The precautionary approach states that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

— Principle 15 of the 1992 Rio Declaration on Environment and Development

The Biosafety Protocol and You

Biodiversity, or the variability among living organisms and ecosystems and the interactions between them, is the basis of human life. Encompassed in the fish that thrive in the waters, the trees that cover the earth and the bacteria that enrich our soil, biodiversity provides us with the goods and services that sustain our lives and underpin sustainable development. As biodiversity declines, so too does the Earth's capacity to support human life. It is therefore incumbent upon all humanity to safeguard it from all threats and to stop or reduce its loss. The Cartagena Protocol on Biosafety is one of the key instruments contributing to this effort by reducing the potential adverse effects that LMOs may have on biodiversity. To achieve this objective effectively, your help is needed.

You can help by:

- Encouraging your Government to join the Protocol if your country has not already done so
- Contacting the national focal point for the Protocol to find out what is being done to implement it and how you can contribute to the process (if your country is a Party)
- Using the existing systems to work towards strengthening the national biosafety laws, foster national compliance with the Protocol's provisions to make sure that biosafety is fully integrated into existing biodiversity and sustainable development initiatives
- Informing your friends and family on the biosafety issue
- Writing to the editor of your local newspaper and reaching out to local media

With your help the Protocol will effectively ensure biosafety at the international, national and local levels, and contribute to sustainable development for the benefit of all humanity and the environment. For more information on the Protocol visit our website at:

www.cbd.int/biosafety/

Achievements under the Protocol

- The Protocol has steadily grown and is emerging as a vibrant and influential international agreement for ensuring the safe transfer, handling and use of living modified organisms.
- The Biosafety Clearing-House has become operational and is facilitating the exchange of information on, and experience with, living modified organisms.
- A number of countries have implemented projects and other activities to build and strengthen human and institutional capacities in the safe use of biotechnology.

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THE Cartagena Protocol ON Biosafety

Reducing the Environmental Risks of Modern Biotechnology

UNEP

Convention on Biological Diversity

The Biotech Revolution

For millennia, farmers have selected and saved their best seeds and animals for breeding so that future generations of plant varieties and animal breeds would have better qualities in terms of size, taste, growth rate or yield. This process, referred to as selective breeding, caused slight variations from season to season but over time the changes were vast.

In recent years, new techniques and methods, referred to as modern biotechnology, have allowed scientists to modify plants, animals and microorganisms at rates faster than those of conventional methods. They do so by manipulating genes and inserting them into an organism resulting in living modified organisms (LMOs). The first commercially grown LMO, a tomato modified to resist rotting, was introduced in 1994. Since then, a number of other LMOs have been produced globally.

The Safety Concerns of Biotechnology

Although modern biotechnology can potentially improve human wellbeing, for example by enhancing agricultural productivity, there is concern about potential risks that LMOs resulting from modern biotechnology may pose to biological diversity and to human health. Concerns include, for example, the possibility that modified plants with pest-resistant characteristics may affect not only the intended pests but also a variety of non-target organisms—plants, insects and animals. Another concern is that the continued use of crops that are resistant to herbicides and insects could lead to the appearance of resistant weeds and insects.

In 1992, world leaders at the United Nations Conference on Environment and Development, recognizing the potential risks of modern biotechnology, called for an international mechanism to ensure that biotechnology is developed and applied with adequate safety measures. As a result, the Cartagena Protocol on Biosafety was negotiated, as a supplementary agreement to the Convention on Biological Diversity.

Adopted on 29 January 2000 and entered into force on 11 September 2003, the Cartagena Protocol on Biosafety works to ensure the safe transfer, handling and use of living organisms modified through the use of biotechnology techniques.

The Cartagena Protocol on Biosafety in Action

The Protocol works to protect biodiversity by encouraging the safe transfer, handling and use of LMOs. It does so by establishing rules and procedures with a focus on regulating the movements of these organisms from one country to another. There are two key procedures, one for LMOs intended for direct introduction into the environment, known as the Advance Informed Agreement (AIA) procedure, and another for LMOs intended for direct use as food, feed or for processing (LMOs-FFP). The diagram below outlines the procedures.

Under the AIA procedure, countries intending to export an LMO are required to seek consent from the potential importing countries prior to the first shipment. Before deciding to import LMOs, countries are required to assess their potential risks in a scientifically sound and transparent manner. Based on the results of the risk assessment a country can decide to import or not to import a specific LMO.

Under the procedure for LMOs-FFP, countries that decide to place such LMOs onto the market are required to make public their decision by entering it into a central information system known as the Biosafety Clearing-House (BCH), available online at https://bch.cbd.int.

When a country is uncertain about the potential negative impacts an LMO may have on the environment, it can decide not to import that LMO based on the precautionary approach. In addition, when deciding whether or not to import an LMO, a country may also take into account socio-economic considerations that may arise from the impacts of the LMO. Countries are required to consult the public in their decision-making process regarding LMOs.

If a country decides to import an LMO that is to be released into the environment, it is required to communicate its decision as well as a summary of the risk assessment to the BCH. In addition to these decisions, the BCH facilitates free access to key information such as national biosafety laws, a registry of approved LMOs and scientific literature.

When a country decides to allow the import of an LMO, the Protocol requires that the LMO being moved from one country to another is safely transported, handled and packaged. Shipments of the LMO must be accompanied by documentation that clearly identifies it as such.

Once an LMO has been imported, a country is required to take appropriate measures for managing any risks identified by the risk assessment and continue to monitor and control any risks that may emerge in the future. If any unexpected effects emerge or if new scientific information about the LMO becomes available, countries must repeat the risk assessment process and review, if necessary, the decision that was made in respect to that LMO.

Under the Protocol an international process has been initiated to put into place a mechanism that would establish responsibility for damage caused by LMOs that are moved across national borders and the possible measures for redress or compensation.