out the provisions of this Act;

the Control of Agricultural Chemical Act Cap 28 was created to control and regulate the manufacture, storage, distribution and trade in, used, importation and exportation of agricultural chemicals and for other purposes connected therewith;

the Plant protection Act Cap 39 : An Act created to make for the prevention of the introduction and spread of disease destructive to plants. The Minister may make rules for the purpose of preventing and controlling attacks by or the spread of pests or diseases in Uganda, and in particular, and without prejudice to the generality of the foregoing power. The Commissioner for agriculture may by order, prohibit, restrict, or regulate the importation into and the exportation from Uganda of nay plants and the soil packages, coverings or wrappings of the plants and any article or class of articles, whether of a nature similar to plants or not and any animals or insects known or likely to be injurious to agriculture or to infect any with any pest or disease; and

the Animal Breeding Act (2001) was created to establish the National Animal Genetic resources and Centre and Data Bank, to provide for the promotion, regulation and control, marketing, import and
export and quality assurance of animal and fish genetic materials and generally to provide for the implementation of the National Breeding Policy in Uganda; to repeal and replace the Brand of Stocking Act; and to provide for other matters.

3.2.2 Regulatory or policy Framework for Uganda's wildlife

The harvest and use of Uganda's wildlife is regulated within the national environmental and natural resource policies for the environment, wildlife, wetlands, forestry and water as follows:

- The Wildlife policy (1995) explicitly states that for proposed developments in the wildlife sector environmental impacts be carried out and environmental audits of existing facilities. The policy goal is to ensure sustainable management of the wildlife resources of Uganda;

- The National Policy for the Conservation and Management of Wetlands (1995) calls for wetlands to be utilised in such a way that they do not lose traditional benefits presently obtained from them. In addition the Wetlands Policy states that any use of wetlands should consider the requirements of all other users in the community. In addition, Government established certain wetlands as fully Protected Wetlands Areas due to their important biodiversity and partial exploitation of resources is allowed in others;

- The Uganda Forestry Policy (2001) urges for a modern, competitive, efficient and well-regulated wood and non-wood industry promoted with the Private Sector. The also maintains a strong regulatory framework to control illegal practices, monitor the behaviour of resource users, and to measure environmental and social impacts and collect dues;

- The National Water Policy (1999) urges for the coordination of preparations and review plans and projects which may affect national water resources whether the development is undertaken by Government agencies, donors or private developers; to ensure that the plans and projects are consistent with policies and priorities and the Water Action Plan

3.2.3 National institutional arrangements

The Uganda Wildlife Authority is charged with the control and management of wildlife in general in Uganda. The Wildlife Policy (1995) laid the basis for the wildlife law in Uganda. The mission of UWA is "to conserve in perpetuity the resources within the national parks and other wildlife areas enable the people and the global community to derive ecological, economic and aesthetic and educational benefits". UWA is a body corporate with perpetual succession and powers to sue and be sued. The Uganda Wildlife Act (2000) also makes provisions for integrating local interests in the implementation of the wildlife legislation. Under sections 12 and 13 of the Act local authorities are empowered to form wildlife committees to advise on wildlife management and utilisation within the local jurisdiction. It is consequently possible for individuals and communities to manage wildlife. The minister has power, after consultation with local authorities, to declare certain areas wildlife conservation areas. Wildlife Conservation areas can either be wildlife protected areas or wildlife management areas. The following activities may be permitted in wildlife protected areas: biodiversity conservation, recreation, scenic viewing, scientific research, and other economic activities such as regulated extractive utilisation of natural resources.

Wildlife management areas are those protected for sustainable management of wildlife. Accordingly, such areas include wildlife sanctuaries and community wildlife areas. Under the former activities which are not destructive to the protected species or its habitat may be permitted, while under the latter persons with property rights may engage in sustainable management and utilisation subject to applicable laws and regulations. Under which individuals that have property rights to land may carry out activities for sustainable management and utilisation of wildlife if the activities do not adversely affect wildlife and in which areas the State may prescribe land use measures.

The Ministry of Water, Lands and Environment (MWLE) is the parent ministry as far as environmental issues are concerned. As the mother Ministry of the wildlife sub-sector MWLE is charged with conservation wildlife and promotion of benefit of wildlife use options for communities.
The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF): This is the institution responsible for the promotion of agriculture in the country. The Ministry has a direct input on what happens in the wildlife sector based on the regulations developed for livestock management along the protected areas and reserves. In addition, MAAIF works closely with UWA and MWLE to control disease livestock and wildlife outbreaks in areas near important wildlife habitats. Some of the commodities that are traditionally defined under agriculture such as ornamental fish and capture are in fact wildlife.

The Ministry of Tourism, Trade and Industry (MTTI): responsible for the conservation of wildlife and wildlife related trade in the country. It is the ministry that ensures that the right policies regarding wildlife conservation, trade and tourism are put in place. MTTI has played a big role in the process of gazettement of land for conservation in Uganda. The Management Authority for CITES is located in MTTI.

The National Environment Management Authority (NEMA): under the National Environment Statute, 1995 the National Environment Management Authority (NEMA) is the principal agency in Uganda for the management of the environment and to coordinate, monitor and supervise all activities in the field of the environment (GoU, 1995).

The National Forest Authority (NFA) is responsible for coordinating the management of forest resources and areas declared as forests and forest reserves and the biological resources in them. The NFA manages a large section of wildlife both plants and animals found in national forests and forest reserves and community forests.

Uganda Export Promotions Board (Uganda BioTrade Programme): The Uganda Export Promotions Board (UEPB) is charged with expanding the trade possibilities of Uganda, especially in the international market. With regard to the wildlife trade the BioTrade initiative (UNCTAD) is managed by UEPB. The initiative is meant to enhance trade and investment in biological resources while also ensuring sustainable utilization.

The Uganda Investment Authority (UIA) is responsible for providing information and streamlining the process of investing in Uganda. Therefore provides investors and potential investors with the prospects that exist in several industries include the wildlife sector.

