The value of biodiversity
ACCA’s series of Friday Forums addresses sustainability issues relevant to the business community.

On 1 April 2011 ACCA focused on the value of biodiversity to the ecosystems which global human communities, businesses and non-human species critically rely, and on the role that accountants can play in assessing this value.

The key points raised at the event are summarised in this paper.

THE PANEL

The event was chaired by Stephanie Hime, biodiversity and ecosystems service specialist at KPMG, who previously worked for an EFTEC (an Economics for the Environment Consultancy), a company dedicated to producing research in environmental economics.

Joining Stephanie on the panel were Joshua Bishop and Carlota Garcia-Manas.

Joshua Bishop is chief economist, IUCN (International Union for Conservation of Nature). Joshua promotes economically-efficient approaches to nature conservation while presenting the case for conservation in economic terms. Joshua is also business and enterprise co-ordinator for the TEEB Study (The Economics of Ecosystems and Biodiversity), a major international initiative which aims to highlight the global economic benefits of biodiversity.

Carlota Garcia-Manas is head of research, EiRIS (a global responsible investment research organisation). Carlota leads on EiRIS’ research with particular emphasis on new methodology development, sector expertise and knowledge management, and has been an active member of the United Nations Environmental Finance Initiative/Global Reporting Initiative (UNEP-FI/GRI) working group that developed the financial industry sector supplement to the GRI guidelines.
INTRODUCTION

There is now a growing body of evidence and opinion which aims to highlight the importance of biodiversity to society as a whole, and the importance of assigning a value to ecosystems so that business can better appreciate how its impact on biodiversity can affect the bottom line. Ideally, this value should be assessed by independent observers, such as accountants, who are also practised in expressing such value in terms which are meaningful to business, and which can actively dissuade negative behaviours.

The Ethical Corporation, in their 2011 document Briefing Biodiversity, states: ‘Biodiversity depletion is happening so fast, it’s a case of price it or lose it’. This comment puts the argument in context. Biodiversity loss is a real threat to business sustainability, and the economic valuation of ecosystem services can be used as an immediate means of addressing the problem, aiding the conservation of biodiversity, revealing hidden value, and supporting strategic decision-making. Recent reports also show that consumers want to see the independent assessment of any commercial claims regarding biodiversity support, with a recent survey showing that 82 per cent of consumers in the EU, US and Brazil had ‘more faith’ in a company if its support for biodiversity was independently verified.1 Accountants – as auditors – can provide this independence, not least through the definition of appropriate standards and the verification of data.

‘Biodiversity depletion is happening so fast, it’s a case of price it or lose it.’
THE ETHICAL CORPORATION, BRIEFING BIODIVERSITY, 2011.

THE ECONOMICS OF ECOSYSTEMS AND BIODIVERSITY (TEEB) FOR BUSINESS

Highly influential in this debate is the TEEB study,2 a major international initiative which now represents a ‘state of the art’ analysis of the value of biodiversity to business, and the economic impacts that can result from bio-degradation.

TEEB was inspired by the Stern Review on the Economics of Climate Change, published in 2006, and was commissioned by the G8 Environment Ministers Meeting in 2007. Now administered by the UN Environment Programme, TEEB brings 14 international scientific and policy leaders together with over 500 editors, authors and reviewers, and is supported by financial donors and institutional partners from across the world, including government agencies, academic bodies and financial institutions. TEEB has already delivered a series of interim reports for policy makers and the business community at local, regional and national levels, providing an in-depth understanding of biodiversity trends and impacts.

Fundamental to TEEB is the definition of biodiversity as a ‘web of life’ comprising a variety of species (and with genetic differences between these species) and a variety of ecosystems. Together these underpin the livelihoods and well being of everyone on the planet, in (from the human perspective at least) a myriad of multi-layered relationships ranging from basic survival to freedom of choice.

Although human activity has sustained – and even enhanced – many ecosystems (such as agricultural land or managed forests), many more ecosystems are declining, and it is clear that those under particular threat are those which are ‘unpriced’, such as wild woods, fresh water and pollination. In answer to the question ‘why should business care?’, there are many compelling examples which demonstrate why any threat to biodiversity is a threat to business sustainability.

---


2. The Economics of Ecosystems and Biodiversity [website], <http://www.teebweb.org>.
As a starting point, it is important to note that much environmental impact research and analysis currently focuses on greenhouse gas (GHG) emissions, and on the contribution of industry to GHG production. Other impacts, however, from water abstraction to heavy metal pollution, are now being recorded and analysed more accurately.

As consumers and investors become increasingly aware of these wider impacts, and spend or invest their money accordingly, it makes good business sense to minimise all impacts on ecosystems as early as possible.

Dependence is another issue, and there is a growing awareness of the real cost to business when an ‘unpriced’ ecosystem is damaged. Pollination is one such ecosystem – essential across agriculture and beyond, yet currently threatened by ‘colony collapse disorder’ which mainly affects domesticated bees. Business needs a greater appreciation of the economic imperative to protect such ecosystems. In the case of pollination, this could mean improving habitats for wild bees, for example, or the development of backstop technologies to prepare for future threats.

