Is natural capital a material issue?

An evaluation of the relevance of biodiversity and ecosystem services to accountancy professionals and the private sector

A report from ACCA, Fauna & Flora International and KPMG

About ACCA www.accaglobal.com

ACCA (the Association of Chartered Certified Accountants) is the global body for professional accountants, supporting 154,000 members and 432,000 students throughout their careers, and providing services through a network of over 80 offices and centres. ACCA works to strengthen a global profession that is based on the application of consistent standards, which ACCA believes provide the best support for international business and the desire of talented people to have successful, international careers. ACCA champions the needs of small and medium-sized business (SMEs) and emerging economies, and promotes the value of sustainable business.

About Fauna & Flora International www.fauna-flora.org

Fauna & Flora International (FFI) protects threatened species and ecosystems worldwide, choosing solutions that are sustainable, on the basis of sound science and taking account of human needs. Operating in more than 40 countries worldwide – mainly in the developing world – FFI saves species from extinction and habitats from destruction, while improving the livelihoods of local people. Founded in 1903, FFI is the world's longest-established international conservation body and a registered charity. Through its global corporate partnerships, within the Business and Biodiversity Programme, FFI aspires to create an environment where business has a long-term positive impact on biodiversity conservation. FFI leads the **Natural Value Initiative (NVI)** collaboration (**www.fauna-flora.org/initiatives/nvi**). To date, the NVI has released a series of valuable publications and tools that address biodiversity and ecosystem services within the finance, extractive, pharmaceutical, and agricultural sectors.

About KPMG www.kpmg.co.uk

As sustainability and climate change issues move to the top of corporate agendas, KPMG in the UK's Climate Change and Sustainability Services (CC&S) practice assists organisations by providing sustainability and climate change Assurance, Tax and Advisory services to organisations, helping them apply sustainability as a strategic lens to their business operations in order to better understand the complex and evolving environment, optimising their sustainability strategy.

For more information, please visit our website:
www.kpmg.com/UK/en/services/Audit/Pages/ClimateChangeandSustainabilityServices.aspx

We are on the brink of a potential crisis from the combined effects of ecological degradation and population growth. Natural resources on which society and business are dependent are being lost at an unprecedented rate. This loss of natural capital is posing a new array of risks to business ranging from increasingly severe competition for access to resources, to tightening regulation and greater and more costly hurdles to accessing finance. The Rio+20 meeting saw over 50 countries and 89 private sector organisations make formal commitments on natural capital. A trend is emerging that attempts to use accounting practices to give better understanding of the implications of the loss of natural capital for governments and for business.

How prepared is the accounting profession to respond?

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Foreword

Business and government leaders from around the world are increasingly sounding the alarm about the significant impact of human activities on the natural environment – affecting its capacity to provide the goods and services we rely upon, and consequently resulting in a clear cost to business. Such is the concern of business and government that the recent Rio+20 UN conference on sustainable development saw CEOs of 39 financial institutions, including banks, investment funds, and insurance companies, make a formal commitment to work towards integrating natural capital considerations into their products and services.

Shareholders are becoming increasingly engaged with the issue. Alongside this, governments are exploring regulatory or policy changes to encourage the sustainable use of biodiversity and ecosystem services (BES) through the development of frameworks for national ecosystem services accounting.

The commitment at Rio+20 demonstrates the growing realisation that all economic activity is either directly or indirectly linked to natural capital, and action is needed. Nonetheless, this link has yet to be measured and addressed widely by the corporate sector. As all aspects of business are ultimately linked to and influenced by trends in natural capital, this highlights a risk to business, which could ultimately lead to business failure.

The question remains: how do we effectively measure, assess and report to business on the economic impacts of natural capital on business?

ACCA has long recognised that companies ignore the need to account for non-financial issues: natural capital is no exception. The accountancy profession and the business world need to start urgently considering the extent to which they are drawing down natural capital and how the erosion of such capital will affect business. New accounting, valuation and reporting techniques are required; different approaches to risk identification, materiality processes and the internalisation of externalities are needed.

