

# CHAPTER 1

## 1. DEFINITION OF TERMS

- Wildlife refers to all varieties of flora and fauna, animals, insects, birds and marine life.
- Wildlife Tourism refers to human activity undertaken to view wildlife in a natural setting.
- Wildlife conservation is preservation of rare population or endangered species of wild plants and animals.
- Ecosystem refer to inter action of wild species
- Flora and fauna refers to wild plants
- Endangered species refers to species that are facing the threat of extinction in the future
- Wildlife watching is organized tourism undertaken to watch wildlife
- Host communities are people who live in the vicinity of the tourist attraction who are directly or indirectly interacting with wildlife.

### 1.1 IMPORTANCE OF WILDLIFE AND TOURISM RESOURCES

Diverse wildlife promotes ecosystem and therefore a sign of a healthy environment. For humans it is satisfying and fulfilling to basically watch wildlife and learn about their survival and general behaviours. Above all these, for many years wildlife has shown to be of importance to the livelihood of human beings, socially and economically. Human being hunt, fish and trap so as to get food, clothing and income for the betterment of their lives. Diverse wild species help in maintaining environmental quality by degrading and removing some pollutants and preventing waste accumulation.

Wildlife is also a source of medicines. Nowadays many remedies contain ingredients sourced from wild animals and plants. Agriculture rely very much on the varied stocks and crops that are adapted to local or regional conditions and that can withstand pests, diseases, predators, pollutants and other threats.

Wildlife attract Tourists in large scale to watch where they incur lots of money on travelling expenses, accommodation, food and equipment they will use while wildlife watching. In return all these expenses incurred are used to create permanent and seasonal jobs, pay taxes and contribute to the gross domestic product.

### 1.2 OVERVIEW OF THE IMPACT OF EXPANSION OF WILDLIFE AND TOURISM ACTIVITIES OVER THE YEARS IN THE WORLD

It is important to expand wildlife and tourism activities to ensure their sustainability. However, involvement of host communities is of vital importance. Host communities are those people who live within the vicinity of the tourist attraction area. This people are directly or indirectly

affected by wildlife tourism attraction activities. Great care should be taken towards their culture and social issues so that expansion of activities could be supported by host communities. Its sustainability depends on making sure that host communities benefit from the establishment. If the community was engaged in destructive activities to wildlife, it is important to change such behaviours by engaging them into the activities that would enhance their knowledge and understanding wildlife protection.

The negative impacts such as overgrazing and degradation of land are brought about by the existence of wild animals so proper management should be exercised to prevent such destruction. Excessive fishing also should be curbed by putting in place control measures to allow moderate activities that will also allow multiplication of species and that will ensure their existence over years to benefit even the future generation. The wildlife viewing should also be controlled to allow wildlife to engage in to their natural activities. Control measures should be supported by proper legislation that would enforce proper establishment of wildlife tourist places, protection of wildlife, controlled tourism activities, involvement and benefit to host communities, government tax and remedial measures for criminal activities.

### **1.3 INTERNATIONAL AWARENESS REGARDING WILDLIFE AND TOURISM ACTIVITIES.**

**To be attended later**

### **1.4 THE ESSENCE OF CONDUCTING ENVIRONMENT AUDIT ON WILDLIFE AND TOURISM AS INTOSAI WGEA RECOMMENDS.**

**To be attended later**

### **1.5 CONTENT AND STRUCTURE OF DOCUMENT.**

**To be attended later**

### **1.6 MANAGEMENT OF TOURISM.**

**To be attended later**

# CHAPTER 2

## 2. IMPACT OF TOURISM ON WILDLIFE

### BACKGROUND

In today's global environment, the management and utilisation of natural resources are a matter of great public interest. The reason for this is the realisation that the key to future of most countries is economic development based on the sustainable utilisation of natural resources; including wildlife. Therefore, effective management of wildlife has attracted international tourists, thereby making tourism one of the major foreign exchange earner for countries worldwide; and an important socio-economic growth sector. These two sectors have potential to contribute to the growth; and diversification of the economy and to generate socio-economic benefits, inter-alia;

1. Contributing to environmental protection and conservation which is (clustered in five areas (Brandon 1996)<sup>1</sup>
  - ❖ Source of financing biodiversity, conservation, especially legally protected areas.
  - ❖ Economic justification for protected areas.
  - ❖ Economic alternatives for local people to reduce over exploitation of wild land and wildlife resources on protected areas.
  - ❖ Constituency – building which promotes biodiversity conservation and
  - ❖ An impetus for private biodiversity conservation effort.
2. Contributing to economic and social development, for example:
  - ❖ Funding the development of infrastructure and services
  - ❖ Providing jobs;
  - ❖ Providing funds for development and maintenance of sustainable practices;
- ❖ Providing alternative and supplementary ways for communities to receive revenue from biological diversity.