The Uganda National Council of Science and Technology (UNCST) is the Technical Authority for CITES in Uganda. This means that UNCST provides technical advice on the review of the status of CITES classification of certain species, the type of use rights applied for CITES-listed species and advice on other issues regarding wildlife conservation, trade and the Multilateral Environmental Agreements.
CHAPTER FOUR

Gaps and Opportunities in Uganda's wildlife trade

4.1 General opportunities for trade and investment in Uganda

Box 4: Investment climate: Key factors for foreign investors in Uganda

Strengths:
- Strong and stable government commitment to creating a market-friendly environment
- One of the most dynamic economies in sub-Saharan Africa with an average growth rate of 6% over the past five years and access to a potentially significant regional market
- Trainable low-cost labour
- Some of the best climatic conditions in sub-Saharan Africa for agricultural production and for tourism

Weaknesses:
- Inadequate physical infrastructure
- Shortage of technically and managerially skilled personnel
- Persistent though declining corruption

Opportunities:
- Commercial agriculture and agro-processing
- Tourism
- Telecommunications as well as other service industries such as education (technical skills) and health services
- Infrastructure development

Threats:
- Ugandan military involvement in the affairs of politically unstable neighbours (Burundi, Rwanda, the Democratic Republic of the Congo and Sudan) and consequent insecurity in parts of northern and western Uganda
- HIV/AIDS epidemic and its impact on labour resources and productivity

Adapted from UNCTAD (2004)

4.2 Wildlife trade opportunities - where are the critical gaps?

4.2.1 State of wildlife trade in Uganda

Wildlife trade in Uganda is largely restricted to trade in Fauna and is controlled by the Uganda Wildlife Authority (UWA) under the Wildlife Act (2000). The Fauna traded include (1) Birds; and (2) Reptiles and Amphibians (which include (i) chameleons; (ii) tortoises; (iii) lizards; and (iv) snakes). Uganda's quota to companies trading in wildlife for 2004 indicates (Table 5) that Birds make more than one-third of the exports, followed by lizards and snakes.
Table 4: Number of Birds, Reptiles and Amphibians allocated in Uganda’s quota for wildlife

<table>
<thead>
<tr>
<th>Commodity</th>
<th>To be traded</th>
<th>Captured</th>
<th>Bred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds</td>
<td>46,870</td>
<td>36,680</td>
<td>8,190</td>
</tr>
<tr>
<td>Chameleons</td>
<td>9,520</td>
<td>7,890</td>
<td>1,630</td>
</tr>
<tr>
<td>Tortoises</td>
<td>4,320</td>
<td>3,600</td>
<td>720</td>
</tr>
<tr>
<td>Lizards</td>
<td>24,140</td>
<td>20,100</td>
<td>4,040</td>
</tr>
<tr>
<td>Snakes</td>
<td>14,520</td>
<td>12,100</td>
<td>2,420</td>
</tr>
</tbody>
</table>


The estimated value of the wildlife export trade is US$ 1,280,000 per year from chameleons, tortoises, lizards and snakes (indicative figures for birds were not available). Moreover, even if Birds were to contribute another US$ 2 million, wildlife trade is still much smaller than other commodities for instance cotton exports fetch US$ 16 million, Tobacco US$ 20 million, formal maize and beans exports US$ 30 million, and way short of the Tourism sector, which fetches above US$ 160 million. With such a low level of export value for the country and the very few traders are involved, UWA has six registered companies-exporters of wildlife, it is perhaps little surprising that the opportunities available for trade in sector are often not mentioned.

4.2.2 Real opportunities

Aside from the birds and reptiles and amphibians that dominate wildlife trade in Uganda, the international picture shows birds, reptiles and amphibians, in fact, contribute just 0.44% of the wildlife trade (Table 3). The biggest wildlife commodities traded are: ornamental fish, mammal furs and fur products and reptile skins products at US$ 750 million, live ornamental plants at US$ 250 million, followed edible snails, reptile skins and mollusk shells at US$200 million and game meat at US$ 120 million. However, the largest wildlife product of them all is the Global trade in Non-Wood Forest Products (NWFPs) such as Gum Arabic, Aloe Vera, Natural Honey, Pharmaceutical plants etc. Indeed, Uganda has considerable potential to produced NWFPs such as Honey, Aloe Vera and Gum Arabic. The opportunities that could be utilized in Uganda are discussed as follows.

1. Ornamental fish

The FAO (1999) reported that the international trade of aquatic organisms for ornamental purposes was growing at an annual rate of 14%. The largest supplier of ornamental fish worldwide Singapore accounted for 33% of the exports in 1986. Moreover, the percentage is envisaged to be much smaller today. Singapore has 130 exporters of ornamental fishes. An emerging exporter in Asia, Sri Lanka, has 14 companies-exporters.

The major buyers of ornamental fish are France, Germany, Japan, the Netherlands and the USA.

Figure 2: International Wildlife Trade of Live commodities by percentage

Adapted from: Broad et al. (2001)
However, for Uganda there are definite requirements (or problems) that have to be dealt with before the potential to export ornamental fish can be realized:
- there is a need of stock of fresh water aquarium fish;
- breeders and communication between breeders and established exporters (and new exporters);
- government support to the industry and promotion of fresh water ornamental fish production in the country; and
- putting in place adequate facilities for packaging and air transport.

A pilot phase for the ornamental fish industry would require:
- project feasibilities studies;
- designing production process and support;
- market identification;
- choosing the main varieties of fish - viable for the market;
- clear financing arrangements;
- determining the technical input requirements
- extension services;
- management expertise for the small-scale projects;
- economic and financial assessments, and monitoring and evaluation.

2. Non-Wood Forest Products

Non-Wood Forest Products make up 74% of the international trade in wildlife commodities (Broad, 2001) and by 1995, Gum Arabic trade was worth US$ 101 million and supply was dominated by Sudan and Nigeria. Natural honey, Aloe Vera and spices are other products that could be exploited particularly from the Drylands areas of Uganda, the Karamoja region. Moreover, natural honey and Aloe Vera can be produced throughout the country. This too is an opportunity that should be explored.

