



## Background discussion note

for workshop

# C: Markets for biodiversity goods & services

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# Building Biodiversity Business

Based on in-depth interviews and a detailed literature review, this forthcoming report provides a snapshot of the biodiversity business landscape. It reviews a range of biodiversity business sectors, assesses what has worked (or not) and why, describes the main constraints and identifies opportunities to expand market-based biodiversity conservation within each sector. The report also reviews the policy frameworks, technical resources and financing mechanisms needed to enable biodiversity businesses to grow, in each case highlighting lessons learned from experience and future opportunities.

The authors conclude that there are numerous pro-biodiversity business opportunities that can generate positive financial returns as well as real biodiversity benefits. Many initiatives have been established with impressive results – however, none have achieved significant scale or leveraged substantial private investment. There is a need to build on existing initiatives, recruit additional investors and entrepreneurs, and ‘raise the bar’ in terms of both the scale and conservation benefit of private investment. To this end, three separate but related institutional functions must be fulfilled: namely the development of appropriate enabling policy; the provision of technical and managerial support tailored to biodiversity business; and access to appropriate finance from investors who understand the particular constraints and opportunities of creating new businesses and markets.

Shell and IUCN plan to publish the final report by the end of 2007.

## Executive Summary

Biodiversity forms the foundation and fabric of life on earth but is eroding beneath the feet of human activity. In the poorest countries, the deterioration of the natural environment is making it increasingly difficult for millions of people to meet even bare subsistence needs. Equally, as countries prosper, society is becoming less tolerant of environmental damage and increasingly aware of the extent to which our economies depend on healthy and diverse ecosystems.

Successive international treaties and national strategies have committed governments to stem the tide of biodiversity loss. An imposing edifice of environmental policy is in place in most countries. As much as US\$20 billion per year is raised from public finance and private philanthropy for global conservation activities – much of this money is used to maintain over 100,000 protected areas covering nearly 12 percent of the world’s land surface. Yet all this is not sufficient. The fact is that current efforts to conserve biodiversity are overwhelmed by the adverse impacts of growing human economies. Spending on protected areas remains deficient and undervalued ecosystem services are being eroded.

If current approaches to conservation are not sufficient, what more can be done? One answer is to harness the very market forces that are often blamed for biodiversity loss. The challenge is to re-orient the economic incentives that drive private investment, production and consumption, and to make biodiversity conservation a viable business proposition in its own right. In other words: *building biodiversity business*.

Biodiversity business is defined in this report as: *'commercial enterprise that generates profits via activities which conserve biodiversity, use biological resources sustainably, and share the benefits arising from this use equitably'*.

This definition reflects the three over-arching goals of the United Nations Convention on Biological Diversity (CBD), which also calls for increased efforts to enlist the private sector in biodiversity conservation, sustainable use and equitable benefit sharing. In both the environmental and business communities, there is growing recognition of the potential to conserve biodiversity on a commercial basis. If even a small proportion of private capital flows, international trade and national economic output could be harnessed for biodiversity business, the resulting contribution to conservation would be enormous. Increased private investment in biodiversity business would have the greatest impact in developing nations, where the conservation funding gap is most extreme and where many critically endangered species and habitats are virtually unprotected today.

This report presents a snapshot of the emerging biodiversity business landscape, its constraints, opportunities and requirements. It is based on a 12-month study involving literature review, analysis and extensive consultation with practitioners, policy-makers, donors and commercial investors.

From a conservation perspective, a major attraction of biodiversity business is the potential to generate new and additional investment in conservation activities. At the same time, some people remain sceptical of the motives of the private sector; while others worry that market-based approaches may distort conservation priorities. Nevertheless, this report argues that *not* exploring what markets can deliver is no longer an option.

From a business perspective, the reasons to invest in biodiversity business are increasingly compelling. They are most obvious in cases where private profitability depends directly on the health of ecosystems – ecotourism ventures, for instance. Similarly, it is now recognised that greater variability in genes, species and ecosystems is associated with increased resilience and biological productivity in agriculture, ranching, forestry and marine fisheries. Even businesses in urban areas, lacking a direct interaction with the natural world, can be motivated by new policy incentives and changing consumer preferences to 'go green'. Corporate action on biodiversity can help businesses distinguish themselves from competitors while also improving relations with investors, employees, local communities and others.

New biodiversity business models may also help reduce rural poverty. While employment and skills development are a normal part of every business, biodiversity business has the added benefit that it often stimulates a flow of funds from relatively wealthy urban centres to the countryside, as well as from industrialized to developing nations. Growing markets for ecosystem services and for biodiversity-friendly energy, food, fibre and recreation should provide ample opportunities for rural entrepreneurship and employment.

Today, biodiversity conservation is mainly viewed by business as a risk or liability, rather than a potential profit centre. However, this perception is beginning to change. As public awareness of the global biodiversity crisis grows, an increasing number of companies see a business advantage in developing processes to integrate biodiversity into their operations, as well as seeking market-based solutions and opportunities. Furthermore, even with modest initial returns from most biodiversity business investments – in the range of 5 to 10 percent per annum – there are significant profits to be made as the sector grows from niche markets to mainstream business.

A broad spectrum of different sectors and models of biodiversity business are examined in detail in this report. Their status and trends are described, along with constraints and opportunities for investment.

Examples include organic agriculture and certified timber. By demonstrating the potential of more sustainable production practices, these businesses are showing the way forward for mainstream agriculture and industrial forestry – sectors historically responsible for significant biodiversity loss. Although accounting for less than 5 percent of the overall market today, the growth rate of sustainable or certified products is three to four times greater than the market average. The market for sustainably harvested timber and organic agriculture, for example, has been growing at double-digit rates.