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<sup>1</sup> UNEP Conservation International Tourism and Biodiversity: Mapping Tourism Global Footprint (page 4)

- ❖ An entry product that can have direct benefits for developing other related products at the site and regionally.
- ❖ Tourist satisfaction and experience gained at tourist destination.

Conversely; tourism industry has impacts as it is based on natural areas and the wildlife that inhabit them. Therefore, tourism impacts which may be short-term or long-term and negative include among others; environmental, socio-cultural and economic.

## **2.1 ENVIRONMENTAL IMPACTS**

Tourists may have significant detrimental effects on wildlife and ecology if go unchecked. The cumulative effect may exacerbate permanent degradation, thereby compromising the viability of sites in question, as tourist destination. Environmental impacts of tourism include among others<sup>2</sup>;

- ❖ Use of land resources for accommodation: tourism facilities and other infrastructure provision, including roads networks, airports and seaports.
- ❖ Extraction of use of building materials (e.g. use of sand from beaches, reef, limestone's, wood and rivers);
- ❖ Damage to or destruction of ecosystems and habitats, including deforestation, draining of wetlands and intensified or unsustainable use of land;
- ❖ Increased soil erosion and compaction;
- ❖ Unsustainable consumption of flora and fauna (e.g. through picking of plants; or purchase of souvenirs manufactured from wildlife, in particular such endangered species as coral and turtle shells or through unregulated hunting; shooting and fishing);
- ❖ Disturbance of wildlife, disrupting normal behaviour and potentially affecting mortality and reproductive success;
- ❖ Intensive water demands from tourism;
- ❖ Extraction of groundwater;
- ❖ Accidental introduction of exotic species;
- ❖ Increased incidences of exotic fire;
- ❖ Disruption of parent – offspring bonds.

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<sup>2</sup> CBD Guidelines on Biodiversity and Tourism Development

## 2.2 SOCIAL AND CULTURAL IMPACTS

Social and cultural impacts related to tourism may include among others<sup>3,4</sup>;

- ❖ Changes to family structure and gender roles, leading to tension and loss of self esteem for men and older generations;
- ❖ Dilution of local languages and culture;
- ❖ Commoditisation/demeaning of culture ceremonies which are re-enacted for tourists;
- ❖ Loss of language, artefacts and access to private sacred sites.
- ❖ Impacts of indigenous and local communities and cultural values;
- ❖ Impacts on health and integrity of local cultural systems;
- ❖ Intergenerational conflicts and changed gender relationships)
- ❖ Erosion of traditional practices and lifestyle.

### 2.2.1 What are the main types and causes of pollution?

Definition of pollution; its types and causes<sup>5</sup>

Pollution is the production of harmful substances particularly a contaminant or toxin, which produces some kind of harmful impact on the environment or living organism. Resulting from the definition, the following are the main types and causes of pollution:

Types of Pollution	Causes: Human Activities	Effects/Impact	Solutions
Air Pollution: Over emission of harmful gases ( e.g carbon monoxide <sup>0</sup> or particulates (e.g soot) in the air and disturbances to the normal composition of the air such that there is an undesired effect on the environment and living things.	Burning of fossil fuels and other materials in oil refineries, power plants, factories, automobiles and other forms of transport as well as incinerators	On the environment, air pollution results in; global warming and climate change, acid rain, earth's ozone depletion affects by causing cardio – respiratory problems.	Saving energy, practicing energy tips, planting more trees, opting for green and renewable energy sources and carbon emission reduction.
Water Pollution: Any change in the physical chemical and biological properties of water	Release of Wastes (domestic, industrial influents, agricultural and marine dumping) into the water	Water Pollution is destructive to the entire ecosystem – results in ocean acidification and coral reef bleaching. Unfit for	Water needs to be conserved. Globally there is need for proper treatment of domestic

<sup>3</sup> Botswana National Ecotourism Strategy – Final Report March 2002.