Surveys undertaken by the TEEB team show that business leaders are becoming increasingly aware of the effect bio-impacts can have on aspects of their business ranging from corporate reputation to inward investment, and to ongoing operational efficiency. Regulatory change is a further driver, as is pressure from external stakeholders, whether NGOs or customers. In response, the TEEB study suggests that business should now focus on five key actions.

1. Set ambitious targets such as those already published by some of the world’s largest corporations (Rio Tinto, for example, sets a goal of ‘net positive impact on biodiversity’).
2. Measure, value and report activities against these targets – to do this business must make better use of the many measurement and valuation techniques available.
3. Set indicators at site, product and group level, covering processes and performance, with results relevant to internal and external reporting mechanisms, especially the annual report or separate sustainability report.
4. Make use of (and help improve) business tools for biodiversity management, both in sectors such as agriculture or tourism which have a direct impact on biodiversity, but also in terms of new business models such as biodiversity banking or water quality trading.
5. Support market friendly policies which actively attract investors, such as tax credits and other incentives, and promote initiatives such as voluntary certification and eco-labelling, and ensuring public access to information.

One TEEB publication, the ‘Synthesis Report’ published in October 2010, has already influenced some legislative changes (such as the EU timber directive which has resulted in companies up and down the supply chain being held to account). In terms of investors, TEEB has encouraged a growing interest in sustainability reporting, and in the mention of biodiversity within such reports; investors may not directly ask about biodiversity but are starting to take note if it does not feature at all. In the UK, the Treasury is also considering making sustainability reporting a mandatory element of a company’s annual reporting process.

Other impacts resulting from TEEB publications include an increasing interest among investors in responsible and sustainable commodity trading, for example in palm oil, forestry or fishing, or organic food. A ‘bio-offset’ strategy is also emerging, where Governments will demand compensation in kind for any biodiversity impacts resulting from commercial activity (and this is considered in more detail further on in this document).

---

REVEALING BUSINESS BIO-IMPACT RISK – THE IMPORTANCE OF IN-DEPTH ANALYSIS

Despite the extensive evidence provided by the TEEB study, from the point of view of the investment community the many complexities involved in analysing corporate bio-impact often compromise understanding, and therefore have little influence on investment decisions. The work of EIRIS (Experts in Responsible Investment Solutions) – an independent, not-for-profit organisation and a leading global provider of independent research into the environmental, social, governance (ESG) and ethical performance of companies – is challenging this position.

EIRIS looks at how companies manage the risks associated with the environment, in terms of their governance structures, their relationships with their stakeholders and with society, and their response to the specific concerns related to the industry sector in which they operate. The current methodology used in such analyses tends to focuses on the negatives (clearly identifiable impacts such as oil spills, for example) and on a company’s biodiversity dependences. Biodiversity risk is then assessed, and adjusted according to the way the company manages this risk; for example, whether a company has a biodiversity action plan, whether it is in dialogue with NGOs, communities or consumer groups, or whether it had already identified risks and opportunities and possible ways to improve performance as a result.

Risk has therefore become a key measure of bio-impact as not everything can be monetarised, and although relative value enables a better comparison, risk is an important indicator where value is difficult to quantify. There is, however, a lack of standard metrics available for the assessment of risk, which also means a lack of useful comparable data both within and across sectors which enables companies to fully understand these risks. Such data could also reveal the hidden value in biodiversity management, revealing opportunities which will allow companies to stay ‘ahead of the curve’.

There is also the need to understand that the measurement and analysis of risk for companies with direct footprints – ie those in the mining sector – is very different to that for companies with relatively small footprints compared to those of their suppliers and customers. Proximity to a much larger footprint needs to be acknowledged and a different approach to risk assessment developed as a result.

EIRIS has therefore concluded that a closer analysis of company performance is required in order to fully reveal any risk of bio-impacts. For example, EIRIS now looks for allegations of breaches of international conventions with regards to areas of high sensitivity or endangered species. It also looks at how such issues are being addressed both at Board and at site level, including mitigation systems, targets and reports.

By broadening the analysis in this way, EIRIS has found that many high and medium-impact companies are not managing their biodiversity risks well.

Biodiversity is still not considered a key criteria when preparing CR or sustainability reports and there can be a disconnect between issues such as biodiversity and climate change.

Reasons for these weaknesses could be primarily regulatory, as biodiversity is lagging behind other environmental issues in terms of protective legislation. In addition, whereas some industries have a good understanding of the links between their operations and biodiversity (for example, between water supply and forestry), in sectors where the relationship is not so direct, or less clear cut, understanding is also less immediate.
To address this, EIRIS is promoting greater awareness of the hidden value of biodiversity, in order to encourage a better understanding of the importance of biodiversity protection. Specific analysis tools are now needed, and EIRIS is launching one such tool – for the analysis of water use – as a result. EIRIS also advocates a more proactive approach from the investor community as this can be an important driver for change. Investors must become more willing to engage with the issue of biodiversity and to understand the effect of negative impacts on the companies within their portfolios. If investors collaborate with organisations such as EIRIS, this will promote greater understanding, which will in turn encourage companies to give biodiversity more prominence within their business strategy.

