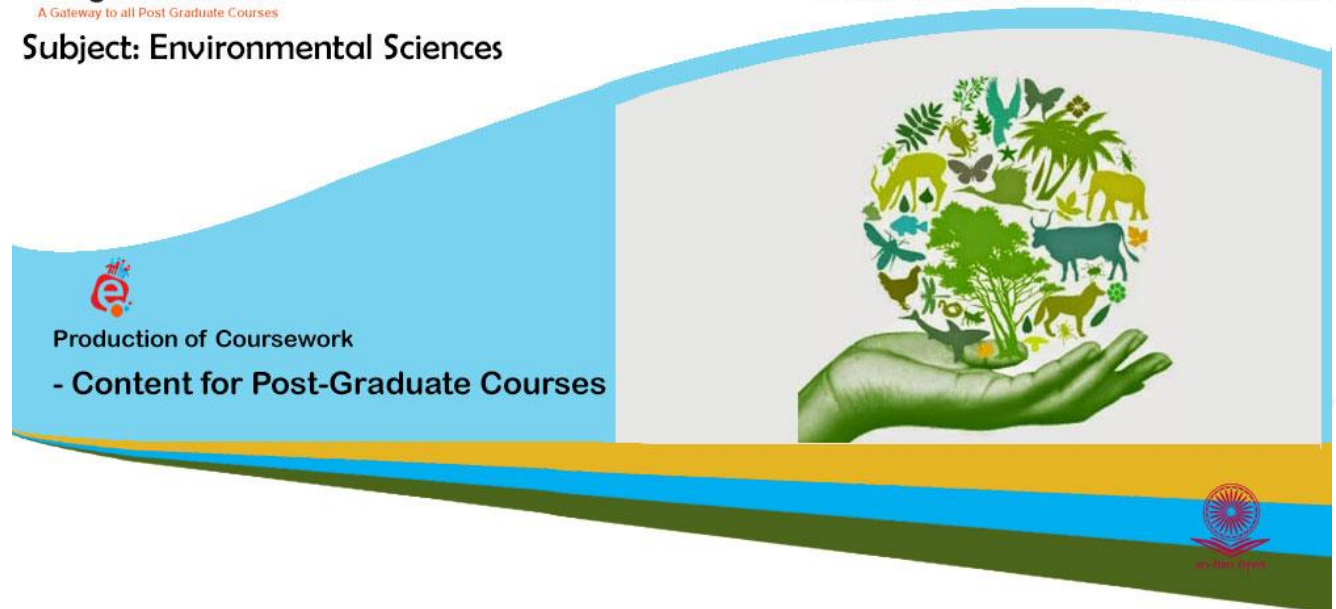


Subject: Environmental Sciences



Paper No: 13 **Environmental Law and Policies**

Module: 34 Convention on Biological Diversity



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Description of Module	
Subject Name	Environmental Sciences
Paper Name	Environmental Law and Policies
Module Name/Title	Convention on Biological Diversity
Module Id	EVS/ELP-XIII/34
Pre-requisites	Understanding of the need for an International commitment for Conservation of Biological diversity.
Objectives	To understand the aims, objectives and outcomes of Convention on Biological Diversity.
Keywords	Convention, Biological diversity, Nairobi Conference, Ex-situ conservation, In –situ conditions

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Convention on Biological Diversity

LEARNING OUTCOMES:

1. Understanding the need for an International Convention on Biological diversity.
2. In depth study of the principles of the Convention on Biological Diversity.
3. Study of the key elements of the strategic plan 2011-2020

Introduction

The biological resources of the Earth are vital to economic and social development of mankind. In the late 80's, there was a growing recognition that biological diversity is a global asset of tremendous value to present and future generations. But at the same time, it was seen that the threat to species and ecosystems is increasing at an alarming speed which has never been as it is today. Extinction of species caused by human activities increased many folds and became a matter of concern thus in 1992 the Rio earth Summit was convened.

