



# Are you a green leader?

Business and biodiversity: making the case for a lasting solution









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"The landscape may appear bleak, but a rising number of companies are making the link between natural assets, their bottom line, business sustainability and the urgent need for a low-carbon, resource-efficient 21st century green economy"

Achim Steiner, UN Under-Secretary General and UNEP Executive Director



#### Preface

Are you a Green Leader? is a contribution towards a renewed commitment to reverse the rate of loss of biodiversity. It is aimed at the companies and corporations who are either wholly or partly dependent on this key resource or whose activities can be a major impediment to its conservation. The world is currently undergoing a sixth wave of extinctions linked firmly to unsustainanable consumption and production patterns and a persistent failure of markets to capture the real value of the globe's animals, plants and other life-forms.

Value in terms of food and fibre but also in terms of multi-million dollar services such as pollination and its contribution to sectors like tourism: value too in terms of ecosystems such as forests and freshwaters to soils and indeed the atmosphere.

Biodiversity is the building block of these nature-based systems whose damage and degradation may equal a global financial loss of up to \$4.5 trillion annually according to The Economics of Ecosystems and Biodiversity hosted by UNEP.

Biodiversity loss will also impact the future economy: the 20th century was an industrial age, the new century will increasingly be a biological one based on discoveries linked with genetics and biomimicry. The landscape may appear bleak, but a rising number of countries and companies are making the link between these natural assets, their bottom line, business sustainability and the urgent need for a transformation towards a low-carbon, resource-efficient 21st century green economy.

Opportunities are also emerging via new kinds of nature-based markets and trading including ones covering areas such as water and wildlife to agreements such as those relating to climate change. For example paying developing countries to maintain forests, via Reduced Emissions from Deforestation and forest



Degradation (REDD), can reduce greenhouse gas emissions while also conserving biodiversity and generating jobs in natural resource management. UNEP is working with farmers and landowners in China, Kenya, Nigeria and Niger on quantifying how differing kinds of agriculture and land management sequester carbon while boosting yields.

This report, prepared in collaboration with UNEP World Conservation Monitoring Centre, is part of a broad body of work that UNEP in partnership with others is evolving in respect to a suite of environmental challenge and opportunities in respect to business.

In 2009, UNEP; the Secretariat of the Convention on Biological Diversity and the Government of Indonesia held the Biodiversity and Business event in Jakarta that also served as third conference on "Business and the 2010 Biodiversity Challenge".

It highlighted successful practices in various sectors which have been included in this report along with sectors which can have significant biodiversity impacts: mining, energy, agri-foods, fisheries, construction, forestry, tourism, pharmaceuticals, cosmetics, fashion and finance.

2010 is the United Nation's International Year of Biodiversity: it was meant to be the year when the world had reversed the rate of loss of biodiversity in order to maintain this essential environmental, social and economic asset.

The fact that this has not occurred requests and requires a renewed commitment, not least from the business community.

Achim Steiner
UN Under-Secretary General
and UNEP Executive Director

The Earth's diverse species are crucial for the functioning of ecosystems, which in turn provide essential goods and services on which people, business and global economies rely.

There is growing awareness of the impact and dependency that business operations have on biodiversity and ecosystem services, and the business risks that poor management of them can present.



## Introduction

This publication provides an overview of the impacts and dependencies that business has on biodiversity and ecosystem services and the associated business risks and opportunities. It highlights existing initiatives to address biodiversity and ecosystem services and harness the opportunities this can present.

The overall aim is to raise awareness around the main issues, as well as provide a useful reference of existing tools, standards, and guidance to support companies wishing to adopt biodiversity-friendly policies and practices. The document covers a wide range of sectors, namely mining, energy, agrifoods, fisheries and aquaculture, construction, forestry, tourism, pharmaceuticals, cosmetics, fashion, and financial services. It covers the business case for businesses to manage their impact on biodiversity, includes a range of tools and initiatives available to support companies to engage in biodiversity issues and complements existing and ongoing work on business and biodiversity, such as the Economics of Ecosystems and Biodiversity (TEEB) study for business (http://www.teebweb.org/).