ESTABLISHING INTERNATIONAL STANDARDS – AVOIDING ‘GREENWASH’

To promote greater understanding of the consequences of bio-impacts, dialogue must be sustained, but this dialogue also needs to be multi-stakeholder and international. National strategies are welcomed, but if national regulations cannot be applied internationally then a wide range of biodiversity impacts will not be covered. Initiatives such as those launched by the GRI and the EU are therefore more effective than those promoted by an individual Government. Governments do have a role to play in areas such as tax incentives, but could be more proactive. At present they often come in after the fact, as was demonstrated by the drive to control carbon emissions – this issue was first identified by academics, then championed by NGOs, before finally being legislated for by governments.

At the level of an individual company, testing ‘on the ground’ is one way to assess the real impact of any biodiversity policy and if such testing is matched against a company’s own performance-based analysis, the results can be used to overtly challenge any suspected ‘greenwash’ which can threaten to undermine the trust of stakeholder groups, from local communities to investors, and especially consumers. Credible standards are therefore crucial, and will improve the management of any ecosystem, but these standards must reflect the very intricate links that comprise the ecosystem in question. In terms of forest management, for example, the widest possible involvement by all those involved in using a forest as a commercial resource will ensure the development of the best standards, but these must also be backed by independent certification. Not everyone will be satisfied with the end result, and some groups will be left behind, but these political difficulties are a necessary part of the process.

There are also lessons to be learnt from the global reaction to climate change evidence. Firstly, business should measure its footprint and act on the findings. Secondly, biodiversity reporting should become more rigorous, moving away from the often anecdotal reporting currently seen today. If a company says it is having a positive impact on biodiversity then it must be able to prove this through rigorous metrics, demonstrating the scope of its activities, showing how any adverse effects are being mitigated, and aligning its reporting with established standards in order to maintain credibility.

EXTENDING THE SCOPE OF BIO-IMPACT ASSESSMENT

As well as undertaking its own bio-impact assessment, every company should analyse its supply chain, and proactively mitigate and offset any bio-impacts identified as a result. Traceability is becoming a very important issue, and the unwitting use of possibly illegally sourced materials can now lead to legal action, and associated poor market response (as evidenced by the recent discovery of illegal timber used in the production of Gibson guitars in the US). A myriad of technologies now exist which can be used to counter many bio-impacts, and these should be fully explored by any company facing potential bio-impact risks.

Financial institutions, such as banks, can also find bio-impact assessment challenging given the multiple investment portfolios a bank will hold, many for companies without a strong record in biodiversity reporting.
Banks can play an important role in driving the biodiversity agenda by refusing to support those organisations that undertake activities that could have an adverse effect on biodiversity. Responsible finance strategies can include the protection of biodiversity as a loan requirement, and the more frequent request for bio-disclosure. Banks should also recognise that biodiversity also offers new business opportunities, such as those already emerging in carbon and water trading, which aim to reduce the financial risk involved in minimising bio-impacts. So although banks themselves may have only a limited footprint, in terms of office practices and so on, their influence in this area can be significant.

**OFFSETTING AS AN OPTION FOR BIODIVERSITY CONTROL**

Offsetting is already well established as a carbon management and reduction tool, but its use in bio-impact mitigation is more contentious. It is not impossible, however, and one approach is to recognise that although biodiversity may not be easy to ‘price’ it does still have a value. In this respect it operates within a marketplace similar to that for real estate or art, where value is very much determined by context, location and time.

Compensation through biodiversity offset is therefore usually in kind, and the metrics used to evaluate such compensation are often based on a study of similar ecosystems near by. Mitigation ratios also exist, based on exemplar such as the impact of industry on US wetlands; the EU Environmental Liability Directive also looks at the issue of how to compensate for damage to different ecosystems.

A key feature of any compensation strategy is that mitigation must have a local effect as it is the local community which suffers when their ecosystem is damaged.

**CONCLUSION**

Business has clearly some way to go before biodiversity is on an equal footing with carbon in terms of offsetting, trading or mitigation. However, recent threats to business from damaged ecosystems – resulting either from natural events or the direct impact of human activity – have highlighted both the dependence of business on biodiversity, and the economic importance of sustaining biodiversity wherever possible.

By assigning real value to biodiversity, determined by independent assessment, business will start to appreciate the potential costs involved if an ecosystem is damaged – perhaps beyond repair – and therefore the cost-benefits of early bio-impact mitigation.

Accountants can play a fundamental role in establishing the standards required to ensure such valuation is consistent, accurate and relevant, and therefore provide a real incentive for changed behaviour.