ACCA, together with its partners KPMG and Fauna & Flora International, has been exploring the relevance of natural capital to accountancy professionals and the corporate sector. This report aims to continue to show the relevance of non-financial accounting to its members and students, as well as demonstrating the tangible role the profession can play in managing corporate impacts and dependencies on natural capital. It demonstrates how some among the business community are integrating natural capital into their decisions, and that accounting for it is paramount.

Helen Brand, Chief Executive, ACCA

ACCA

Nature underpins business in countless ways. For many years humanity has failed to place a value on the resources obtained from the environment – freshwater, healthy soils, stable climates, pollination. Our days of securing such resources at no cost are numbered. As biodiversity and ecosystems are degraded, the ecosystem services that are derived from them (and form a large part of the natural capital on which we rely) decline. Society, and business as a part of that, is increasingly living off the capital of the natural world rather than the interest. Basic economic theory suggests that this is unsustainable.

FFI welcomes a move by regulators to understand the true value of these services to mankind and business and to take steps to protect them. Such steps are giving rise to a range of risks and opportunities for businesses. These are hitting their bottom line. As the issue becomes increasingly material to companies, it will increasingly feature in their risk analyses and disclosures. FFI believes that the measurement and disclosure of this issue is absolutely key to enabling stakeholders such as investors, government and civil society to hold to account poor performers while rewarding those who adopt a proactive stance on the issue.

Mark Rose, CEO, Fauna & Flora International

FAUNA & FLORA INTERNATIONAL

KPMG's UK Climate Change and Sustainability practice helps clients to understand how global sustainability mega-forces affect their businesses and to implement sensible solutions that reduce the risks and unlock opportunities. 'Ecosystems and Biodiversity' is one of ten mega-forces that KPMG highlighted in the report *Expect the Unexpected*, published earlier this year; KPMG is convinced that businesses will increasingly be held to account for their impacts on the natural environment and that they need to think now about how they should respond.

Further evidence of the trend came at the recent Rio+20 UN Conference on Sustainable Development, where the CEOs of 39 financial institutions, including banks, investment funds, and insurance companies, committed to working towards integrating natural capital considerations into their products and services. This means they will take account of ecosystem impacts when deciding whether and how to provide finance.

As a result, many businesses could find that their impacts on nature directly affect their credit worthiness, balance sheets and company values within the next five to ten years, as moves to place an economic value on 'natural capital' accelerate.

With that in mind, urgent work should be done to find practical ways to assess and report on the natural capital impacts of business and to use those assessments in formulating future strategy. CFOs and accounting professionals must be at the centre of this work, which is why KPMG's UK Climate Change and Sustainability practice, has been pleased to join with ACCA and Flora & Fauna International on this important report. By setting out a series of recommendations on natural capital loss, materiality and disclosure, the report makes a timely and useful contribution to this process.

Vincent Neate, Head of Climate Change and Sustainability, KPMG in the UK

KPMG

Executive summary

This report investigates the concept of materiality and how it is used to identify issues for management and disclosure. It is aimed at accountancy professionals and business leaders. It explores the extent to which materiality definitions currently reflect the increasing significance of ***natural capital*** as a business issue. A survey of over 200 accountancy professionals, interviews with CFOs/senior management from eight major companies, a disclosure survey of corporate reporting by 40 organisations in specific sectors, and desk-based research into relevant literature and work in the field were all undertaken as part of this work. The report focuses on **biodiversity and ecosystems**, which are specific constituents of natural capital that give rise to **ecosystem services** (see **Box 1** for definitions of these scientific terms). The report does not consider the specific impacts on geological resources as these are routinely included in market transactions and accountancy practices.

Natural capital is the stock of capital derived from natural resources such as biological diversity and ecosystems, in addition to geological resources such as fossil fuels and mineral deposits. It provides the ecosystem products and services that underpin our economy and provide inputs or indirect benefits to business.

Biodiversity and ecosystem services (BES) are in decline globally. This trend is predicted to continue as the world's population grows and demands on natural resources increase (see **Box 2**). Loss of BES exposes the corporate sector to a range of new risks and opportunities that can affect profit, asset values and cash flow. Yet BES issues are often overlooked in materiality assessments[1] owing to low or uncalculated market-based values.

