WWF

CASE STUDY

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TALKING BUSINESS:

THE IMPORTANCE OF VALUING NATURAL CAPITAL FOR BUSINESSES IN THE LOWER MEKONG REGION

Many businesses rely on natural capital and ecosystem services, like fish stocks and watershed protection.

OVERVIEW

In 2013 WWF-Greater Mekong Programme commissioned a study to quantify the economic value of ecosystems in Cambodia, Laos, Thailand and Vietnam at local, national and regional levels, as well as establish the costs and benefits of managing these ecosystems sustainably. The study found that there is a potential to add almost US$10.5 billion to the region's economy by pursing a Green Economy over a Business as Usual growth model and that the private sector plays a critical role in recognising this economic benefit. The study identified that the private sector needs to be mainstreaming natural capital values - natural assets (land, water, biodiversity) that support the provision of ecosystem services - into their business planning and operations in order to achieve a more sustainable triple bottom line. By doing this, businesses will not only be able to comply with external and internal requirements and demands, such as measuring business liability and compensation, but it can also lead to increased revenue, cost reductions, revaluing of assets and potentially increasing share prices. Furthermore, business investments that are made towards the increased protection of protected areas within the Lower Mekong region could also have the potential for providing more sustainable revenues. For example the development of eco-tourism initiatives and participation in Payment for Ecosystem (PES) schemes within protected areas could ensure the protection and management of the natural capital that a business relies on, and therefore the businesses' profitability.

INTRODUCTION

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A Green Economy approach enhances natural capital like fish stocks.

In 2013, WWF commissioned and published the report *Economic Analysis of Ecosystem Services in the Lower Mekong Region*. The study draws on the best available published data and techniques to quantify the economic value of ecosystems in Cambodia, Laos, Thailand and Vietnam at local, national and regional levels, and the costs and benefits of managing them sustainably. The modelling found that there is a potential to add almost US$10.5 billion to the region's economy by pursing a Green Economy (GE) over a Business as Usual (BAU) growth model (i.e. an approach that promotes a longer term sustainable growth over short term economic gains). The study highlighted that a GE growth model can prove to be not only the most sustainable choice - environmentally and socially - in the long term but also the more economically advantageous choice for businesses in the Lower Mekong region. This case study highlights the benefits and opportunities of valuing and mainstreaming natural capital into business operations, and the potential for enhancing the financial bottom line for those businesses investing or operating in the Lower Mekong countries.

BACKGROUND

Natural capital is the stock of capital derived from natural resources, such as biodiversity and ecosystem goods and services. These goods and services underpin the global economy and provide inputs and/or benefits to business; businesses therefore depend on the ongoing availability and quality of these inputs and benefits. Agri-businesses, for example, rely on healthy soils, water availability and pollinators. By negatively affecting just one of these elements, the risk of both yield losses and price volatility rises. Natural capital is also affected by business activities and outputs. For example, agri-businesses can improve the abundance of pollinators by growing pollinator supporting plants or providing hives. It is in the interests of business to use natural capital sustainably to improve their long-term profit outlook. By depleting natural capital now, business put their supply chains and future productivity – and therefore profitability – at risk.

BUSINESS INVESTMENT IN THE LOWER MEKONG

To recognize the benefits modeled by the GE scenario, the private sector needs to undertake or engage in the following in the Lower Mekong region:

1. Mainstreaming of natural capital values into business planning and operations.

2. Increased engagement in the sustainable and equitable management of protected areas.

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Sustainable management of forest resources helps secure non-timber forest product supply chains.

Mainstreaming Natural Capital Values into Business Planning and Operations

Corporate natural capital valuation is a process that can improve business decision-making by 1) explicitly valuing both natural capital degradation and the impacts of this on business and 2) the business benefits of the ecosystem services that natural capital provides. The reasons for factoring natural capital values into business decision-making (see figure 1 for a diagrammatic version) are that:

• Ongoing natural capital degradation has a material impact on companies by causing supply chain disruptions or by being forced to introduce costly alternatives to traditional inputs – undermining performance, profits, their license to operate and access to new markets. Natural capital valuation demonstrates where and how investing in natural capital, such as water regulation and purification and natural hazard regulation, can generate considerable cost savings and avoided expenditures. It can also help companies get a better picture of what their assets are worth and points to opportunities for generating more income or earning a better return from such assets.