<sup>4</sup> CBD Guidelines on Biodiversity and Tourism Development

<sup>5</sup> <http://www.all-recycling-facts.com/maintypes-of-pollution.html>

which has harmful effect on living things can be in	bodies (ponds, lakes, rivers, seas and oceans spilling of oil in the sea and ocean	consumption	and industrial waste sewage (Instead of dumping the untreated water in the sea water recycling enhance awareness.
Land Pollution: Refers to contamination and degradation of earth's and surfaces.	<p>Improper disposal of :</p> <ul style="list-style-type: none"> <li>-domestic and industrial waste.</li> <li>-Non biodegradable materials plastics, Styrofoam and cans).</li> <li>-heavy metals such as lead and mercury discharge and run off (agriculture and industry)</li> </ul> <p>Environmentally unfriendly mineral exploitation and harmful agricultural practices</p>	<p>Releasing of harmful substances and chemicals to reach into the ground.</p> <p>Leaching of poisonous toxin into the ground pollution of water bodies.</p> <p>Land pollution can exterminate wildlife and disturb the balance in nature. Chemicals absorbed by plants can be transferred to humans and animals who eat them thus causing respiratory problems, birth defects, skin diseases and even cancer in both animals and humans</p>	<p>Proper disposal of litter re-using old items</p> <p>AND</p> <p>RECYCLING</p> <p>Disease of death of aquatic populations</p> <p>Introduction of environmentally friendly agricultural practices (use of organic fertilisers and pesticides and reduce use of conventional chemical based</p>

## 2.3 PROTECTED AREAS

Protected Areas are explicitly described in the INTOSAI WGEA – Auditing Biodiversity: Guidance for Supreme Audit Institutions; in Chapter 3 (p.42).

### What are the Governments doing to respond to threats in Protected Areas?

#### Legislation and Regulations

Governments play a crucial role in protected areas. They have legal powers to regulate hunting, exploitation of resources (for example forests), control pollution, land use and introduction of exotic species (plants etc) and protect species within the protected areas.

#### Policies and Programmes/Guidelines

Governments formulate national policies on both protected areas and tourism as guiding tools for conservations and protection of the environment within the protected areas. Programmes are funded to ensure implementation of policies and maintenance of protected areas.

### **Protected Areas Management Plans**

Management plans are legal document requirements which are developed to provide framework for management operations within each protected area. They provide mechanisms for the protection of national heritage and define acceptable uses within the protected areas.

### **Environmental Impact Assessments**

Environmental Impact Assessments are used to examine projects, programmes, policies and activities to ensure that potential impacts on the environment within protected areas is considered before enactment of legislation to that effect. For example; infrastructural development, environmental and social impacts assessments are conducted prior to construction in key tourism areas, and that any such developments are within established limits of acceptable change (LAC).

### **Who are the Major Stakeholders regarding Wildlife and Tourism and their Roles and Responsibilities?**

There is need for collaborative effort stakeholders to ensure that both social and environmental benefits are realised. Therefore, major stakeholders regarding wildlife and tourism are; Governments, the Private sector, Residents, given their central influence regarding the impacts of tourism on diversity<sup>6</sup>.

### **Governments**

Governments formulate policy frame-work and regulation for tourism development and wildlife conservation. Different Government Departments ensure that such policies are implemented for sustainable use of the wildlife resource. Policy framework and associated instruments for tourism development and wildlife conservation include among others; laws and regulations defining standards for tourism facilities, access to wildlife resource and land use regulations and zoning; establishment of national parks, reserves and other protected areas; allocation of tax revenues for the protection of biodiversity-based tourism attractions, such as national parks and reserves; monitoring to identify potential environmental damages to protected areas; and ensuring enforcement of wildlife and tourism laws.

### **Private Sector**

The private sector assists by: contributing to the environmental protection and conservation; maintaining the ecological integrity of the areas in which they operate; contributing financially to the conservation of biodiversity; and educating members and customers about the impact of tourism on biodiversity and on local traditional and indigenous people. Many wildlife parks and zoos breed rare

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<sup>6</sup> Tourism and Biodiversity – Mapping Tourism’s Global Footprint (UNEP 2003) at [www.unep.org/PDF/Tourism-and-biodiversity.pdf](http://www.unep.org/PDF/Tourism-and-biodiversity.pdf)

and endangered species as a major part of their activities and release the progeny when possible into suitable habitat. The private sector also assists in driving the development process.

### **Development Agencies**

These agencies finance tourism planning and development, under subsidised development and loans.