Businesses that provide a range of ecosystem services in emerging markets such as water quality and watershed protection are also considered in the report. One major area of growth is the demand for climate mitigation services through 'biocarbon' – i.e. biomass-based carbon sequestration in forests and wetlands and through soil conservation.

Another biodiversity business is based on the search for new compounds, genes and organisms in the wild, known as bioprospecting, an industry that could be worth US\$500 million by 2050. The report also examines ecotourism, sport hunting and fishing. The latter sectors are already large and growing: ecotourism is expanding at a rate of 20–30 percent per year as compared to 9 percent for tourism as a whole, while private expenditure on recreational hunting and fishing is estimated at US\$70 billion per year in the USA alone.

Less conventional markets include biodiversity offsets, wetland mitigation, conservation easements and biodiversity banking. Such businesses can be based on either legislation or voluntary commitments that oblige companies to minimise the biodiversity loss resulting from

their activities and to offset (compensate) for residual losses by restoring or enhancing comparable sites. Emerging experience in Australia, Brazil, South Africa and the United States has shown that such approaches can make a significant contribution to conservation efforts and generate substantial business opportunities for offset providers, although there are concerns about the environmental effectiveness of offsets.

One major hurdle facing all biodiversity businesses is developing practical indicators for measuring negative impacts and positive contributions to biodiversity. Experience in some countries shows that biodiversity assets, in the form of endangered species or natural habitat, can be registered, tracked and even traded under appropriate regulatory frameworks. Nevertheless, the world still lacks agreed standards, methods and indicators for valuing ecological assets and ecosystem services.

The development of biodiversity business also depends on a conducive enabling environment, namely the framework of laws, regulations, taxes, subsidies, social norms and voluntary agreements within which companies operate. For businesses to value biodiversity, it must ultimately become more profitable to conserve biodiversity than to ignore or destroy it. A combination of increased rewards for conservation, increased penalties for biodiversity loss and increased information on the biodiversity performance of business will help to create a biodiversity-friendly economy.

In many countries, significant reform of the enabling environment may be required to enable biodiversity business to grow, particularly where existing policies are predicated on conservation of biodiversity by governments and charities, where the role of business in conservation is limited by law, or where policy incentives such as 'perverse subsidies' are causing continued harm to ecosystems.

Another constraint on biodiversity business is the lack of understanding between the worlds of business and nature conservation. Priorities, time scales and jargon all differ. Natural scientists often lack the financial acumen and consumer orientation of the private sector; conservationists typically lack business planning and management skills. At the same time, most business people lack understanding of how their companies' operations affect and are affected by biodiversity and ecosystem services, or how to manage biodiversity in their operations. In addition, the long-standing difficulties of integrating conservation and development agendas still remain. Nevertheless, new biodiversity business tools are being developed that can bring these worlds together and bridge gaps in planning, management and performance assessment.

Even with the best policies and tools in the world, biodiversity benefits will not materialise or be sustained unless biodiversity businesses survive long enough to become commercially viable. Access to patient capital for investment and expansion is a critical factor in the growth of biodiversity businesses. While most businesses depend on financial support from banks or

investors to cover initial start-up costs, in the case of biodiversity businesses there may be a need for some grant finance or subsidies to help entrepreneurs get beyond the pilot and learning phase and to stimulate demand for commercial conservation services.

Various existing financing instruments have been adapted for biodiversity business, ranging from grants to debt and equity finance. The experience of early and on-going initiatives can help guide the choice of an appropriate financing blend for new biodiversity businesses. While most biodiversity fund managers seek co-financing and prefer debt finance to equity, a range of innovative financial solutions are being tested that combine commercial and non-commercial investors. The integration of financing with technical and business support is increasingly common and can help ensure that biodiversity business delivers significant conservation outcomes as it grows.

These are early days for biodiversity business and there is much to learn. One clear need is for an integrated approach to building biodiversity business, combining policy advice, technical assistance and innovative finance, at a vastly increased scale compared to current efforts. This report outlines a proposed Biodiversity Business Facility, which would function as: (i) a think-tank, to address and influence the enabling environment and develop biodiversity business metrics; (ii) a business incubator, to build capacity and provide technical assistance to support new biodiversity business ventures; and (iii) a funding mechanism, to invest in and secure co-finance for growing biodiversity businesses. Although the eventual scope and form of such a Facility remains to be defined, its potential impact could be enormous. The first step is to assemble a portfolio of biodiversity business enterprise, in order to test, refine and demonstrate the viability of this new approach to conservation.

Around the world, there are mangrove forests that may soon be cleared to make way for shrimp farms, but which could instead be conserved through 'payments for ecosystem services' as natural fish hatcheries, storm buffers and water filtration systems. Similarly, there are thousands of fragments of degraded natural habitat which could be linked and restored, by means of biodiversity offsets, to form vital biological corridors for threatened species. And rural communities around the world could be supported to build the skills and networks necessary to market valuable non-timber forest products.

For such initiatives to flourish, for pro-biodiversity markets to develop, fixed ideas and institutional inertia need to be overcome. Experience is the best teacher and the coming years will be crucial to demonstrate, document and share the results of various market-based approaches to biodiversity conservation in different contexts.

Rhetoric is not sufficient. What is needed are more concrete examples of financially viable biodiversity businesses and functioning markets for ecosystem services. Only on the basis of practical experience will it be possible to convince all stakeholders – public and private – to work together to conserve biodiversity on a sustainable and commercial basis. The ultimate

aim of this report is to promote more informed experimentation and investment, based on a clear understanding of what biodiversity business needs to thrive.

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