The concept of materiality as a driver of action

As part of overall corporate governance, companies may go through a risk-prioritisation process to identify those issues on which to focus management effort. Further filters may then be employed if companies choose to disclose specific issues to stakeholders (see ***Figure 1.1***).

Box 1: Definitions of biodiversity and ecosystem services (BES)

Biodiversity: The variability among living organisms from all sources at a species, habitat and genetic level – a constituent of natural capital.[2]

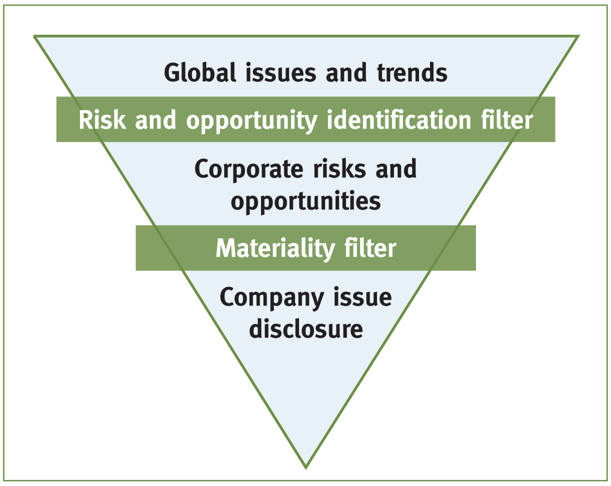
Ecosystem: A dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit,[3] e.g. ecosystems include deserts, coral reefs, wetlands or rainforests.

Ecosystem services: The benefits, closely dependent on biodiversity, which human beings obtain from ecosystems.[4]

Box 2: The value of ecosystem services (ES)

- The loss of the pollination services from bees in Britain would cost the UK economy GBP 1.8 billion per annum[5]
- Conserving forests avoids greenhouse gas emissions worth US$ 3.7 trillion over the long term (net present value)[6]
- The costs of cumulative losses of ecosystem services in the 50-year period to 2050 will be equivalent to 7% of GDP by 2050[7].

Figure 1.1: Risk and opportunity identification



> Only a very short time ago, we were drawing blank looks when we mentioned natural capital accounting… At Rio, everyone is talking about it.[i]
>
> Rachel Kyte, Vice President for Sustainable Development, World Bank

Material issues are those issues that could influence the users of financial accounts. Key stakeholders such as investors still largely judge corporate performance on the basis of measures of financial materiality. Many environmental and social issues, including BES, are rarely considered to be material by companies, despite increasing concern from civil society. The concept of materiality underlies principles of corporate disclosure. Unless the materiality of BES as an issue can be demonstrated, the arguments for its inclusion within corporate disclosures, and by association corporate strategy and management systems, are weak. Yet action by civil society suggests that BES loss is an increasingly significant issue for business and society as a whole.

A changing landscape of risks

The Principles for Responsible Investment[ii] show that 50% of company earnings could be at risk from environmental externalities – equivalent to 11% of global gross domestic product.[8] In addition, full environmental costs of production in 11 key industry sectors could account for a considerable proportion of earnings (earnings before interest, taxes, depreciation and amortisation – EBITDA), this would have amounted to 41% in 2010.[9] It is becoming increasingly accepted that a significant volume of financial flows are not accounted for in corporate accounts. Furthermore, it is becoming clear that the costs of these externalities are being borne primarily by governments and society more broadly. At least some of these externalities will at some point be internalised. Thus, the links between BES and corporate value through impacts on share price are strengthening. Shareholders are becoming increasingly engaged on the issue. Alongside this, governments are exploring regulatory or policy changes to encourage the sustainable use of BES through the development of frameworks for national ecosystem services accounting and by evaluating the status and economic value of ecosystem services.