• Restoring and managing natural capital is beginning to be linked to new and emerging opportunities. Natural capital valuation provides a tool for informing the development of new ecosystem markets by assessing how much the natural capital is worth, at what levels they might be priced or sold by the company, and whether the returns are sufficiently high to warrant investing in market or product diversification.

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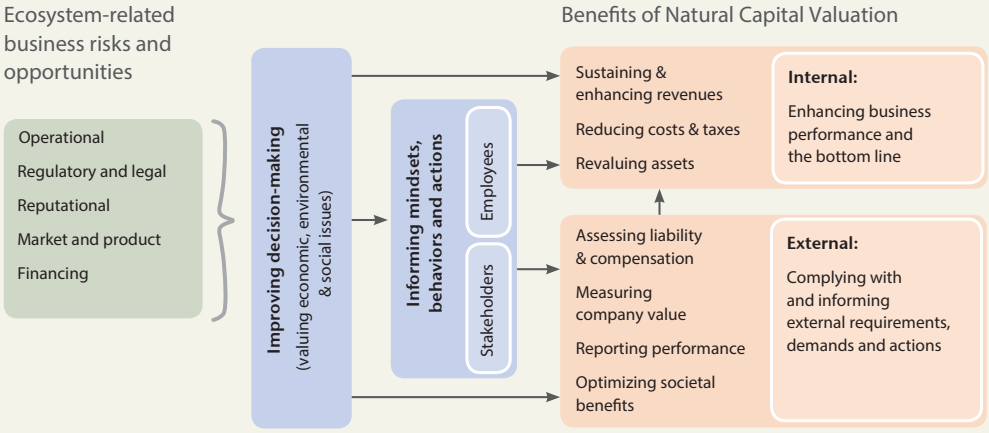
Many businesses, like fish wholesalers, depend directly on healthy ecosystems to supply their products.

• Communities, NGOs, customers, consumers and shareholders are demanding that these issues are addressed, reported and accounted for as they become increasingly conscious of the inter-relationship between business operations and the state of ecosystems. Natural capital valuation can help companies report on environmental performance and highlight where natural capital can make a substantial difference to measures of company and share value.

• There are more stringent regulatory and legal requirements for companies to minimize and mitigate their natural capital impacts, and to fully compensate any damages caused. Natural capital valuation allows for more complete disclosure of environmental issues and activities, which can also assist with reporting upon performance. It can also improve the calculation of levels of liability and compensation.

FIGURE 1: The benefits of corporate natural capital valuation. (Source: WBCSD (2011) Guide to Corporate Ecosystem Valuation)



The example in Box 1 outlines how natural capital valuation can lead to cost reductions and enhanced revenue for business.

BOX 1

CASE STUDY - CORPORATE NATURAL CAPITAL VALUATION FOR A HYDROPOWER WATERSHED

Energias de Portugal (EDP) is an electrical utility operating in 11 countries, though mainly in Portugal, Spain, Brazil and USA. It is responsible for the management of a hydropower system's reservoirs and canals in the Natural Park of Serra da Estrela, Portugal. The water retained in the reservoirs has other uses other than hydropower generation such as, agriculture and water consumption. In recent years, EDP has received an increasing number of requests from the Natural Park and local Authorities to minimize some known biodiversity impacts of these infrastructures and the appropriate water level in the reservoirs for recreational purposes. EDP was interested in understanding the overall costs and benefits provided by the watershed so that future decisions about this hydropower system could be better supported and also provide evidence to all stakeholders about the best management options. The valuation exercise involved calculating the Total Economic Value of the watershed for a baseline scenario of current use as well as projected use within 20 years time. The exercise also consisted of an Ecosystem Service Review to identify the main ecosystem services being provided by the watershed. It was found that the net present value of the watershed, for the current baseline scenario, is within 114,126,170€ - 127,076,183€. The results clearly indicated that power generation is the most important service provided by the watershed. This has allowed EDP to consider engaging with new markets, and thereby **enhancing revenue**, as the use of this approach demonstrates to potential buyers of Renewable Energy Certificates the overall benefits of the water system in the region, beyond CO2 emissions avoidance. The valuation results will also be useful for future renegotiations of mandatory financial securities as required under the EU Environmental Liability Directive, which may **reduce a large cost** for EDP. The approach and methodology used are being converted into a training kit for internal use, so it can help the company to scale up the ecosystem services approach for wider use (WBCSD, 2010).

