



REPORT

JUNE
2012



**ECOLOGICAL
FOOTPRINT
AND INVESTMENT
IN NATURAL
CAPITAL IN ASIA
AND THE PACIFIC**

WWF

WWF is one of the world's largest and most experienced independent conservation organizations, with over 5 million supporters and a global Network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

Asian Development Bank (ADB)

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

Global Footprint Network

The Global Footprint Network promotes the science of sustainability by advancing the Ecological Footprint, a resource accounting tool that makes sustainability measurable. Together with its partners, the Network works to further improve and implement this science by coordinating research, developing methodological standards, and providing decision makers with robust resource accounts to help the human economy operate within the Earth's ecological limits.

WWF International

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In Terai, Nepal, the land was previously grazed on, leaving it barren and bereft of life. Through sustainable management the area has now been regenerated

FOREWORD

The Asia and Pacific region has some of the largest and most diverse ecosystems on earth. The Coral Triangle boasts an astonishing 3,000 species of fish and harbours 76% of the world's coral species.

The widespread loss of natural ecosystems and biodiversity is much more than a conservation issue.

Natural ecosystems provide socially and economically valuable services – such as food and fiber resources, clean water and climate regulation – that are fundamental to human welfare, but are often overlooked in decision-making processes

In the Greater Mekong Subregion (GMS), 1,200 new species have been discovered in the past 20 years, while on the island of Borneo, scientists have discovered 600 new species in that same time span. The Himalayan mountain range is another biodiversity hotspot with an incredible spectrum of flora and fauna, and the Eastern Himalayas are the source of freshwater for one billion people in the region.

Despite the rich natural capital in the region, this report reveals that biodiversity is in decline in all types of ecosystems, including in forests, rivers and oceans, with the rate of species loss about twice the global average. Furthermore, data presented on ecological footprints and biocapacities shows that the Asia and Pacific region has a “biocapacity deficit”. This means that countries in the region use more biologically productive land and sea to support the consumption of food, fibre and energy, as well as to build infrastructure and absorb carbon dioxide emissions, than is available within the region. This shortfall can only be made up by importing natural resources or by continuing to deplete natural capital, which has significant economic and environmental implications, including rising commodity prices and worsening degradation of natural resources.

The loss of natural capital in the region is the result of numerous factors associated with human activity. These range from the clear cutting of primary forests to make way for plantations and agricultural land to the dynamiting of coral reefs to catch fish. In Borneo, for instance, an average of 850,000 hectares of forest has disappeared every year over the last 25 years. Similarly, deforestation has been a major issue in the GMS, with 8.5 million ha lost between 1990 and 2005. In the last 40 years, the Coral Triangle has lost 40% of its coral reefs, and 80% of the spawning aggregations of reef fish has disappeared or declined. Meanwhile, among many other impacts, climate change is accelerating the melting of glaciers in the Himalayan region, threatening regional water and energy security and raising concerns regarding disaster impacts.

60
THE LOWER
MEKONG BASIN
PROVIDES
WATER, FISH AND
OTHER NATURAL
RESOURCES
FOR OVER 60
MILLION PEOPLE

The widespread loss of natural ecosystems and biodiversity is much more than a conservation issue. Natural ecosystems provide socially and economically valuable services – such as food and fibre resources, clean water and climate regulation – that are fundamental to human welfare, but are often overlooked in decision-making processes. For example, more than 120 million people in the Coral Triangle depend directly on local marine and coastal resources for their income, livelihoods, and food security, while international fisheries exports from the region are estimated to be worth more than \$3 billion a year. In the GMS, the Lower Mekong Basin provides water, fish and other resources for over 60 million people. The economic value of capture fisheries in the Mekong River basin alone is estimated to be between \$1.4 and \$3.9 billion per year.

Clearly, greater focus is needed to ensure that the region’s “natural capital” is maintained to support long-term social and economic prosperity. Protecting natural capital will require clear vision, careful stewardship, and tangible investments, to ensure effective protection, management, and wise use of the regions precious resources. We must approach the issues on multiple levels. At the regional level, support for multi-country conservation programs is needed to reflect the fact that large-scale ecosystems are public goods that cut across national boundaries and require coordinated regional approaches. On the national level, it will be important to encourage development processes that are orientated towards “green growth” while supporting the enforcement of the many environmental laws that have been adopted by nations in the Asia-Pacific region. And on the local level, it is important to support appropriate incentives that encourage businesses and communities to protect natural capital and maintain the whole range of invaluable services that it provides.

As the ultimate driver of resource use, consumption patterns must also be addressed. Creating and expanding markets that reward and ultimately demand sustainable practices, such as through product certification schemes, will allow buyers to make more responsible choices. Whether those buyers are diners in seafood restaurants in Hong Kong, China or supermarket chains in North America, they can, through their decisions, send a signal to the marketplace.

In this report, you will find examples of promising approaches for sustainably managing natural capital in this region. These are based on experiences from a number of important regional cooperation initiatives, including the Heart of Borneo Initiative, the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, the Greater Mekong Subregion Core Environment Program, and the Living Himalayas Framework for Cooperation. The four initiatives demonstrate the commitment of the participating governments to protecting the integrity of natural ecosystems while improving livelihoods and reducing poverty. Looking forward and beyond the “Rio+20” United Nations Conference on Sustainable Development in June 2012, these initiative can provide valuable lessons on how we can support large scale ecosystem management in the region. Working together with a wide range of partners, ADB and WWF stand ready to assist developing countries in the region to make inclusive and environmentally sustainable growth a reality.

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