Natural capital and materiality

As shareholder attention on BES issues grows, these issues are beginning to feature in management disclosure and analysis – the qualitative part of the annual report and accounts, or within separate sustainability reports. There are also some instances where an item or issue might be measurable in financial terms and therefore included in the quantitative elements of the accounts.[10]

- There have been planning restrictions as a result of impacts on natural capital and associated decreases in company share price. For example, in 2012 the Canadian Gold mining company, Infinito Gold, lost permission to develop a mine as a result of the potentially significant impacts on agriculture, forests and endangered species.[11] This led to a decrease in share value of 50% (see ***Figure 4.1***, page 20) and a reference in the annual report to material uncertainties regarding the company's ability to continue as a going concern.[12]

- Clean-up costs from the 2010 Gulf of Mexico oil spill and associated compensation claims for ecological damage have affected both BP's balance sheet and its profit and loss. The company's 2011 annual report included a \$3.5 billion provision related to clean-up costs and a \$7.8 billion provision related to litigation and claims associated with the spill.

- There have been delays in securing permission to develop as a result of concerns about natural capital. For example, Newmont Mining Corporation in Peru experienced significant delays as a result of concerns about the impacts of the mine on water availability. This not only resulted in costs associated with the delay, but also required an investment of approximately \$150 million from the investment partner, Minera Yanacocha.[13]

[i] Source: http://blogs.worldbank.org/voices/rios-buzzing-about-natural-capital-accounting

[ii] The United Nations-backed Principles for Responsible Investment have been devised by the investment community to provide a voluntary framework by which all investors can incorporate ESG issues into their decision-making and ownership practices and so better align their objectives with those of society at large.

Key findings

Perceptions of risks and opportunities associated with BES are variable within the accountancy profession: not all companies that are considered high risk in terms of their impacts or dependence on BES by stakeholders evaluate that risk. Nonetheless, some of the accountancy profession routinely include such issues within business risk evaluations (see **Box 3**). Furthermore, a small but significant proportion of companies, such as Iberdrola and EON, include BES in their materiality reviews. In general, however, the focus on financial measurement for determining materiality acts as a barrier to the identification of BES issues as material.

Box 3: Highlights from a survey of the ACCA membership

A survey was sent out to the ACCA membership to gather their views and activities on natural capital. Respondents were skewed towards those in senior management posts, such as CFOs, CEOs or other senior managers.

Key findings included:

- 60% of respondents agreed that the natural world was important to their business
- more than half of the respondents had included natural capital issues in their company's business risk evaluations at some point
- 49% identified natural capital as a material issue for their business and linked it to operational, regulatory, reputational and financial risks
- there was a relatively low response rate of less than 1% (218 members) compared with an average response rate of around 3% in other ACCA surveys.

Corporate BES disclosures, as currently practised, are too limited to provide insights into risk management: a handful of companies in sectors with high environmental impact are reporting substantial detail on BES, but the majority are reporting little or no information owing to the perceived immateriality of the issue. In fact, this is at odds with stakeholder expectations, including those of some of the investment community who are looking to companies to disclose on the matter.

Existing financial reporting and disclosure standards can be applied to the issue of BES: in some cases, an item or issue relating to BES is measurable in financial terms and, therefore, included in the quantitative elements of the accounts. The interpretation and application of International Financial Reporting Standards (IFRS), such as those on business combinations, and International Accounting Standards (IAS), such as those on impairment of assets, agricultural or intangible assets, could be influenced by natural capital loss in some sectors. In practice, many significant risks and opportunities are unquantified, cannot be easily valued, and are therefore excluded from the accounts.

Companies in a range of sectors are exploring the use of valuation techniques to assist in decision making, alongside other means of identifying and evaluating risk: some, such as Rio Tinto and Eni, are testing the use of environmental economic valuation in informing business decisions; others are using stakeholder dialogue or enhanced environmental impact assessment processes that include consideration of BES.

There are a number of barriers to corporate action: these impede companies from effectively determining risk and opportunity exposure on BES. These barriers include the lack of a standardised business case, low and lacking market values for BES and certain accounting principles. The accounting and business communities also lack awareness on natural capital issues.

Understanding of the concepts and terminology: although there is broad understanding of terms such as biodiversity and ecosystems, the terms ecosystem services and natural capital are less well known, reflecting the relatively recent emergence of these issues as business risks.