### **Local Residents in Tourism Destinations**

Local people (communities and indigenous people) make up a large part of the workforce in the tourism and wildlife industries. Representatives of Local Communities and indigenous people actively participate in the development, operation and monitoring of tourism activities on lands and waters, they traditionally occupy if they are actually involved in that connection. Local communities also partake in conservation, especially in buffer zones of protected areas and conservation corridors, wildlife management areas if they are properly capacitated and informed.

### **Other Key Stakeholders**

This category of stakeholders includes inter-alia; consumer/tourists, Non-governmental Organisations (NGOs) Research Institutions and Inter-governmental Organisations such as UNEP, World Tourism Organisation (WTO) and United Nations Conference on Trade and Development (UNCTAD):

#### **i. Consumers/Tourists**

Visits by tourists to tourism destination generate employment and create income for communities as well as assisting in the conservation of cultural and natural assets and the environment. Tourists and tourism operators contribute to conservation efforts through participation in impact alleviation activities, monitoring and scientific research etc. Satisfied tourists lead to more tourists and thus increased benefits to host indigenous and local communities. Travel guides, magazines and newspapers contribute to raising awareness about critical issues facing tourism industry and help stimulate and demand for change.

#### **ii. Non-governmental Organisations (NGOs)**

The International Organisations assist in bio-diversity conservation and protection, whilst local NGOs assist indigenous and local communities to diversify their income through sustainable tourism and protection of natural resources base.

#### **iii. Inter-Governmental Organisations**

These organisations provide technical assistance and information guidelines, facilitate negotiations, mediating agreements and they also provide financial and logistical resources.



#### **iv. Research Institutions**

Research Institutions contribute significantly to research into the impacts of (cause – effect relationship) tourism activities on species and habitats; provide scientific data on the environmental and socio-activities within the protected areas, fragile ecosystems and important heritage tourism sites.

### **What are the Impacts of Wildlife**

While wildlife is a valuable natural resource with several beneficial values to the people, wild animals usually cause damage to society in terms of attacks on people and livestock, damage on crops and other property such as infrastructure, and disruption of peaceful existence in local communities living in close proximity to wildlife areas. With the increasing populations and the accompanying encroachment of their settlements, cattle posts and farmlands on wildlife habitat, the escalation of human - wildlife conflict is inevitable. Resultantly, the following are some of human-wildlife conflict issues<sup>7</sup>:

#### **Human deaths and Injuries**

Large mammalian carnivores are responsible for numerous fatal attacks on humans and large herbivores such as elephants are involved in human deaths. This is mostly prevalent in Africa. Road accidents caused by wildlife may result in human death and injury. The phenomena are noticed worldwide.

#### **Destruction of crops**

A variety of vertebrates such as birds, rodents, primates, antelopes, buffalos, hippopotamuses, bush pigs and elephants raid crops. The occurrences and frequency of crop raiding is dependent upon conditions such as the availability, variability and type of food sources in the area.

#### **Livestock Depredation**

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<sup>7</sup> Human-Wildlife Conflict in Africa: Causes, Consequences and Management Strategies (Food and Agriculture Organisation of the United Nations, 2009)

Carnivores such as leopards, lions, cheetahs, hyenas, civet-cats as well as crocodiles kill livestock such as cattle, goats and sheep. The number and type of domestic of domestic animals killed by wildlife varies according to the species, time of the year and the availability of natural prey.

### **Transmission of diseases to livestock and/or humans**

Wildlife transmits diseases, such as rabies, to domestic livestock and possibly to humans. Scavengers and predators, such as spotted hyenas, jackals, lions and vultures disseminate pathogens by opening up, dismembering and dispersing parts of infected carcasses. African Buffalos play a vital role in transmitting foot and mouth disease; especially in Southern Africa.

### **Adverse interaction with other species (endangered or highly valuable)**

The destruction of habitats by elephants can jeopardise the survival of sympatric wildlife species such as giraffes, buffalos and bushbucks. This can also be detrimental to the development of populations of roan, sable and tsessebe. The phenomena are experienced in the sub-Saharan Africa. Elephants destroy infrastructures such as ponds, tracks and other water installations in both parks and Elsewhere.

### **Other manifestations of human-wildlife conflict**

Sometimes livestock and humans compete for water with elephants and this can lead to loss of cattle, particularly at the end of the dry season or in times of drought.

