Biodiversity supporting development

**Poverty Eradication, Sustainable Livelihoods and Equitable Growth**

- More than 180 million people are directly or indirectly employed in fisheries and aquaculture, providing income to households totaling about 540 million people (8% of the world population) of whom more than 90% live in developing countries.

- The value of the ecosystem services provided by coral reefs ranges from more than US$ 18 million per square kilometer per year for natural hazard management, up to US$ 100 million for tourism, more than US$ 5 million for genetic material and bioprospecting and up to US$ 331,800 for fisheries.

- 25-50% of the pharmaceutical sector’s revenue (about US$ 650 billion/year) is derived from genetic resources.

- Ecotourism is a fast-growing sector which generates significant employment and is now worth around US$ 100 billion/year.

**Agriculture and Food Security**

- Genetic diversity is central to the seed industry. Its top 10 companies had commercial seed sales of US$ 15 billion in 2006.

- Approximately 33% of the food consumed by humans is dependent, either directly or indirectly, on honey bee pollination. The worldwide economic value of the pollination service provided by insects in 2005 was estimated to be US$ 190 billion for the main crops that feed the world.

- Fisheries account for at least 15% of animal protein directly consumed by humans. Fisheries indirectly support additional food production by providing inputs to the aquaculture and livestock industries.

- Large populations in South and East Asia are dependent on complex rice-fish agro-ecosystems, where fish and other aquatic animals serve as a source of nutrition to local communities, and provide essential services for rice productivity in the flooded fields.

**Health**

- The World Health Organization suggests that as many as 80% of people in Africa rely on traditional medicines as the main source for their health care needs.

- A large number of top-ranking global prescription drugs contain components derived from biodiversity.

- The chemical taxol, derived from the Pacific yew, has been found to kill cancer cells.

- ACE inhibitors, which are among the most effective medicines known for treating high blood pressure, are derived from the Pit Viper (*Bothrops jararaca*).

- Microbes have given us nearly all of our antibiotics such as penicillin, as well as the cholesterol lowering statins.

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**United Nations Decade on Biodiversity**

*FEBRUARY 2014*
Gender and Women

- Women provide almost 80% of the total wild vegetable food collected in 135 different subsistence-based societies.

- Women produce, select and save up to 90% of seeds and germplasm used in smallholder agriculture and also play key roles in the multiplication, improvement and storage of seeds.

Water and Sanitation

- A survey in North America indicated that for every 10% increase in forest cover in a water supply catchment water treatment costs decreased by approximately 20%. Forest cover both increased security of supply and led to reduced pollutants in the water.

- In the Austrian Alps it has been estimated that runoff generated during extreme rainfall events may be up to 80% lower in mountain forests than for areas which have been deforested and converted to pasture.

- Trees in the Amazon forest are able to extract water from up to 10 meters below the Earth’s surface and return it to the atmosphere. It is estimated that 25% to 50% of the rainfall in the Amazon is derived from water recycled from forests.

- If treated as an economic asset, the minimum asset value of the natural infrastructure provided by the Mississippi delta would be US$ 330 billion to US$ 1.3 trillion (at 2007 values) in terms of hurricane and flood protection, water supply, water quality, recreation and fisheries.

- In East Calcutta Wetland, a Ramsar Site in India, the city’s waste water is treated and used for pond-fish cultivation and agriculture. The wetland provides about 150 tons of fresh vegetables daily, as well as some 10,500 tons of table fish per year.

STRATEGIC PLAN FOR BIODIVERSITY 2011-2020

THE VISION

By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.

STRATEGIC GOALS

Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Goal D: Enhance the benefits to all from biodiversity and ecosystem services

Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

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