Considering the case of Aloe Vera East Africa is reported nearly 200 taxa of genus Aloe. The sap of certain Aloes has medicinal or cosmetic applications and has been traded internationally for a very long time.

Table 5: Numbers of Indigenous, endemic and threatened Aloe taxa in East Africa

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Aloe taxa</th>
<th>Endemic Aloe taxa</th>
<th>Taxa recorded as threatened</th>
<th>Species threatened by international Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Eritrea</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>40</td>
<td>19</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Kenya</td>
<td>55</td>
<td>24</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>Mozambique</td>
<td>28</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Somalia</td>
<td>30</td>
<td>24</td>
<td>13</td>
<td>--</td>
</tr>
<tr>
<td>Sudan</td>
<td>10</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tanzania</td>
<td>41</td>
<td>23</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Uganda</td>
<td>15</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>


In Uganda the threatened Aloe plants according to the IUCN Red list (1992) were four species. At the present there is little (if any) regulation of harvesting of wild Aloe species neither does there appear to be any regulation of the trade in the Aloe species and their products. There is increasing interest in Aloe products in Uganda (Hafashamana, 2003). However, it seems most of it goes on in form of semi-processed products, which may be smuggled out of the country without being declared to the law enforcement agents due to the small size of the semi-processed products, they are easily con-

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3 Uganda’s Department for Fisheries Resources (DFR) and the Fisheries Resources research Institute (FIRRI) are in the early stages of experimentation with the intention to introduce ornamental fish production in Uganda. As noted above the international market was US$ 750 million in 2001. the potential for aquaculture in Uganda has been under exploited largely because the market opportunities have been largely unclear. However, ornamental fish provides an enormous opportunity that requires further scrutiny.
cealable. In East Africa, monitoring systems to effectively monitor trade in the Aloe species and their products are absent. There is accurate data on the trade in Aloe that takes place in Uganda, although, a lot is exported. Aloe species are generally traded as live plants for the ornamental plant market and as extracts for the cosmetic and medicinal plant industry. The substantial international trade in Aloe products is extremely difficult to quantify in terms of overall value and volume. The trade is dominated by products of the widely cultivated Aloe vera (barbadensis), a species that is only known in cultivation and is not included in the Appendices of CITES. Trade in East African species traded as extracts is relatively small in comparison both with the global trade in A. vera products and with trade in South African species, but is of significance domestically and probably also for international markets. To date Aloe trade for Kenya and Tanzania is documented but that from Uganda is undocumented. Suggesting that a large volume is unrecorded (or not sold as a wild product).

3. Wildlife farming

In Uganda, communities such as the Batwa in the Southwestern part of the country depend on wildlife as an essential food resource, as a source of income and as an important part of human spiritual and cultural systems. In such communities there is little tradition of domestic livestock management. Further the limited wildlife also serves essential food security needs. Wildlife often consumed includes mammals, birds, reptiles, amphibians, and fishes. In recent years, concern has been growing about the unsustainable level of wildlife hunting. In Uganda hunting was banned in 1980 and the ban has never been lifted since. However, some limited level of hunting takes place with the understanding of UWA and sometimes outside the control of UWA or the National Forestry Authority (NFA).

The six wildlife exporters on UWA's rooster for wildlife exporters in Uganda are engaged in wildlife farming, largely of a semi-urban nature. However, wildlife farming poses some dangers as delineated below:

Disease: animal health and disease are a key concern in all livestock farming and awareness of the tight links between domestic animal, wild animals and human health has increased in recent years. Disease is a concern because of the limited knowledge about wild animal diseases and how disease of species in captivity, and the interactions between wild, domestic and human populations, due to limited research on the subject (Hardouin, 1995). Intense farming also concentrates diseases into a small area thereby allowing rapid amplification and spread of any diseases within the captive population. Captive populations may also allow for rapid mutation of disease, and serve as a reservoir for diseases, which can potentially spread to wild populations of the same or other species in surrounding areas.

Genetic concerns: interbreeding between wild and captive populations of the same or close species have the potential to lead to the deletion of genetic traits to wild animals (Jori et al., 1995). Escaped farmed animals pose the possibility of their interbreeding with wild animals. Hybrids, such as the hybrid turtles in Asia, described as a new species obfuscate the taxonomy and conservation efforts (Dalton, 2003).

Miranda et al. (2005) noted that in making economic considerations of wildlife trade as follows:

- Wildlife farming will be economically attractive if it offers a return per unit investment equivalent to rearing domestic species. But this is generally not the case due to the much lower productivity of many wildlife species compared to domesticated ones. It is generally more cost-effective to hunt wildlife than to farm it, until the point when local wildlife populations have largely been extirpated. Thus, for wildlife farms to be a conservation tool, external investments and incentive systems are required together with parallel disincentives against hunting.

- The general lack of experience in raising wild species also makes these farms riskier than rearing domestic animals. Asking marginalized farmers in developing countries to expand considerable amounts of time, energy, and capital on untried systems is unlikely to succeed (Eltingham, 1984).

- The slaughter and processing requirements of wildlife species are less likely than domestic species to meet national health and hygiene regulations in many countries (Rushton et al., 2004). This is likely to make the wild meat less appealing except for the few specialized consumers.

Law enforcement considerations: farms complicate enforcement of laws concerning hunting and trad-
ing of wildlife. Without substantial enforcement capacity, including chain of custody, enforcement officers are unable to determine the provenance of animals in urban markets. Also, farms can be a mask for laundering illegal trade of wild caught animals.

Invasive alien species considerations: Wildlife farming on a significant scale almost inevitably results in animals eventually escaping. If the species is not native to the local area, escapees pose potential threats to local species, and the wider environment. The Convention on Biological Diversity recognizes game ranching as a possible means of introducing invasive alien species, and calls for environmental impact assessments and adoption of a precautionary approach when planning such developments.