### **What are the tools Governments use to identify, assess, manage and mitigate impacts of wildlife?**

Governments use variety of tools to identify, assess, manage and mitigate impacts of wildlife which include among others:<sup>8</sup>

#### **Legislation, Regulations and Permits**

These legal documents are regulatory measures used in hunting and live capture. The permits are issued for wildlife live capture, export and import of wildlife.

However, overly protectionist policy whereby wildlife – off take through hunting is completely prohibited may have negative impact on wildlife as it may lead to population explosion of certain species, hence

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<sup>8</sup> Human-Wildlife Conflict in Africa: Causes, Consequences and Management Strategies (Food and Agriculture Organisation of the United Nations, 2009)

increasing human wildlife conflict thus negative perception towards wildlife (no will of conservation). Nonetheless, viewed as a legitimate management practice, hunting needs to be based on scientific monitoring to ensure sustainable harvests, and needs to be controlled by policies and regulations which address the timing, location and viable methods of hunting.

### Licensing/Safari Hunting

Licenses are issued to trophy hunters as a low cost technique which has the potential to raise public tolerance towards wildlife. For valuable species such as crocodiles, the option of trophy hunters, permits to cull large numbers are issued by the Governments to private-sector operators in order to make the hunting or capture economically viable. A professional hunter can be chosen, through a tendering process, who will bring his clients to their conservancy to hunt crocodile, as well as elephants, hippopotamuses and buffalos.

### Trade

Trade is done on an approved quota only which is strictly regulated using CITES permits.

### Wildlife – off take

The legal wildlife- off take is where the individuals/communities/Tour operators etc are given right to defend human life and property which is enshrined in countries, in the event wildlife particularly lions threaten to cause damage to both life and property. This may have a negative impact on wildlife population because there is always NO QUOTA. Some animal species can be killed or injured in protection of crops (this include, African elephants, buffalos, hippopotamuses, bush pigs, yellow baboons, velvet monkeys, warthogs and rats) while others are killed or injured in protection of domestic animals and human life. The latter group includes lions, leopards, crocodiles and spotted hyenas.

In most African countries, wildlife laws address the issue of the protection of people from wildlife in at least one law article related to the defence of human life and property from wildlife attack. Generally, the principle of self defence is considered legitimate and legal, whatever category the animal belongs to, whether protected or non-protected species. In some countries Governments utilise the CITES-approved annual hunting off take, especially hunting of elephants.

### Compensation

#### Direct Compensation

Communities are paid compensation in the event of loss of human life or livestock killed by predators or destruction of crops by elephants. Payment of compensation

exists in sub-Saharan Africa.

#### Indirect compensation-

Local communities can be encouraged to share revenues with the national parks by serving in the Board that oversees the day-to-day management of the park and therefore share the responsibility of protecting wildlife. The Community Based Natural Resource Management Programmes involve the Local communities in the management and use of the wildlife in their locality. This is a strategy to motivate Communities to protect wildlife outside the protected areas.

#### Fencing

Governments construct fences to help prevent the transmission of certain endemic contagious diseases such as foot -and-mouth disease, African swine fever and theileriosis. The establishment of control areas, game-proof fences, sanitary cordons and movement control are intended to separate wildlife from domestic livestock. The fencing is used throughout Africa for various purposes. The fencing can be electric, artificial or traditional barriers (trenches either covered or uncovered and thorny branches, and stone walls and sharp rocks are widely used in Africa).

#### Communities Awareness

Awareness raising is carries out in Community at different levels, for instance in schools or in adult education arenas, such as farmer field schools. Education and training are directed towards disseminating innovative techniques, building capacity for conflict prevention and resolution and increasing public understanding of human-wildlife conflict. Education and training promote commitment towards conservation, raise awareness of the essential role wildlife in ecosystem functioning and its ethical and economic value as well as recreational and aesthetic importance. Additionally, Governments train communities in mitigation methods against elephant damages, where Communities are implored to use innovative ways to address human elephant conflict. Such methods include use of chilli (hot) pepper and bee colonies which have been found to be effective in sub-Saharan Africa.

## CHAPTER 3

### **INTERNATIONAL AGREEMENTS/TREATIES ON WILDLIFE CONSERVATION.**

This chapter intends to highlight International Agreements signed with the purpose of preserving wildlife or biological diversity. The conservation of wildlife in return promotes Tourism and more importantly fulfill the obligation of preserving natural resources for the benefit of the future generation.

The chapter will give a brief description of each international agreement, its objective(s), summary of provisions, date, place of adoption and date it came to force.