This report was initially developed as a background discussion paper for the Biodiversity and Business conference held in 2009 in Jakarta, Indonesia. The conference — a joint event combining the Convention on Biological Diversity (CBD) Third Business and the 2010 Biodiversity Challenge Conference and the United Nations Environment Programme (UNEP) Division of Technology, Industryand Economics (DTIE) 2009 Business and Industry Global Dialogue. This final report, prepared in collaboration with the UNEP World Conservation Monitoring Centre (UNEP-WMC) is intended as a reference material for businesses that are looking to effectively engage with biodiversity by stressing the link between biodiversity and core business and by highlighting best case practices.

#### Why does biodiversity matter?

Biodiversity¹ provides the basis for human development and well-being. The Earth's diverse species are crucial for the functioning of ecosystems, which in turn provide essential goods and services on which people, business, and global economies rely. These include raw materials like wood, water, fish and medicinal compounds, as well as regulating and supporting services such as climate stabilization, flood regulation, pollination and soil formation. However, biodiversity is currently disappearing at an alarming rate. Over the past 50 years ecosystems have been extensively modified to meet the rapidly growing demands for food, fresh water, timber,

fibre and fuel. As a result, around 60% of examined ecosystem services are now degraded or being used unsustainably<sup>2</sup>. Human induced climate change, as well as a growing human population and continued economic expansion will further exacerbate ecosystem degradation and biodiversity loss — with Southeast Asia, the Congo Basin and parts of the Amazon expected to suffer the greatest losses. This loss forms a major barrier to sustainable development in these regions and around the world. Damage to biodiversity has been estimated to cost the global economy more than US\$500 billion per year<sup>3</sup>.

2010 is the United Nations International Year of Biodiversity and the world's attention is turning to the conservation of biodiversity. While we are faced with unprecedented pressures on biodiversity and the ecosystem services they provide, we are also faced with an opportunity for action. Businesses are more engaged and aware than ever before. Many companies are taking steps to identify and minimise their impacts on biodiversity and ecosystems and reaching out to civil society to create innovative solutions that enable the present day needs of society and economies to be balanced with the overarching need to ensure we continue to live in a healthy and productive environment.

## The business case for biodiversity management

There is growing awareness of both the impact and dependencies that business operations have on biodiversity and the associated ecosystem services. These natural resources are often used at no cost to companies or at a price that does not reflect their true value. Business impacts on biodiversity are varied and can range from large scale impacts, including habitat and biodiversity loss, to localized impacts such as overharvesting of specific species. Impacts can also be direct, as in the case of land conversion, overexploitation or pollution, or indirect as a result of increased access to remote areas for hunting and logging for example. Moreover, geographical scales of impacts can vary from local, regional to global and can occur at any one place along the value chain, from production, transportation, consumption to disposal.

<sup>&</sup>lt;sup>1</sup> Derived from the term biological diversity which is defined by the Convention on Biological Diversity as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems

<sup>&</sup>lt;sup>2</sup> http://www.millenniumassessment.org/documents/document.356.aspx.pdf

The Economics of Ecosystems and Biodiversity (TEEB) for National and International Policy Makers. http://www.teebweb.org/LinkClick.aspx?fileticket=Ps6eutErJJI%3d&tabid=10 19&language=en-US



## Some facts

The economic cost of biodiversity loss and ecosystem degradation is estimated to be between US\$2 and 4.5 trillion. This figure is expected to rise<sup>4</sup>.

Many of the world's aquifers are becoming depleted or polluted, and it is estimated that by 2030 almost half of the world's population will be living under severe water stress<sup>5</sup>.

Coral reefs are in danger of dying out in the next 20 years, despite providing services worth up to US\$189,000 per hectare per year for natural hazard management <sup>6</sup>.

The cost of environmental degradation related to water loss in the Middle East and North Africa has been estimated at some US\$9 billion a year, or 2.1 - 7.4% of GDP<sup>7</sup>.

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