Unit 4 Lecture 4

In 1972, the United Nations Conference on the Human Environment (Stockholm) resolved to establish the United Nations Environment Programme (UNEP). Governments signed a number of regional and international agreements to tackle specific issues, such as protecting wetlands and regulating the international trade in endangered species. These agreements, along with controls on toxic chemicals and pollution, have helped to slow the tide of destruction but have not reversed it. For example, an international ban and restrictions on the taking and selling of certain animals and plants have helped to reduce over-harvesting and poaching.

In addition, many endangered species survive in zoos and botanical gardens, and key ecosystems are preserved through the adoption of protective measures. However, these are stopgap actions. The long-term viability of species and ecosystems depends on their being free to evolve in natural conditions. This means that humans have to learn how to use biological resources in a way that minimizes their depletion. The challenge is to find economic policies that motivate conservation and sustainable use by creating financial incentives for those who would otherwise over-use or damage the resource.

In 1987, the World Commission on Environment and Development (the Brundtland Commission) concluded that economic development must become less ecologically destructive. In its landmark report, Our Common Future, it said that: "Humanity has the ability to make development sustainable-to ensure that it meets needs of the present without compromising the ability of future generations to meet their own needs". It also called for "a new era of environmentally sound economic development".

In 1992, the largest-ever meeting of world leaders took place at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil. An historic set of agreements was signed at the "Earth Summit", including two binding agreements, the Convention on Climate Change, which targets industrial and other emissions of greenhouse gases such as carbon dioxide, and the Convention on Biological Diversity, the first global agreement on the conservation and sustainable use of biological diversity. The biodiversity treaty gained rapid and widespread acceptance. Over 150 governments signed the document at the Rio conference, and since then more than 187 countries have ratified the agreement.
The Convention has three main goals:

- The conservation of biodiversity,
- Sustainable use of the components of biodiversity, and
- Sharing the benefits arising from the commercial and other utilization of genetic resources in a fair and equitable way

The Convention is comprehensive in its goals, and deals with an issue so vital to humanity's future, that it stands as a landmark in international law. It recognizes-for the first time-that the conservation of biological diversity is "a common concern of humankind" and is an integral part of the development process. The agreement covers all ecosystems, species, and genetic resources. It links traditional conservation efforts to the economic goal of using biological

resources sustainably. It sets principles for the fair and equitable sharing of the benefits arising from the use of genetic resources, notably those destined for commercial use. It also covers the rapidly expanding field of biotechnology, addressing technology development and transfer, benefit-sharing and biosafety. Importantly, the Convention is legally binding; countries that join it are obliged to implement its provisions.

The Convention reminds decision-makers that natural resources are not infinite and sets out a new philosophy for the 21st century, that of sustainable use. While past conservation efforts were aimed at protecting particular species and habitats, the Convention recognizes that ecosystems, species and genes must be used for the benefit of humans. However, this should be done in a way and at a rate that does not lead to the long-term decline of biological diversity.

The Convention also offers decision-makers guidance based on the precautionary principle that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat. The Convention acknowledges that substantial investments are required to conserve biological diversity. It argues, however, that conservation will bring us significant environmental, economic and social benefits in return.

Some of the many issues dealt with under the Convention include:

- Measures and incentives for the conservation and sustainable use of biological diversity.
- Regulated access to genetic resources.
- Access to and transfer of technology, including biotechnology.
- Technical and scientific cooperation.
- Impact assessment.
- Education and public awareness.
- Provision of financial resources.
- National reporting on efforts to implement treaty commitments.

National Level

The Convention on Biological Diversity, as an international treaty, identifies a common problem, sets overall goals and policies and general obligations, and organizes technical and financial cooperation. However, the responsibility for achieving its goals rests largely with the countries themselves.

Private companies, landowners, fishermen, and farmers take most of the actions that affect biodiversity. Governments need to provide the critical role of leadership, particularly by setting rules that guide the use of natural resources, and by protecting biodiversity where they have direct control over the land and water. Under the Convention, governments undertake to conserve and sustainably use biodiversity. They are required to develop national biodiversity strategies and action plans, and to integrate these into broader national plans for environment and development. This is particularly important for such sectors as forestry, agriculture, fisheries, energy, transportation and urban planning. Other treaty commitments include:

- Identifying and monitoring the important components of biological diversity that need to be conserved and used sustainably.
- Establishing protected areas to conserve biological diversity while promoting environmentally sound development around these areas.
- Rehabilitating and restoring degraded ecosystems and promoting the recovery of threatened species in collaboration with local residents.
- Respecting, preserving and maintaining traditional knowledge of the sustainable use of biological diversity with the involvement of indigenous peoples and local communities.
- Preventing the introduction of, controlling, and eradicating alien species that could threaten ecosystems, habitats or species.
- Controlling the risks posed by organisms modified by biotechnology.
- Promoting public participation, particularly when it comes to assessing the environmental impacts of development projects that threaten biological diversity.
- Educating people and raising awareness about the importance of biological diversity and the need to conserve it.
- Reporting on how each country is meeting its biodiversity goals.

International level

The Convention's success depends on the combined efforts of the world's nations. The responsibility to implement the Convention lies with the individual countries and, to a large extent, compliance will depend on informed self-interest and peer pressure from other countries and from public opinion. The Convention has created a global forum-actually a series of meetings-where governments, non-governmental organizations, academics, the private sector and other interested groups or individuals share ideas and compare strategies.
The Convention's ultimate authority is the Conference of the Parties (COP), consisting of all governments (and regional economic integration organizations) that have ratified the treaty. This governing body reviews progress under the Convention, identifies new priorities, and sets work plans for members. The COP can also make amendments to the Convention, create expert advisory bodies, review progress reports by member nations, and collaborate with other international organizations and agreements.
The Conference of the Parties can rely on expertise and support from several other bodies that are established by the Convention:

- The Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). The SBSTTA is a committee composed of experts from member governments competent in relevant fields. It plays a key role in making recommendations to the COP on scientific and technical issues.
- The Clearing House Mechanism. This Internet-based network promotes technical and scientific cooperation and the exchange of information.
- The Secretariat. Based in Montreal, it is linked to United Nations Environment Programme. Its main functions are to organize meetings, draft documents, assist member governments in the implementation of the programme of work, coordinate with other international organizations, and collect and disseminate information. In addition, the COP establishes ad hoc committees or mechanisms as it sees fit. For example, it created a

Working Group on Biosafety that met from 1996 to 1999 and a Working Group on the knowledge of indigenous and local communities.