Socio-cultural considerations: Throughout the humid tropics, especially in rural areas, hunting often continues even when farmed substitutes are available, because:

(i) When wildlife is still relatively abundant, it is the cheapest way to obtain meat. Many of the people most dependent on wild meat are the poorest and most marginalized in a country (Rushton et al., 2004);

(ii) Farmed animals are often viewed primarily as savings and insurance, rather than protein sources to be used routinely (Robinson and Bennett, 2000);

(iii) Many cultures in the tropics have no tradition of long-term planning and livestock management. Overcoming this will take long-term extension;

(iv) Obtaining meat is not the only reason for hunting. Instead, animal trophies as cultural artifacts or for personal adornment is a widespread practice;

(v) Animals hunted in the wild are frequently regarded as having medicinal, particular symbolic or social importance (Archetti, 1997);

(vi) Some cultures have no concept of or belief in natural resource scarcity (Croll and Parkin, 1992), which may decrease motivation for generating protein and income through wildlife farming;

(vii) Hunting may itself be of major cultural importance. For instance, if to be a hunter is essential in gaining respect (Bennett & Robinson, 2000);

(viii) In most tropical cultures, hunting is the role of men, and raising livestock often falls to the women (Kleyson, 1996; Archetti, 1997);

In the humid tropics, all available data and information strongly indicate that wildlife farming to produce meat is not economically viable compared to hunting or to farming of domestic species. Certain economic and cultural conditions might still determine that wildlife farming should be conducted. In such cases, strict guidelines are needed to ensure that the operations succeed as viable farming enterprises, and do not harm wildlife populations. High-value, luxury and urban demand for wild meat creates pressure for wildlife farms within easy reach of urban areas. The higher prices paid by some urban consumers will, in some cases, make this economically viable. Such farms are also not a solution to a conservation problem, since they would not reduce hunting by rural peoples, or supply cheap meat to poorer urban dwellers.

4. Data Collection, Benefit sharing and Quota Allocation

In discussions held with a wide range of stakeholders the Consultant discovered that a collector, for instance collector, for instance of tortoises, earned about Ushs 20,000 per tortoise. But the international indicative figures are Ushs 540,000 to Ushs3,600,000 (or US$ 30 to US$200). For the collector whose sole income comes from wildlife collection for traders, to earn one dollar a day for 365 days a year he/she would have to collect at least 33 tortoises a year.

The number of tortoises or any other wildlife collected is not dependent on the collector alone it is dependent on the quota allocation system, and indeed the wildlife which is bred (farmed). The system of collecting data on wildlife that are estimated to be in the wild and those on farms need to be clearer. This will ensure that the volume of export necessary is known from the outset. In addition, the wildlife trade regulator would then decide upon the number of collectors who can stay in business. In fact, this could be used as a source of extra livelihoods for communities that depend on wildlife trade.

5. Commodity value

Similar to agriculture, wildlife trade seems to capture only the low value products in the market with
a value ranging from US$ 1.50 to US$375 per unit. The value of a crocodile skin is for instance US$2500, ten-times higher than the indicative price of a six year old tortoise. There several other examples, especially with the NWFPs. However, by targeting the lower end of the market, wildlife traders make only very marginal profits and this discourages sustainability because: the resource rents earned are actually lower than the value of the wildlife in its habitat, and the benefits returned to the collectors cannot help them overcome poverty.

7. Medicinal plants and Traditional Knowledge systems:

The discussion on Intellectual Property Rights (IPRs) and Biodiversity convening stakeholders and promoting IPRs are largely unutilised in Uganda. The World Health Organisation estimated that 80% of the Worlds population relies on traditional medicine to meet daily health requirements (Roe et al., 2003). The materials used in traditional medicine include parts of plants and animals - with a vast majority originating from the wild. Traditional medicine is dominant in many African countries, and in some countries traditional medicine is officially recognised in the national health care system. Despite the high demand for traditional medicine products and substances from developing countries, the trade has not been profitable due to the lack of industry and marketing capacity to compete for a share in foreign markets. For most developing countries large quantities of natural products are exported either in raw or in semi-processed form, leading the bulk of profits going to the importing countries where the products are processed, packaged and marketed.

8. Low Human resource capacity versus conservation

Live pet trade includes a wide range of species of birds, reptiles, primates and ungulates. Captive breeding is also possible if suppliers are to feed this dynamic market. However, this requires additional (technical) skills and expertise. Therefore, it might be cheaper to collect specimens from the wild where the process is sustainable. In cases where collection of specimens from the wild is not sustainable it will danger the biodiversity of the region, and in some cases even reduces the population of particular species below the minimum needs for its reproduction and survival.

4.3 Conclusions to opportunities and gaps in Uganda's wildlife trade

Wildlife trade in Uganda contributes about US$ 3 million which a very small value compared to the revenue obtain from tourism alone at approximately US$ 200 million. The real opportunities for wildlife trade in Uganda lies in diversification into such markets as ornamental fish and Non-Wood Forest Products such as Aloe Vera, Gum Arabic and Honey and farming (or intensification) in crocodile skin production and several other products. There are a few regulations and almost non-existent regulations for monitoring the trade in Non-Wood Forest Products. A lot of illegal trade has been reported especially products going into neighbouring countries under the guise of low volume produce. The culture of using wild animals and plants in traditional medicine is well documented in Uganda, unlike the extent of collection. Documentation in terms of what wildlife species are used as ingredients of traditional medicine and the ability to propagate them is also important in that, captive breeding can be used as a measure for over dependency on products from the wild for sustainable commercial exploitation.

Many of the wildlife exporters in Uganda are also engaged in farming. However, wildlife farming presents problems of its own:

- Diseases many be transmitted between wild, captive and human populations as the international epidemic of Avian Flu clearly illustrates;
- In addition, Genetic concerns have been expressed, perhaps not as much in Uganda (Sub-Saharan Africa) as in Asia, where the taxonomy and conservation status of turtles is under threat. In Uganda as well intensification could bring such problems.
- Property rights issues are a concern since the current legislation of 1964 is considered out dated and was made for a very small market, which has grown enormously since.