#### 1) **Convention on International trade in Endangered Species of Wild Fauna and Flora.**

The objective of the agreement was to protect certain endangered species from over – exploitation by means of a system of import/export permits. Because the trade in wild animals and plants crosses borders between countries, the effort to regulate it requires international cooperation to safeguard certain species from over-exploitation. CITES was conceived in the spirit of such cooperation. Today, it accords varying degrees of protection to more than 30,000 species of animals and plants, whether they are traded as live specimens, fur coats or dried herbs.

The Agreement provides for the protection of animals and plants whether dead or alive, and any recognizable parts or derivatives thereof. Appendix 1 covers endangered species, trade in which is to be tightly controlled, appendix 2 covers species that may become endangered unless trade is regulated, appendix 3 covers species that any party wishes to regulate and requires international cooperation to control trade, and appendix 4 contains model permits. Permits are required for species listed in appendices 1 and 2, stating that export/import will not be detrimental to the survival of species.

The convention was first adopted on the 3<sup>rd</sup> March 1973 in Washington D.C. Amendments were made in 22<sup>nd</sup> June 1979 and 30<sup>th</sup> April 1983 in Bonn and Gaborone respectively. It came to force on the 1<sup>st</sup> July 1975

## 2) **Agreement on conservation of Polar bears**

The agreement seeks to achieve protection of the polar bear as a significant resource of the Arctic region through further conservation and management measures.

The Agreement provides for the prohibition of taking of polar bears, except for bona fide scientific or conservation purposes, or to prevent disturbance of the management of other living resources, or by local people using traditional methods in accordance with the laws of the party concerned. It further provides for parties to take action to preserve the ecosystems of which the polar bears are part and that parties conduct research into management and conservation of the species, coordinate such research and exchange information

The Agreement was adopted in Oslo on the 15<sup>th</sup> November 1973 and it came into force on 26<sup>th</sup> May 1976

## 3) **Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere**

The objective of the convention is to preserve all species and genera of Native American fauna and flora from extinction, preserve areas of extraordinary beauty, historic or scientific value

The convention provides for parties to"

- Establish national parks, national reserves, nature monuments and strict wilderness reserves. The national parks to provide recreational and educational facilities to the public and strict wilderness areas to be maintained inviolate
- Maintain cooperation between Governments in the field of research
- Species listed in annex to enjoy special protection
- Impose controls on trade in protected fauna and flora

The Convention was adopted in Washington D.C. in October 1940 and came to force in May 1942.

#### 4) **International Convention on Biological Diversity - Rio 1992**

The objective of the convention is conserve biological diversity, promote the sustainable use of components, and encourage equitable sharing of benefits arising out of the utilization of genetic resources. Such equitable sharing takes account of appropriate access of heritable resources, as well as appropriate transfer of technology.

The Convention provides for each party to

- Establish protected areas
- Conserve biological diversity within their jurisdiction as well as outside their jurisdiction in certain cases.
- Restore degraded ecosystem
- Promote the recovery of threatened species
- Control the risks posed by organisms modified by technology and prevent the introduction of alien invasive species that threatens the ecosystem or native species.
- To provide for research, training, general education and fostering of awareness in relation to measures for the identification, conservation and sustainable use of biological diversity.
- Ensure provision for Environmental impact Assessment of projects that are likely to have significant adverse effects on biological diversity.

The responsibility of Governments is to develop National biodiversity strategies and action plans and report on how it is meeting the goals. (*One of the audit criteria*)

The Convention was signed in Rio de Janeiro, Brazil in June 1992 and it came to force in December 1993.

#### 5) **International Union for Conservation of Nature (IUCN)**

#### 6) **International Convention for the protection of birds**

#### 7) **Convention on Conservation of Nature in the South Pacific**

#### 8) **Convention on the Conservation of species of wild animals that migrate across or outside national boundaries**

It provides for;

- Endangered migratory species to be listed in appendix 1

- Migratory species to be subject to agreements listed in appendix 2
- International agreements should deal with those aspects of the conservation and management of the migratory species concerned which serve to achieve the object of protection
- Establishment of a scientific council to provide advice on scientific matters and to put in place a secretariat.

The Convention was adopted in June 1979 in Bonn and came into force in November 1983.