What is Biodiversity?

Biodiversity encompasses the variety of all life on earth. Biodiversity manifests itself at three levels:

- Species diversity which refers to the numbers and kinds of living organisms
- Genetic diversity which refers to the genetic variation within a population of species
- Ecosystem diversity which is the variety of habitats, biological communities and ecological processes that occur in the biosphere.

The biodiversity we see today is the outcome of over 3.5 billion years of evolutionary history, shaped by natural processes and increasingly, by the influence of humans. Biodiversity forms the web of life of which we are an integral part and upon which we so fully depend.

Biological diversity is the natural biotic capital of the earth, and affects us all. Humanity derives its supplies of food, medicines, energy and many industrial products from biological resources

The Convention on Biological Diversity (CBD)

The CBD is one of the three conventions agreed by governments at the 1992 Rio Earth Summit. It is probably the most important international agreement ever adopted. It recognizes that setting social and economic goals for the use of biological resources and the benefits derived from genetic resources is central to the process of sustainable development, and that this in turn will support conservation.

History of the Convention on Biological Diversity (CBD)

The United Nations Environment Programme (UNEP) convened the Ad Hoc Working Group of Experts on Biological Diversity in June 1987 to explore the need for an international convention on biological diversity. Soon after, in May 1989, it established the Ad Hoc Working Group of Technical and Legal Experts to prepare an international legal instrument for the conservation and sustainable use of biological diversity. The experts were to take into account "the need to share costs and benefits between developed and developing countries" as well as "ways and means to support innovation by local people".

By February 1991, the Ad Hoc Working Group was re-named as the Intergovernmental Negotiating Committee. Its work culminated on 22 May 1992 with the Nairobi Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity.

The Convention was opened for signature on 5 June 1992 at the United Nations Conference on Environment and Development (the Rio "Earth Summit"). It remained open for signature until 4 June 1993, by which time it had received 168 signatures. The Convention entered into force on 29 December 1993, which was 90 days after the 30th ratification. The first session of the Conference of the Parties was scheduled for 28 November – 9 December 1994 in the Bahamas.

The Convention on Biological Diversity was inspired by the world community's growing commitment to sustainable development. It represents a dramatic step forward in the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising from the use of genetic resources.

Objectives of the Convention of Biological Diversity (Article 1)

The Convention, while reaffirming sovereign rights of nations over their biological resources, establishes three main goals:

1. The conservation of biological diversity
2. The sustainable use of components of biological resources;
3. Fair and equitable sharing of the benefits arising out of the utilization of genetic resources

Important Definitions (Article 2)

1. "Biological diversity" means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.
2. "Biological resources" includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.
3. "Biotechnology" means any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use.
4. "Country of origin of genetic resources" means the country which possesses those genetic resources in in-situ conditions. "Country providing genetic resources" means the country supplying genetic resources collected from in-situ sources, including populations of both wild and domesticated species, or taken from ex-situ sources, which may or may not have originated in that country.

5. "Domesticated or cultivated species" means species in which the evolutionary process has been influenced by humans to meet their needs.
6. "Ecosystem" means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.
7. "Ex-situ conservation" means the conservation of components of biological diversity outside their natural habitats.
8. "Genetic material" means any material of plant, animal, microbial or other origin containing functional units of heredity.
9. "Genetic resources" means genetic material of actual or potential value.
10. "Habitat" means the place or type of site where an organism or population naturally occurs.
11. "In-situ conditions" means Conditions where genetic resources exist within ecosystems and natural habitats, and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.
12. "In-situ conservation" means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.
13. "Protected area" means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives.
14. "Regional economic integration organization" means an organization constituted by sovereign States of a given region, to which its member States have transferred competence in respect of matters governed by this Convention and which has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to it.
15. "Sustainable use" means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.
16. "Technology" includes biotechnology

Principles of CBD (Article 3)

The underlying principles of the convention are:

1. States have sovereign right to exploit their own resources pursuant to their own environmental policies.
2. States have responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principles of CBD lays down the rights as well as obligations of the Member states.