Human resource capacity shortfalls have been expressed in the industry absence of expertise for several issues concerning wildlife trade from managing health concerns, certification of products, maintaining standards, carrying out the proper studies to guide resource managers and traders. This is a key challenge that also presents great opportunity.
PART TWO:
WILDLIFE SECTOR TRADE STRATEGIC PLAN
CHAPTER FIVE

Goals, Objectives, Result Areas and Activities

5.1 Overall Goal

To sustainably enhance trade in wildlife, in Uganda, by streamlining the technical, regulatory and administrative support provided to stakeholders - communities, collectors and traders - in line with national and international wildlife conservation and trade regulations.

5.2 Specific objectives

1. determine the sustainable quota of wildlife that should be captured from the wild or farmed while at the same time maintaining the high conservation standards of the country.
2. to increase trade in wildlife through increased production (volume) of wildlife commodities traded.
3. to diversify the number of commodities in the wildlife trade in Uganda.
4. continually carry out research for product development, cost effectiveness, feasibility and viability and increase value obtained from in key high value markets.
5. reduce the risk or potential risk of transmitting diseases while carrying out wildlife trade related activities.
6. to regulate, monitor and control all illegal wildlife trade in Uganda
7. to improve the livelihoods of poor communities that are highly dependent on wildlife by increasing their direct share of benefits from the wildlife trade.
8. to ensure that adequate and appropriate business services are available for, and provided to, wildlife trade stakeholders, particularly farmers, exporters.
9. to provide adequate, appropriate and accurate information to all stakeholders in wildlife conservation and trade. To ensure co-existence of both sides.
10. initiate capacity building with the aim of increasing the human resource capacity of wildlife trade regulators, exporters, breeders and product processors. And, to increase the level disease monitoring and control of captive and animals in the wild.
11. develop standards, certification procedures and the means of certifying wildlife commodities and products. To ensure that sources are authenticated and a high quality of the commodities and products is put in place and maintained.
12. create a centre in Uganda for arbitration on wildlife trade either by augmenting the current CITES country office or by empowering the current trade dispute handling office in the Ministry of Tourism Trade and Industry.
13. develop an international negotiating position on CITES and other Multilateral Environmental Agreements that ensures that the right to conserve and to trade wildlife in Uganda is protected.

5.3 Result areas, activities and responsible institutions

RESULT 1: Sustainable wildlife trade quotas that preserve high wildlife conservation standards established

ACTIVITIES:

- Incorporate trade rules and environmental treaties into current regulation that governs biodiversity conservation and economic development with the wildlife sub-sector ^4^.
- Develop sustainable management plans
- Identify and document species of national significance
- Design strategies to promote their conservation
- Using sustainable yield harvesting approaches to determine the appropriate population size of wildlife that will be maintained in the wild; age and classes to be harvested; the timing of the harvesting; and off-take rate.
- Initiate linkages to national branding through eco-tourism

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^4^ Whether trade contributes to natural resource degradation depends to a great extent on two factors: a) the strength of national environmental regulations, and b) the degree to which international trade regimes reinforce or undermine them. If a country’s ability to regulate exploitation of natural resources is already weak, international trade can amplify existing problems. For example a nation may ban the exploitation of a certain resource, but if enforcement is rare, and World markets offer high prices the economic incentive to violate the ban will be strong.
Provide incentives for conservation of the species
RESPONSIBLE INSTITUTIONS: MTTI, UBTP, UWA, NEMA, NFA, CBOs, MUIENR, Private sector associations
RESULT 2: Volume and value of wildlife trade increased
ACTIVITIES
- Enhance supplier or company capacities for sustainable supply
- Strengthen supply chain management and enhance relations between suppliers and companies
- Improve company management practices
- Increase supplier or company participation in conservation related activities i.e. resource monitoring, species and ecosystem documentation, etc.
- Integrate wildlife trade in development and supportive legislative frameworks
- Generate market information on tradable species
- Undertake market studies on trends, pricing, etc. and assess implications on resource conservation and preservation.
RESPONSIBLE INSTITUTIONS: MTTI, UWA, NEMA, NFA, CBOs, wildlife traders' association

RESULT 3: Research outputs on new wildlife trade products, and feasibility of trade in new commodities (or products) produced
ACTIVITIES:
- Establish research needs for wildlife trade
- Design mechanisms to support continual research and development to support sustainable use of wildlife resources
- Research on alternatives to wildlife resources The present level of wildlife population in many areas are so low that it will be necessary to boost breeding herds by dislocating in forms like domestication and propagation on-farm if commercial exploitation and conservation are to be catered for at the same time.
- Develop manuals on: trade in live animals, humane treatment of live animals (proper facilities locally and internationally), and
RESPONSIBLE INSTITUTIONS: Faculty of Veterinary Medicine Makerere University, MUIENR, UWA, UBTP, Wildlife trade sector association

RESULT 4: contribution of wildlife trade to the poverty reduction and other development goals of Uganda improved
ACTIVITIES:
- Design incentive mechanisms for conservation
- Review benefit sharing policies
RESPONSIBLE INSTITUTIONS: UWA, UBTP, MTTI, MUIENR, Wildlife trade sector associations

RESULT 5: Adequate information on prospects, conditions and requirements for entering the wildlife trade market provided
ACTIVITIES:
- Develop regulations on health and sanitation and aids for implementing these regulations such as: i. guidelines and information on notifiable diseases to communities and commercial ranchers; ii. a firm institutional basis for continued wildlife research; iii. review tests to identify meat from different species; iv. assist veterinary staff in vaccinating against disease outbreaks near wildlife areas. v. research on common diseases such as Foot and Mouth disease, Trypanosomiasis, Malignant catarrhal fever and Cystercosis; vi. research appropriate cropping methods for wildlife; and vii. establish an expert committee to review applications for the introduction of new and exotic species into a given area
RESPONSIBLE INSTITUTIONS: UWA, MAAIF, Faculty of Veterinary Medicine Makerere University, MTTI, UBTP, Wildlife trade sector association

RESULT 6: Level of illegal wildlife trade in Uganda controlled
ACTIVITIES:
- Implement regional and international legislation related to sustainable trade in fauna e.g. domestication of the Lusaka Agreement, CITES, CBD, etc.
Enforce national regulations related to sustainable trade e.g. the Wildlife Act (2000)
Consider developing and/or adapting the sentencing guidelines for environmental offences in the context of combating the illegal wildlife trade.
Promote deterrence of illegal wildlife trade through:
i. increasing the risks of detection through increased resources directed to enforcement;
ii. encouraging speedier processing of cases;
iii. seek to reduce rewards of the illicit trade through disrupting markets for illegally traded goods, particularly by raising awareness of the threat the illegal wildlife trade poses to endangered species; and
iv. lowering the threshold of tolerance of the illegal trade, through education and campaigning.
Consider introducing a due diligence scheme and code of conduct for the legal wildlife trade, drawing legal traders into more effective partnerships with regulators, and enhancing their role in intelligence-gathering to challenge illegal traders.

