Generating and Maintaining the Supply of Ecosystem Services

Biodiversity generates and helps maintain the supply of many ecosystem services essential for human well-being and economic development. Numerous studies have shown the considerable economic value of these goods and services. However, their value is seldom reflected in market prices. Hence for many ecosystem services, markets cannot fulfill their role to signal scarcity. Hence, consumers, firms, and government entities perceive many of those goods and services to have a price of zero, which provides strong incentives to overuse and destroy biodiversity and ecosystems in the name of economic development.

Economic valuation studies can help eliciting the ‘hidden’ value of biodiversity and ecosystem services, and policy measures can then be applied that seek to rectify the incentives of consumers, producers, and governments towards a more sustainable behavior. Hence, such ‘incentive measures’ do not rely on an outright prescription or prohibition of specific activities, but rather seek to induce changes in behavior towards sustainability. Possible measures to encourage the conservation or sustainable use of biological diversity include:

- Positive incentive measures: economic, legal or institutional measures that are designed to encourage beneficial activities. These may include incentive payments for organic farming, agricultural land set-aside schemes as well as public or grant-aided land purchases or conservation easements.
- Negative incentive measures or disincentives: mechanisms that are designed to discourage harmful or unsustainable activities. Examples of disincentives are user fees or pollution taxes.
- The creation or strengthening of markets: mechanisms and arrangements seeks to change the relative costs and benefits of specific activities in an indirect way. Trading mechanisms and other institutional arrangements create or improve markets for biological resources, thus encouraging the conservation and sustainable use of biological diversity. Examples include, inter alia, individual transferable fishing quotas and other trading schemes, biodiversity prospecting, and the commercialization of biodiversity-based products, possibly including certification and eco-labeling initiatives.
- Another important element is identifying and removing policies or practices that generate “perverse” incentives”, that is, incentives that accelerate the loss of biodiversity. Examples include those public subsidies that support unsustainable farming, forestry or fishery activities.

Why it is important:

- Global benefits from coral reefs including tourism, fisheries and coastal protection are estimated at some US$30 billion per year; insect pollination of over 40 commercial crops in the United States alone at US$ 30 billion per year, while the market for herbal drugs amounted to US$47 billion in 2000. These are just a few examples.
- When left alone markets fail to adequately reflect the value of biodiversity and its essential role in the supply of ecosystem services. Given the tremendous amount of economic value associated with many ecosystem services, such market failures need to be corrected, and government policies reformed or adapted accordingly.
What the CBD is doing:

The CBD’s economic work aims to elicit the value of biodiversity through appropriate valuation tools and to “internalize” this value into market prices through the use of appropriate incentive measures. In fact, the Convention devotes an own Article to require Parties to adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biodiversity.

The COP has encouraged Parties to review existing policies to identify and promote incentives for conservation and sustainable use of biodiversity. Parties have also been encouraged to identify perverse incentives and consider the removal or mitigation of their negative effects.

To support implementation of valuation and incentive measures by Parties, COP and its subsidiary bodies have undertaken work to develop policy guidance and technical good practice manuals. A database on incentive measures in operated under the clearing house mechanism of the Convention in order to facilitate the exchange of experience among Parties, governments, and relevant organizations in the design and implementation of incentive measures.

The Convention is also cooperating closely with a number of international partner organizations to assist governments in the design and implementation of incentive measures, as well as the promotion of markets for biodiversity-based good and services produced in a sustainable manner.

The Conventions’ work on incentive measures is scheduled for in-depth review at COP 9.

Addressing the interlinkages between international trade rules and the provisions of the Convention forms another important area of the economic work under the Convention. While the Convention does not require measures that are directly related to international trade, there is a close relationship between many of its provisions – as well as those of its Biosafety Protocol – and the provisions of the multilateral trade agreements of the World Trade Organization (WTO). Consequently, the Convention is following relevant negotiations under the WTO closely, and, as requested by COP, the Convention secretariat is cooperating with the WTO and its secretariat on a number of technical issues of joint interest, including in providing technical support and capacity-building to member governments.

The trade-related work of the Convention is part of a broader effort of the international community to ensure harmony and mutual supportiveness between trade rules and international environmental law, in order to both maintain biodiversity and promote international trade, for the common goal of sustainable development.

For more information on:

Economics, Trade and Incentive Measures: www.cbd.int/incentives

CBD COP Decisions: www.cbd.int/incentives/decisions.shtml

Guidelines and Tools: www.cbd.int/incentives/tools.shtml