The Economics of Ecosystem and Biodiversity (TEEB)[1], in 2010 put forward a three-tired approach towards the improved management of natural capital for the policy sector, the NGO sector and also for the business sector:

- Recognising the value of biodiversity and ecosystems: embedding the knowledge that they are both important and significant.
- Demonstrating the value of biodiversity and ecosystems through integrating information about their benefits and costs into the calculations and indicators that inform and influence decisions.
- Capturing biodiversity and ecosystem values, by using markets, prices and incentives to influence people's economic behaviour.

In terms of mainstreaming values into business operations (reflected in the 'demonstrate' and 'capture' components of the TEEB approach), there is no one recommended tool or process to do this. The process or tool that will be selected will depend on the financial resources of each business and the capacity to undertake these valuations. There is, however, a Natural Capital Protocol (NCP)[2], being developed by the Natural Capital Coalition that will provide clear guidance on how businesses can assess their impacts and dependencies on natural capital, and how they can manage these impacts better. Importantly, it will also include advice on how the results of the NCP are to be used and embedded in companies. Presently, businesses looking into mainstreaming natural capital into business decision-making should apply shadow natural capital costs to their financial decision-making. Four broad steps are involved in this:

1) Identifying - Build an understanding of the impacts and dependencies of natural capital relevant to operations, risk profiles, customer portfolios, supply chains and business opportunities.

2) Embedding - Use of methodologies and tools (or support their development) that can integrate natural capital considerations into the decision making process of all aspects of operations. Includes a scoping and planning phase that helps companies identify specific business goals and an appropriate analytical context for natural capital valuation, as well as elaborate a plan for the implementation of the natural capital valuation.

3) Accounting - Integrating natural capital values into accounting systems. [3]

4) Disclosing/reporting – Embed natural capital values into integrated reporting frameworks so that investors, stakeholders and third parties have a better understanding of natural capital risk exposure and opportunities.

[1] More information from: http://teebweb.org/training/about/teeb-the-initiative/#approach

[2] Due for publication in March 2016. Further updates available from: http://www.naturalcapitalcoalition.org/natural-capital-protocol.html

[3] A decision matrix and guidance on the type of accounting methodology available from http://www.biodiversityoffsets.net/natural-capital-accounting-business-guide-selecting-approach-report-european-business-biodiversity-bb-platform/

OPPORTUNITIES FOR BUSINESS INVESTMENT IN PROTECTED AREAS

Business investment in the protected areas of the Lower Mekong countries has the potential for healthy and sustainable business revenues.

According to a 2014 analysis by World Travel and Tourism Council international tourism accounted for up to 9.8% of global GDP and estimates that tourism is expected to continue to grow by 4.3% annually. In the Lower Mekong region the number of International Tourist Arrivals between 2002–2009 rose by an average of 10%. Protected areas, including National Parks and World Heritage Sites, are consistently the primary attraction for tourists interested in exploring natural areas and its wildlife across the world. An online survey by Trip Advisor in 2012 found that more than a third of travellers are found to favour environmentally-friendly tourism, including eco-friendly treks, community homestays, and are willing to pay between 2 and 40% more for this experience. In contrast to the steady state of growth by traditional mass tourism, ecotourism, nature, heritage, cultural and "soft adventure" tourism (such as snorkelling, casual bicycle tours, wildlife viewing etc) are taking the lead and are predicted to grow rapidly across the globe over the next two decades (UNEP, 2012). The United Nations Environment Programme and World Tourism Organization (2012) estimated that global spending on ecotourism is increasing at a higher rate than the industry-wide average growth in tourism. Given this context, the development of the eco-tourism sector within the Lower Mekong countries not only has the potential to expand and generate sustainable revenue for tourism businesses but it also provides the opportunity to protect and manage the natural capital of these protected areas in which these eco-enterprises iare based around. Interested businesses should therefore engage in active collaboration between local government and authorities, communities and local and national conservation NGOs to determine the feasibility of the establishment of eco-tourism businesses in specific protected areas, which should also include an assessment of the capacity of local communities to participate in eco-tourism ventures.