RESPONSIBLE INSTITUTIONS: UWA, UBTP, MTTI, MUIENR, Wildlife trade sector associations

RESULT 7: Higher revenues and improved food security for poor wildlife dependent communities obtained
ACTIVITIES:
- Increase participation of Local Government and communities in trade regulation, monitoring and benefit sharing.
- Community sensitisation on trade and conservation of species
- Design incentive mechanisms for conservation
- Review benefit sharing policies

RESPONSIBLE INSTITUTIONS: UWA, UBTP, MTTI, MUIENR, Wildlife trade sector associations

RESULT 8: Appropriate, adequate business services available for the wildlife trade sector
ACTIVITIES:
- Review the tariff/permit fees structure for fauna
- Review quota allocation based on resource assessment
- Lobby tax exemption on inputs
- Streamline export documentation
- Sensitization of business support agencies on wildlife trade and the legislation. 
- Improve relations and communication between regulators and companies
- Training on wildlife inspection, handling, transportation
- Develop human resource in the taxidermist industry
- Encouraging private sector investment there may be willingness to manage wildlife on a commercial basis.
- Develop marketing strategies in an attempt to finding new marketing opportunities; marketing consultants can be hired to investigate the commercial potential of different wildlife products like medicinal plants, Gum Arabic, reptiles and some insects among others.

RESPONSIBLE INSTITUTIONS: UWA, UBTP, MTTI, MUIENR, Wildlife trade sector associations

RESULT 9: Wildlife conservation and trade stakeholders well-informed on wildlife trade versus conservation implications
ACTIVITIES:
- Promote consultation and participation of all actors in the policy formulation processes.
- Raise awareness of the benefits of wildlife trade among stakeholders
- Promote public or private sector interaction and relationship building
- Encourage intra-institutional relations for improved communication and facilitation of trade
- Encourage sector organizations through formation of an association

RESPONSIBLE INSTITUTIONS: MTTI, UWA, MFPED, URA, Wildlife Traders Association and Sector stakeholders

RESULT 10: Human resource that can adequately handle breeding, disease control and processing in the wildlife trade sector trained
ACTIVITIES
- Assess training needs and multiplication technologies

\[5\] Private wildlife ranches in Southern Africa have shown that there is great willingness to invest in conservation through utilisation, either consumptive or non-consumptive. The same concept is taken in Kenya and there are a number of successful private game reserves. Use rights for this kind of management can be given on the basis of willingness to follow regulations like removing only mature wildlife and observing closed seasons and controlling marketing to minimise illegal taking and marketing.
Initiate development of curriculum
Training companies and supplier communities
RESPONSIBLE INSTITUTIONS: Public and Private Universities, and other tertiary training institutions, MTTI, UWA, UBTP, and Wildlife trade sector associations

RESULT 11: Internationally recognized and locally used standards for wildlife trade in Uganda articulated

ACTIVITIES:
- Develop standards and related certification mechanisms for environmental sustainability, health and disease free initiatives
- It can also help to clarify the discussion on Intellectual Property Rights and Biodiversity by providing studies on mechanisms, convening stakeholders and actors and promoting that IPRs are not used to misappropriate biodiversity based Traditional Knowledge.
- All meat will have to be inspected and stamped with a veterinary roller\(^7\)

RESPONSIBLE INSTITUTIONS: NEMA, MAAIF, UWA, UNBS, UBTP, Wildlife trade sector associations

RESULT 12: A reliable arbitration centre for wildlife trade in Uganda created

ACTIVITIES:
- Assess the need for an arbitration centre
- Develop recommendations for policy formulation
- Establish centre

RESPONSIBLE INSTITUTIONS: MTTI, UWA, UBTP, MJCA, Wildlife trade sector associations

RESULT 13: A well developed mechanism for integrating the concerns of the wildlife trade sector in international wildlife trade and conservation negotiations established

ACTIVITIES:
- Promote information exchange fora and platforms such as:
  a) the conservation community participating in the monitoring and assess the implications of trade, investment and services liberalisation and advise on biodiversity implications.
  b) the conservation community needs to get involved in trade, presenting its analysis and recommendations in policy formulation and implementation. It can establish itself as a resource to be called upon during dispute settlement and submit amicus briefs where appropriate.
  c) convene stakeholders to resolve conflicts and promote the use of the principle in multilateral contexts. Specifically promote that international trade rules do not undermine the control of invasive alien species.

RESPONSIBLE INSTITUTIONS: UWA, UBTP, MTTI, MUIENR, Wildlife trade sector associations

\(^7\) Hunting: hunting was banned in Uganda in 1980
PART THREE: REFERENCES AND ANNEXES
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### ANNEX I: ESTIMATED ANNUAL VALUE OF INTERNATIONAL TRADE IN WILDLIFE IN THE EARLY 1990S