Recommendations

Targeting its two key audiences – CFOs and accountants – this report's recommendations are focused on the five key themes that form the overarching issues discussed within the report as follows:

- Engage with experts and develop skills: follow guidance being produced by expert groups on how to address BES.
- Identify externalities to internalise impacts on BES.
- Define materiality to ensure that all risks and opportunities posed by BES are picked up.
- Consider the use of valuation methods if and when appropriate.
- Enhance disclosures on natural capital.

CFOs should:

- engage with experts to understand the level to which their organisations depend on natural capital; this would include understanding the degree to which company revenues, costs and going concern status rely on natural capital (both directly and indirectly)
- ensure that risk and materiality assessments consider natural capital; by doing so, CFOs will be able to determine if the various risks posed by declining natural capital will have a material impact on their organisations and implement mitigation strategies to avoid negative impacts on corporate value
- work with finance teams to develop the skills and capacity for accurate assessment of a company's impact or dependence on natural capital
- disclose material natural capital impacts and dependencies, guiding the development of robust disclosure and assurance systems to ensure data quality
- use their board position to educate other board members on the importance of BES within key management and strategic decisions
- consider whether natural capital can be incorporated into financial accounts, and engage with the IASB or local accounting standard setters on how current accounting standards can be improved to address the topic more fully
- engage with organisations such as IIRC or NCD[iii] that want to develop tools to account for natural capital
- learn from those already engaged with these issues, and consider how the tools that are used by these companies can be applied to their own operations.

Accountants should:

- draw on their core skills and expertise in accountancy to contribute to the development of potential natural capital accounting methodologies to aid the quantification and management of company externalities
- call on accountancy bodies to provide guidance on how to address natural capital within company annual reports and accounts, as well as sustainability reports
- follow and track new guidance that becomes available within the area of natural capital
- engage with experts to increase skills through workshops and training
- pilot or trial natural capital accounting methodologies with clients, where appropriate, and use this experience to work with regulators on disclosure guidance and assurance practices.

An emerging challenge

The challenge for the accountancy profession will be to determine when the loss of natural capital will require an enhanced understanding and approach to business-risk assessment and corporate disclosure. Doing so too late may lead to failures when anticipating future risks and their associated costs to business. It may also lead to overlooked opportunities to increase supply chain resilience, secure and maintain licences to operate, and enter new markets.

[iii] Natural Capital Declaration

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Endnotes

[1] Joshua Bishop (ed.) (TEEB), *The Economics of Ecosystems and Biodiversity in Business and Enterprise*, London and New York: Earthscan, 2010.

[2] *Convention on Biological Diversity, Article 2. Use of Terms*, UN Conference on Environment and Development, 1992.

[3] Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: A Framework for Assessment*, Island Press, 2003.

[4] *Ibid.*

[5] Tom D. Breeze, Stuart P.M. Roberts, Simon Potts, Simon G. Potts, *The Decline of England's Bees: Policy Review and Recommendations*, University of Reading, 2012.

[6] *Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB*, TEEB, 2010

[7] *The Economics of Ecosystems and Biodiversity: An interim report,* TEEB, 2008.

[8] *Universal Ownership: Why Environmental Externalities Matter to Institutional Investors*, PRI & UNEP FI, 2010.

[9] *Expect the Unexpected: Building Business Value in a Changing World*, KPMG, 2012.

[10] Joshua Bishop (ed.) (TEEB), *The Economics of Ecosystems and Biodiversity in Business and Enterprise*, London and New York: Earthscan, 2010.

[11] Alex Leff, 'Costa Rica court annuls Infinito Gold concession', *Reuters*, 24 November 2010. *http://www.reuters.com/article/2010/11/25/costarica-gold-idUSN2425147520101125*

[12] *Consolidated Financial Statements For the Years Ended March 31, 2011 and 2010*, Infinito Gold Ltd., 31 March 2011. *http://www.infinitogold.com/i/pdf/2011Q4_FS.pdf*

[13] 'Peru's Buenaventura: Minas Conga Reservoirs to Cost About $150 Million', *The Wall Street Journal*, June 2012. *http://online.wsj.com/article/BT-CO-20120627-713933.html*

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