Cooperation (Article 5)

1. Each Contracting Party shall, as far as possible and as appropriate, cooperate with other Contracting Parties, for the conservation and sustainable use of biological diversity.
2. The Cooperation can be bilateral or Multilateral.
3. If required any party can through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest seek help for arranging cooperation.

Obligations of the States (Article 6)

Each Contracting Party shall, in accordance with its particular conditions and capabilities:

1. Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and
2. Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

Identification and Monitoring (Article 7)

Enhancing knowledge and understanding of biological diversity and the impacts on it are important measures addressed in the Convention. Signatories are required to identify (for example, through surveys) and monitor important ecosystems, species and genetic components of biological diversity, as well as processes and activities that have or are likely to have significant adverse impacts on biological diversity. Countries are then able to determine their priorities with regard to conservation and sustainable use measures which need to be undertaken.

In-situ & Ex-situ conservation (Article 8 and 9)

In-situ conservation is the conservation of ecosystems, natural habitats and species in their natural surroundings. Signatories are required to give emphasis to *in-situ* conservation through a broad range of actions, including

- Establishment and management of protected areas;
- Conservation and sustainable use of biological resources within and outside protected areas;
- Promotion of environmentally sound and sustainable development in areas adjacent to protected areas;
- Rehabilitation and restoration of degraded ecosystems; control of alien species and genetically modified organisms;
- Protection of threatened species and populations; and regulation of damaging processes and activities.

While the Convention emphasised the importance of *in-situ* conservation, it also acknowledges that *ex-situ* measures also have an important role to play. *Ex-situ* conservation means conservation outside natural habitats, for example in zoos, botanic gardens and seed banks. Parties are to take *ex-situ* measures, while ensuring that ecosystems and natural populations of species are not threatened.

Conservation and Sustainable Use of Biological Diversity

An overarching objective of the CBD is encouraging the conservation and sustainable use of the components of biological diversity. The CBD requires Parties to integrate considerations relating to conservation and sustainable use into national decision-making (Article 10).

It requires its Parties to adopt measures relating to the use of biological resources to avoid or minimise adverse impacts on biological diversity (Article 10(b)).

Further, Parties are encouraged to integrate the conservation and sustainable use of biological diversity into relevant sectorial or cross-sectorial plans, programmes and policies (Article 6(b)). Parties are responsible for identifying the processes and categories of activities that have or are likely to have significant adverse impact on biological diversity and monitoring their effects (Article 7(c))

Access to and the Fair and Equitable Sharing of Benefits arising from the Utilization of Genetic Resources

The CBD encourages the parties to provide access to and to equitably share the benefits arising from the utilisation of genetic resources, as also the CBD seeks to establish incentives to conserve biodiversity. The CBD approach is first of all based on the fundamental premise that nation states have sovereign rights over the biological diversity within their territory (Preamble and Article 15(1)). The CBD also recognises that national governments have the authority to determine access to these resources in accordance with national legislation (Article 15(1)). It provides that access to genetic resources must be obtained with the Prior Informed Consent (PIC) of the CBD party, and on mutually agreed terms (Article 15(4) and (5)). The CBD envisages the use of legal measures that could feasibly include IPRs (Article 15(7)), by calling on Parties to take legislative, administrative or policy measures to ensure the benefits arising from research, development and commercial use of genetic

resources are shared in an equitable way with the provider of the genetic resources. The Conference of the Parties (COP) has established a number of subsidiary bodies to consider access and benefit sharing. First, it has established a Panel of Experts on Access and Benefit Sharing whose role is to develop a common understanding of basic concepts and to explore all options for Access and Benefit Sharing on mutually agreed terms including guiding principles, guidelines, and codes of best practice for Access and Benefit-Sharing arrangements

Capacity Building under CBD through Research and Training

Effective global action requires the expansion of national capacities, particularly in developing countries, for the conservation and sustainable use of biological diversity. In this regard the Convention provides for national and international action on research, training, the exchange of public information, and scientific and technical co-operation with emphasis on building national capabilities through human resource development and institution building. Provisions for encouraging public understanding of the significance of biological diversity and the measures required for its conservation are also included. Technology transfer of this and other pertinent information is an important aspect of ensuring the convention meets its objectives.

