UNDP Environment & Energy Group

KEY RESULTS & LESSONS FROM THE **UNDP-GEF** BIODIVERSITY PORTFOLIO

UNDP 2010

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ACRONYMS AND ABBREVIATIONS

AP	Asia and the Pacific
AS	Arab States
BR	Biosphere Reserve
CAPE	Cape Action for People and Environment Programme (South Africa)
CBD	Convention on Biological Diversity
CBO	Community-based organization
CBNRM	Community-based natural resources management
CCA	Community Conserved Area
CDM	Clean Development Mechanism
CIS	Commonwealth of Independent States
CZMP	Coastal Zone Management Plan
ECIS	Europe and the Commonwealth of Independent States
EU	European Union
FSC	Forestry Stewardship Council
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse gases
GIS	Geographic Information Systems
ha	Hectare
IAS	Invasive Alien Species
ICZM	Integrated Coastal Zone Management
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for the Conservation of Nature
km^2	Kilometers squared
LAC	Latin America and the Caribbean
MA	Millennium Ecosystem Assessment
MAP	Medicinal and Aromatic Plants
MCPC	Medicinal Plants Conservation Project (Egypt)
MDG	UN Millennium Development Goal
NGO	Non-government organization
NP	National Park
ODA	Official Development Assistance
PA	Protected Area
PES	Payment for Ecosystem Services
PoWPA	CBD Programme of Work on Protected Areas
REDD	Reducing emissions from deforestation and degradation
SEA	Southern and Eastern Africa
SIDS	Small Island Developing States
SINASIP	National System of Protected Wild Lands of Paraguay
SME	Small and Medium Enterprises
SP	Strategic Programme
SPAN	Strengthening the Protected Area Network in Namibia
TEEB	The Economics of Ecosystems and Biodiversity Report
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WCA	Western and Central Africa
WCMC	World Conservation Monitoring Centre
WWF	World Wide Fund for Nature

INTRODUCTION

This report presents and evaluates the results and lessons mined from all GEF-funded UNDP biodiversity projects. The results and lessons documented have been distilled from projects in five regions, namely Africa, Arab States, Asia and Pacific, Europe and CIS, and Latin America and the Caribbean.

It concludes with a summary of some of the future challenges that confront UNDP programme countries in seeking to conserve their biodiversity while attaining their economic and social development objectives.

The report documents the results of projects in the period from 2004-2010, mining information from projects that had been under implementation for a minimum of one year as of June 30, 2009.

A list of the projects analyzed in the report forms an annex.

part I

Background to UNDP's Work on Biodiversity Management

1.1 Biodiversity Loss: The Global Context

'Biological diversity' (commonly referred to as biodiversity) is the variety and variability of life on Earth. The United Nations Convention on Biological Diversity[1] describes biodiversity as:

> the variability among living organisms from all sources including, inter alia, terrestrial, marine and aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

The Earth supports a complex web of life comprising 3 million to 10 million species of plants and animals, of which only about 1.8 million have been scientifically described, plus an even greater number of microorganisms.

Biodiversity plays a vital role in almost every sphere of human life. Trees play an important role in absorbing greenhouse gases; forests also control soil erosion and purify water. Wetlands act as reservoirs in dry weather and help to filter and purify water. Coral reefs and mangrove swamps protect the land that they surround by stabilizing shorelines and buffering coasts from storm surges. Tropical forests, the tundra and wetlands such as peat swamps are important repositories of above and below-ground carbon.

Though billions of people around the world depend on ecosystem goods and services for their livelihoods and subsistence, and on the healthy 'flow' of these services through connected land and seascapes, these contributions are neither fully recognized nor valued in

its original area of coral reefs; 15 percent are seriously threatened with loss within the next 10 to 20 years; and 20 percent are under threat of loss in 20 to 40 years. The latter two estimates have been made under the Intergovernmental Panel on Climate Change's (IPCC) 'business as usual' emissions scenario, which does not consider the looming threats posed by global climate change or the potential positive benefits gained through effective future management. If current trends in carbon dioxide emissions continue, it is possible that many of the remaining reefs may be lost over the next 20 to 40 years. A major concern is that the majority of marine species will not be able to evolve or adapt to changes in ocean chemistry that result from acidification caused by increased uptake of carbon dioxide by the oceans. The very survival of these ecosystems is at risk.[3]

The loss of coral reefs will have huge economic impacts, will threaten the balance of global biodiversity and will endanger the food security of hundreds of millions of people relying heavily on oceanic natural resources in tropical areas.

According to the *Global Biodiversity Outlook,*[4] the loss of primary forest since 1991 has been estimated at six million hectares annually; deforestation in general

An estimated 80,000 edible plants are found in the world; one in every three mouthfuls of the food we eat is prepared from plants pollinated by wild insects and animals. Plants and animals also provide people with medicine. Forty percent of all