Participation in Payment for Ecosystem Services (PES) schemes that incentivize the protection and maintenance of ecosystem services also offer the potential for significant reductions in environmental and social governance costs as well enhanced security of sustainable supply chains. PES schemes function via an agreement between the investor (e.g. a private company) and the ecosystem service provider (e.g. a local community in a protected area) under which the service provider agrees to protect and maintain ecosystem services and the investor commits to providing a reward for this service. Due to their direct reliance on natural capital, in terms of business performance and productivity, and the ecosystem services that flow from this capital, the investors most likely to benefit from a PES scheme in the Lower Mekong region include:

- large scale downstream agriculture;
- commercial water users;
- electricity providers; and
- tourism industry.

A feasibility study of a PES scheme was undertaken by Fauna and Flora International in 2013, in the Stung Atay water catchment in Cambodia for forest protection and hydro-power generation with a protected area. It found that a 30% efficiency loss of electricity production from increased sedimentation, due to loss of forest cover, could lead to a revenue loss of US$180 million over 30 years, or an average of US$6 million per year for the Stung Atay hydro-dam. Investment in forest protection could mitigate the risk of reduced hydropower production, which would cost less than US$100,000 per year on an ongoing basis. This example illustrates that the cost of participation in a PES scheme, and thereby the protection of natural capital and its ecosystem services, is often very small when compared to the cost of the loss of these services for a business. By investing in the protection and management of ecosystem services, therefore, businesses can secure their supply chains and future productivity – and therefore profitability.

Forests provide valuable watershed protection, an essential ecosystem service for many water-dependent businesses.

RECOMMENDATIONS AND NEXT STEPS

Numerous businesses around the world are now aware of the business value of Earth's natural assets—and the business imperative of safeguarding them.

To ensure long-term financial sustainability, businesses seeking to invest in the Lower Mekong Region need to capitalise on the numerous economic, social and environmental benefits from valuing natural capital and mainstreaming this information into business operations.

Furthermore, the application of a Green Economy approach, whilst initial transitional costs from a BAU approach would likely be incurred, would result in longer term social environmental and economic benefits and would have fewer risks and longer term costs involved than the continuation of the BAU approach. Included within this approach is the greater engagement needed in the sustainable management of protected areas by the private sector. Businesses could also consider capitalising on the huge potential of eco-tourism opportunities within protected areas in the Lower Mekong countries. Furthermore, it is also recommended that businesses participate in PES schemes to ensure the protection and management of natural capital that a business relies on for its profitability.

WWF has a strong background in developing effective partnerships with the private sector that help to change practices throughout a business's operations and value chain (e.g. H&M, IKEA, Banco do Brazil). Please contact Susan Roxas, the Greater Mekong Regional Director for Marketing and Corporate Relations, for further information on how WWF can help (see contact details below).

More Information

Fauna and Flora International (2013). Investing in Catchment Management: A Feasibility Study Summary for an Incentive for Ecosystem Services Approach in the Stung Atay Catchment, in the Cardamom Mountains, Cambodia. Available at: http://www.ffi-spes.org/feasibility-study.html

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10.45 BILLION

Annual value added by switching to a Green Economy approach in the Greater Mekong, in USD

300 MILLION

Population of the Greater Mekong region

2.52 BILLION

Annual value added to harvested production when switching to a Green Economy approach in the Greater Mekong, in USD

38%

Regional Net Present Value added by GEG for ecosystem services that maintain water quality and flow

SUSTAINABLE FINANCE FOR CONSERVATION CASE STUDY SERIES

The WWF-Greater Mekong Sustainable Finance for Conservation case study series brings to light high quality examples of different models in the Mekong countries for economic valuation of natural capital, payments for ecosystem services and benefits sharing mechanisms.

Contact Information

Susan Roxas
Regional Director for Marketing and Corporate Relations
WWF-Greater Mekong Program Office
Email: susan.roxas@wwfgreatermekong.org

Chloe Hill
Green Economy Technical Advisor
WWF Greater Mekong c/o WWF Cambodia
Email: chloe.hill@wwfgreatermekong.org

Why we are here
To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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