Institutional Arrangements

The Convention establishes a number of institutional arrangements necessary to ensure effective implementation. The Conference of the Parties (Article 23) is the key decision-making body responsible for monitoring the implementation of the Convention and has a major role in funding matters. Signatories are required to submit reports on measures taken for the implementation of the Convention and their effectiveness in meeting the objectives of the Convention.

The Subsidiary Body on Scientific, Technical and Technological Advice (Article 25) is to provide the Conference of the Parties with advice relating to the implementation of the Convention, including the status of biological diversity and the effectiveness of measures taken to give effect to the Convention.

It also has a major role in identifying technologies for the conservation and sustainable use of biological diversity suitable for transfer to developing countries.

Settlement of Disputes (Article 27)

In the event of a dispute between Contracting Parties concerning the interpretation or application of this Convention, the parties concerned shall seek solution by negotiation.

If the parties concerned cannot reach agreement by negotiation, they may jointly seek the good offices of, or request mediation by, a third party.

The party can also resort to compulsory dispute settlement mechanisms as Arbitration or Submission of the dispute to the International Court of Justice.

Protocols to Convention on Biological Diversity

Cartagena Protocol

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international treaty governing the movements of living modified organisms (LMOs) resulting from modern biotechnology from one country to another. It was adopted on 29 January 2000 as a supplementary agreement to the Convention on Biological Diversity and entered into force on 11 September 2003.

The Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology. It establishes an advance informed agreement (AIA) procedure for ensuring that countries are provided with the information necessary to make informed decisions before agreeing to the import of such organisms into their territory. The Protocol contains reference to a precautionary and reaffirms the precaution language in Principle 15 of the Rio Declaration on Environment and Development. The Protocol also establishes a Biosafety Clearing-House to facilitate the exchange of information on living modified organisms and to assist countries in the implementation of the Protocol.

Nagoya Protocol

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity is a supplementary agreement to the Convention on Biological Diversity. It provides a transparent legal framework for the effective implementation of one of the three objectives of the CBD: the fair and equitable sharing of benefits arising out of the utilization of genetic resources.

The Nagoya Protocol on ABS was adopted on 29 October 2010 in Nagoya, Japan and entered into force on 12 October 2014, 90 days after the deposit of the fiftieth instrument of ratification. Its objective is the fair and equitable sharing of benefits arising from the utilization of genetic resources, thereby contributing to the conservation and sustainable use of biodiversity.

The Nagoya Protocol sets out core obligations for its contracting Parties to take measures in relation to access to genetic resources, benefit-sharing and compliance. The Nagoya Protocol addresses traditional knowledge associated with genetic resources with provisions on access, benefit-sharing and compliance. It also addresses genetic resources where indigenous and local communities have the established right to grant access to them. Contracting Parties are to take measures to ensure these communities' prior informed consent, and fair and equitable benefit-sharing, keeping in mind community laws and procedures as well as customary use and exchange.

United Nations Decade of Biological Diversity

The United Nations General Assembly at its 65th session declared the period 2011-2020 to be “the United Nations Decade on Biodiversity, with a view to contributing to the implementation of the Strategic Plan for Biodiversity for the period 2011-2020” (Resolution 65/161).