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<thead>
<tr>
<th>Commodity</th>
<th>Estimated value million US$</th>
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<td>Live trade</td>
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<tr>
<td>Primates</td>
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<tr>
<td>Cage birds</td>
<td>60</td>
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<tr>
<td>Reptiles and amphibians</td>
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<tr>
<td>Ornamental fish</td>
<td>750</td>
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<tr>
<td>Animal products for clothing/ornamental etc.</td>
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<tr>
<td>Mammal furs and fur products</td>
<td>750</td>
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<tr>
<td>Reptile skins</td>
<td>200</td>
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<tr>
<td>Reptile skin products</td>
<td>750</td>
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<tr>
<td>Mollusc shells</td>
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<td>Ornamental corals</td>
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<td>Natural pearls</td>
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<tr>
<td>Animal products for medicine</td>
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<tr>
<td>Wild ungulate products for medicine (deer velvet, musk etc.)</td>
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<td>Chelonia products</td>
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<td>Seahorses</td>
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<tr>
<td>Animal products for food (excluding fish)</td>
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<tr>
<td>Game meat</td>
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<td>Frog legs</td>
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<td>Swiftlet nests</td>
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<td>Edible snails</td>
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<td>Live ornamental plants</td>
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<td>&quot;wild&quot; plant trade</td>
<td>250</td>
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<td>Non-wood forest products (NWFPs)</td>
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<td>Global NWFPs estimate (Iqbal 1995)</td>
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<td>Subtotal (excluding fisheries food products and timber)</td>
<td>14,939.7</td>
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<tr>
<td>Fisheries food products</td>
<td>40,000</td>
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<tr>
<td>Timber</td>
<td>104,000</td>
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<tr>
<td>Total</td>
<td>158,939.7</td>
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</table>

Source: Broad (2001)
ANNEX II: INSTITUTIONAL ACTORS INVOLVED IN TRADE AND SUSTAINABLE DEVELOPMENT

The actors who work on trade and sustainable development fall into four main categories:

1. World Trade Organization (WTO)
   The WTO is addressing sustainable development in the following bodies: the Doha negotiations, the Committee on Trade and Environment, the TRIPS Council, the Technical Barriers to Trade (TBT) Committee, the SPS Committee, and the Committee on Trade and Development. As alluded above, the Doha Development Agenda contains provisions on the environment, including MEAs, market access for environmental goods and services, fisheries subsidies, ecolabelling, and the relationship between TRIPS and the CBD. Given that the DDA negotiations involve mainly trade officials, and there is no formal interaction with other international organizations (with the exception of the CTE), it is far from certain that these negotiations will lead to sustainable solutions. The discussions in the CTE appear to have moved away from strong advocacy and negotiation, which characterised the first years of its existence, to focus more on information exchange, and leveraging discussions aimed at further analysis. This more pragmatic approach is perhaps a reaction to the highly politicised atmosphere of the CTE's early years, although virtually all the major controversies remain open. It does not appear likely that the CTE will, in the foreseeable future, be a body which will be able to forge consensus on major issues. The CTE is to play a special role the DDA negotiations by providing an environmental input, but it is unclear how effective this will be, especially since in many cases the same officials will be involved in both processes. Notwithstanding the CTE's weaknesses, it remains an important body to monitor, at the very least to observe substantive trends and negotiation dynamics.

2. UN Environment Programme (UNEP)
   UNEP's Economics and Trade Unit, based in Geneva focuses on four main trade themes: (a) MEAs and WTO, where sessions for environmental officials are convened immediately prior to CTE meetings (b) capacity building in collaboration with UNCTAD, (c) environmental assessments of trade agreements, and (d) fisheries subsidies. This work is a combination of convening stakeholders, analysis, and support for capacity building, and appears to be aimed at implementation and other matters of detail, rather than pushing for major policy change or rule making. With these activities, UNEP occupies a central presence in trade and sustainable discussions, although the actual effectiveness of this work remains to be seen.

3. UN Conference on Trade and Development (UNCTAD)
   UNCTAD engages in several activities relating to trade policy, several of which relate to the environment. It has a programme on trade, environment, and development in which several projects take place, including capacity building, technology transfer, traditional knowledge, and assessment of the impacts of environmental regulations on small and medium enterprises in developing countries. There is also a Biotrade initiative, which seeks to promote the sustainable trade in biological resources, as well as a programme on dispute settlement in international trade, investment and intellectual property that provides services for developing countries. By virtue of its nature, UNCTAD addresses the trade and sustainable development interface from a developing country perspective, and in a manner aimed at supporting developing countries. Accordingly, it will not provide a forum for overall consensus building, but is useful for its technical analyses and for convening like-minded officials and experts.

4. UN Food and Agriculture Organization (FAO)
   Although the FAO does not interact significantly with the WTO; trade is addressed mainly in the sectoral programmes of the FAO, such as those relating to agriculture, fisheries and forests, which operate at global and regional levels. Much of this work is technically oriented, although some policy issues are also addressed, such as subsidies and certification. The new FAO International Treaty on Plant Genetic Resources for Food and Agriculture strengthens FAO's importance on intellectual property issues. In addition, the Development Law Unit has carried out technical studies on some trade related aspects of natural resources, such as on plant variety protection. Accordingly, the FAO is important as an institu-
tion that provides targeted technical inputs and can convene stakeholders to address trade issues in very specific contexts.

www.fao.org/trade

5. Convention on Biological Diversity (CBD)

The CBD does not contain the term "trade" in its text, but several of its requirements have implications for trade policy. These are: (a) Access and Benefit Sharing (ABS), which directly impacts on IPRs, (b) invasive species, which bring in controversies over trade restrictions based, inter alia, on the Precautionary Principle, (c) agricultural biodiversity, which has called for an assessment of the economic impacts on agricultural biodiversity, (d) incentive measures, and (e) forest biodiversity, which contains some trade-related aspects. In addition, the Biosafety Protocol is mainly about trade measures and its further development and implementation will lead to interaction with various WTO rules. Thus, the CBD has the potential to become one of the central international processes where trade policy relating to biodiversity conservation is agreed, if there is sufficient political momentum for it to take the initiative. The CBD has sought observer status in the TRIPS Council, but so far this has not been granted.

www.biodiv.org


As noted above, CITES is at the forefront of the trade and environment interface. So, far, however, it has not specifically engaged on WTO issues, other than making submissions at the CTE's MEA information sessions. A proposed Resolution which would have addressed some of the WTO-related concerns about the use of stricter domestic measures was not adopted at the recent meeting of the Conference of Parties. So far, the use of trade restrictions arising out of species listings, or as a result of non-compliance, has not been challenged at the WTO.

www.CITES.org

7. Organization for Economic Cooperation and Development (OECD)

The OECD has had a Joint Working Party on Trade and Environment (JWPTE) since 1991, which is serviced by both the Trade and the Environment Directorates. The JWPTE has presented a number of reports to Ministers, including in 1993 the Procedural Guidelines on Integrating Trade and Environment Policies and in 1995 and 1999 reports summarising the collective point of view of the OECD trade and environment policy-makers. The JWPTE meets regularly twice a year and sponsors certain events, such as consultations with NGOs and workshops. At present the relevant work of the Environment Directorate is focussed on the following themes: export credit agencies and environment, investment and environment, and trade and environment. The Trade Directorate is dealing with the following themes: Methodologies for Environmental Assessment; Sustainable Product Policies and Trade; Environmental Effects of Trade; Trade Measures in MEAs; and Transparency and Consultation.