#### **9) Convention for the Conservation of the Biodiversity and the protection of priority wilderness areas in Central America.**

The objective is to conserve biological resources and biological diversity of the Central American region by means of sustainable use

The convention provides for:

- Parties to cooperate among themselves and with the Central American Commission on Environmental and Development to implement the convention; by for an example, formulating national strategies and programmes and the creation of economic measures.
- Parties to put in place national legislation for the conservation and sustainable development of biological diversity.
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#### **10) Convention on the Conservation of European Wildlife and Natural Habitats**

The objective is to conserve wild fauna and flora and their natural habitats, especially those species and habitats whose conservation requires the cooperation of several states, and to promote such cooperation.

It provides for the following:

- The contracting parties to take requisite measures to maintain the population of wild and flora at, or adapt them to, a level which corresponds in particular to ecological, scientific, and cultural requirements, and further take steps to promote national policies for conservation with special attention to endangered and vulnerable species and endangered habitats.
- Appropriate and necessary measures to be taken to ensure the conservation of the habitats of the wild species of fauna and flora, special attention to be given to protection of areas that are of importance for the migratory species.
- Appropriate and necessary measures to be taken to ensure the special protection of wild species of fauna and flora



- Establish a standing committee to be responsible for monitoring the application of the convention.

The convention was adopted in September 1979 in Berne, and came into force in June 1982.

#### 11) **Convention on Wetlands of International importance especially as waterfowl habitat**

The objective of the convention is to conserve wetlands together with their flora and fauna. This can be ensured by combining far-sighted national policies, strategies, guidelines, procedures with co-ordinate international action.

Considering the fundamental ecological functions of wetlands as regulators of water regimes and as habitats supporting a characteristic flora and fauna, especially waterfowl;

Being convinced that wetlands constitute a resource of great economic, cultural, scientific, and recreational value, the loss of which would be irreparable;

Desiring to stop or reduce the progressive encroachment on and loss of wetlands now and in the future;

Recognizing that waterfowl in their seasonal migrations may transcend frontiers and so should be regarded as an international resource;

Being confident that the conservation of wetlands and their flora and fauna can be ensured by combining far-sighted national policies, strategies, guidelines and procedures with co-ordinated international action;

The convention provides for each party to:

- Designate suitable wetlands within its territory for inclusion in a List of Wetlands of International Importance, hereinafter referred to as "the List" which is maintained by the bureau established under Article 8. The boundaries of each wetland shall be precisely described and also delimited on a map and they may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands, especially where these have importance as waterfowl habitat.
- Shall designate at least one wetland to be included in the List when signing this Convention or when depositing its instrument of ratification or accession, as provided in Article 9.

- Any Contracting Party shall have the right to add to the List further wetlands situated within its territory, to extend the boundaries of those wetlands already included by it in the List, or, because of its urgent national interests, to delete or restrict the boundaries of wetlands already included by it in the List and shall, at the earliest possible time, inform the organization or government responsible for the continuing bureau duties specified in Article 8 of any such changes.
- Each Contracting Party shall consider its international responsibilities for the conservation, management and wise use of migratory stocks of waterfowl, both when designating entries for the List and when exercising its right to change entries in the List relating to wetlands within its territory.

### **Article 3**

1. The Contracting Parties shall formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory.
2. Each Contracting Party shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the organization or government responsible for the continuing bureau duties specified in Article 8.

### **Article 4**

1. Each Contracting Party shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and provide adequately for their widening.
2. Where a Contracting Party in its urgent national interest, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources, and in particular it should create additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat.
3. The Contracting Parties shall encourage research and the exchange of data and publications regarding wetlands and their flora and fauna.

4. The Contracting Parties shall endeavor through management to increase waterfowl populations on appropriate wetlands.

5. The Contracting Parties shall promote the training of personnel competent in the fields of wetland research, management and wardening.

#### **Article 5**

1. The Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavor to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna.

#### **Article 6**

There shall be established a Conference of the Contracting Parties to review and promote the implementation of this Convention. The Bureau referred to in Article 8, paragraph 1, shall convene ordinary meetings of the Conference of the Contracting Parties at intervals of not more than three years, unless the Conference decides otherwise, and extraordinary meetings at the written requests of at least one third of the Contracting Parties. Each ordinary meeting of the Conference of the Contracting Parties shall determine the time and venue of the next ordinary meeting.

- The Contracting Parties shall ensure that those responsible at all levels for wetlands management shall be informed of, and take into consideration, recommendations of such Conferences concerning the conservation, management and wise use of wetlands and their flora and fauna.