The United Nations Decade on Biodiversity will serve to support the implementation of the Strategic Plan for Biodiversity and promote its overall vision of living in harmony with nature. Its goal is to mainstream biodiversity at different levels. Throughout the United Nations Decade on Biodiversity, governments are encouraged to develop, implement and communicate the results of national strategies for implementation of the Strategic Plan for Biodiversity.

Key Elements of the Strategic Plan 2011 – 2020

1. *Rationale*

The rationale for the new plan is that biological diversity underpins ecosystem functioning and the provision of ecosystem services essential for human well-being. It provides for food security, human health, the provision of clean air and water; it contributes to local livelihoods, and economic development, and is essential for the achievement of the Millennium Development Goals, including poverty reduction.

2. *Vision*

The vision for the new plan is: "Living in Harmony with Nature" where "By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."

3. *Mission*

The mission of the new plan is to "take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being, and poverty eradication. To ensure this, pressures on biodiversity are reduced, ecosystems are restored, biological resources are sustainably used and benefits arising out of utilization of genetic resources are shared in a fair and equitable manner; adequate financial resources are provided, capacities are enhanced, biodiversity issues and values mainstreamed,

appropriate policies are effectively implemented, and decision-making is based on sound science and the precautionary approach."

4. *Implementation*

Means for implementation: The Strategic Plan will be implemented primarily through activities at the national or subnational level, with supporting action at the regional and global levels. The means of implementation for this Strategic Plan will include provision of financial resources in accordance with respective obligations under the Convention, taking into account Article 20 of the Convention.

Programmes of work: The thematic programmes of work of the Convention include: biodiversity of inland waters, marine and coastal biodiversity, agricultural biodiversity, forest biodiversity, biodiversity of dry and sub-humid lands, mountain biodiversity and island biodiversity. Together with the various cross-cutting issues, they provide detailed guidance on implementation of the Strategic Plan, and could also contribute to development and poverty reduction.

Broadening political support: for this Strategic Plan and the objectives of the Convention is necessary, for example, by working to ensure that Heads of State and Government and the parliamentarians of all Parties understand the value of biodiversity and ecosystem services.

Partnerships: Partnerships at all levels are required for effective implementation of the Strategic Plan, to leverage actions at the scale necessary, to garner the ownership necessary to ensure mainstreaming of biodiversity across sectors of government, society and the economy and to find synergies with national implementation of multilateral environmental agreements.

Reporting by Parties: Parties will inform the Conference of the Parties of the national targets or commitments and policy instruments they adopt to implement the Strategic Plan, as well as

any milestones towards these targets, and report on progress towards these targets and milestones, including through their fifth and sixth national reports.

Review by the Conference of the Parties: The Conference of the Parties, with the support of other Convention bodies, in particular the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention, will keep under review implementation of this Strategic Plan, and support effective implementation by Parties ensuring that new guidance is informed by the experience of Parties in implementing the Convention, in line with the principle of adaptive management through active learning.

Conclusion

The Convention on Biological Diversity is the only international treaty which protects the biological resources of a country. Biological resources and the traditional knowledge of indigenous people is the asset of the country owned exclusively by the people of that country. Thus, there is a need, at international level, to ensure protection against unauthorized and illegal exploitation of biological resources by another country. At the same time, intra country too, judicious use of the resources must be promoted.

The Convention on Biological Diversity is a step in this direction which promulgates the principles of prior consent before the access of the resources and benefit sharing wherein the indigenous people who are true owners of such resources are recognized and get due share from usage of such resources. Another vital aspect being covered by the Convention is that it stipulates transfer of technology, a much needed step for optimal utilization of the biological resources and to strike balance between resource rich developing countries and technology rich developed countries and provide adequate legal framework for the same.

Irrespective of the aforesaid, the Convention is mere framework and stronger initiative on the parts of the signatory states is required to practice the principles embedded in the Convention and realize the

UN Goals laid down in the General Assembly resolution declaring 2011 -2020 as UN Decade of Biological Diversity.