OECD Environment Directorate - www.oecd.org/env
OECD Trade Directorate - www.oecd.org/ech

B. Regional intergovernmental organizations, regional trade processes and specialised agreements/processes.

In many cases, regional trade processes are at least as significant as global ones in creating rules and mechanisms relevant to trade and biodiversity. There has been a surge of regional trade agreements: More than half of the 162 agreements in force 2002 came into existence after 1995. There is a large diversity in the effectiveness and depth of these processes which are complemented by bilateral and inter-regional activities, i.e. EU-MERCOSUR. Furthermore, specialised international agreements and processes, such as the International Tropical Timber Agreement, may also be relevant to IUCN's work. The most important trade related regional agreements are presented below. For the conservation policy community include working with regional institutions to:

- Influence global policy
- Analyse the specific interface between regional trade rules and conservation
- Contribute to fact finding and analyses of the impacts regional trade rules have on natural resources sectors

1. African Union (AU)
The African Union was established in 1999 to accelerate the regional integration while addressing the
multiple social, economic and political problems Africa faces. It covers all African States except Morocco. Some of the seven Regional Economic Communities (including SADC, COMESA, ECOWAS) form intraregional free trade zones.

4. European Union (EU)

The European Union is a free trade zone with common custom tariffs for third countries. It has a dominant position in world trade and is a significant importer and exporter of agricultural and manufactured goods as well as services. The free market was established in 1993 and covers all 25 member states. The EU has the competence to develop a common trade policy for its member states. The Directorate General Trade represents them in bilateral and multilateral negotiations. The EU also covers a region with relatively strong environmental legislation and is a major force behind international environmental developments.

C. National governments

National governments are key actors in trade and biodiversity, not only because they collectively develop global policy, but also then implement it. In principle, many trade and environment conflicts would be resolvable if national governments projected coherent messages in the various international fora they participate in. However, the reality is often much more complex, in both developed and developing countries, often fail to overcome bureaucratic rivalries and other obstacles to achieving full policy coherence. In many cases, the environmental ministries or agencies are relatively weaker in influencing national policy than economic or trade ministries. There are four possible tracks by which the conservation policy community could relate to national governments on trade and biodiversity. One is to work with select national governments in advancing key items on the global agenda.

A second track is to work with several governments with a view to developing common positions or lessening important differences. A third track is to work with national governments in helping to achieve appropriate balances between trade and biodiversity policies in both projecting messages to regional or global fora, as well as in implementing global law and sustainable development. This involves both technical assistance, as well as capacity building. As mentioned in previous sections of this paper, such cooperation can involve:

- Empowering ministries of environment, through providing information and opportunities for them to engage in relevant trade policy making
- Convening national stakeholders
- Providing trade and/or biodiversity inputs into processes driven by governments
- Advising on public procurement policies

A fourth track is to work with national government when they design their national trade policies, so that they are supportive of national biodiversity conservation objectives.
ANNEX II: CITES REFERENCES: BIRDS

The Red-crowned Parrot

Distributed in East, Central and Southern Africa occurrence has been reported in Kenya, Tanzania and Uganda.

INTERNATIONAL TRADE

Gross Exports of live *Poicephalus gutieltmi*

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The Brown Parrot

INTERNATIONAL TRADE

Gross Exports of live *Poicephalus meyeri*

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The Brown-necked Parrot

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Gross Exports of live *Poicephalus robustus*

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ANNEX III: CITES REFERENCES: REPTILES AND AMPHIBIANS

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The Single welded-horn chameleon

INTERNATIONAL TRADE

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The Helmeted Chameleon

INTERNATIONAL TRADE

Gross Exports of *Chamaeleo hoevelii*

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ANNEX IV: CITES REFERENCES: MAMMALS

CITES Fundamental Principles

1. Appendix I shall include all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorised in exceptional circumstances.

2. Appendix II shall include:

(a) all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to regulation in order to avoid utilisation incompatible with their survival; and

(b) other species which must be subject to regulations in order that trade in specimens of certain species referred to in sub-paragraph (a) of this paragraph may be brought under effective control.

3. Appendix III shall include all species which any party identifies as being subject to regulations within its jurisdiction for the purpose of preventing or restricting exploitation and as needing cooperation of other parties in the control of trade.

4. The parties shall not allow trade in specimens of species included in Appendices I, II and III except in accordance with provisions of the present convention.

Source: UNEP (1973); and UNEP WCMC (2004)

(a) species means any species, subspecies or geographically separate population thereof;
(b) specimens means:
   (i) any animal/plant, whether alive or dead;
   (ii) in the case of an animal: for species included in Appendix I and II, any readily recognisable part or derivative thereof; and for species included in Appendix III, any readily recognisable part or derivative thereof specified in Appendix III in relation to the species; and
   (iii) in the case of a plant: for species included in Appendix I, any readily recognisable part or derivative thereof; and for species included in Appendices II and III, any readily recognisable part or derivative thereof specified in Appendices II or III in relation to the species.
(c) trade means export, re-export, import and introduction from the sea
(d) “Re-export” means export of any specimen that has previously been imported
(e) “Scientific Authority” means a national scientific authority designated in accordance with Article IX of CITES
(f) “Management Authority” also designated in accordance with Article IX of CITES
(g) Party means a State for which the present convention has entered into force.