

# Linking shareholder and natural value

Managing biodiversity  
and ecosystem services risk  
in companies with an  
agricultural supply chain

## Executive summary

October 2009

# Foreword

Over the last decade a broad consensus has developed that climate change and biodiversity loss are among the main challenges facing mankind in the 21st century. The loss of species, the destabilisation of ecosystems and the resulting loss of ecosystem services are threatening human wellbeing and economic development and are obstructing poverty alleviation. It is vital that governments, NGO's, scientists and the business community join forces to halt biodiversity loss and develop ways and means to sustainably use our natural resources. Time is running out, and we need to take responsibility now.

The Dutch government has recently updated its Biodiversity Policy Programme. Under the programme, collaboration with the private sector is a priority, and I am dedicated to contributing to a successful partnership. Facilitating the development of tools and instruments that allow investors, shareholders and companies to review company performance and develop best practice approaches is one way of doing that. I was therefore delighted to support the development of the Ecosystem Services Benchmark. The first testing, reported in this document, shows promising results and clearly illustrates that a growing number of companies are actively managing their biodiversity impacts and the natural resource base. I hope that the benchmark, together with other instruments, can further this trend through periodical reviews in a learning-by-doing process. I congratulate the Natural Value Initiative for the excellent work done, and stand ready to collaborate in the future.



**Dr. Jacqueline Cramer**

Minister for the Environment, The Netherlands

Biodiversity has a hugely significant role in providing goods and services to society (such as the ability of the Earth to regulate its climate or access to pollinators) that are simply not valued in today's markets. What is more, markets have historically worked largely in favour of habitat loss, overexploitation of species, spiralling pollution and climate change. One of the reasons for this is that the costs of using these resources unsustainably are borne by the planet, rather than by the supplier and end-user.

A discernible shift in political thinking seems to indicate that we are beginning to move in the right direction. The agreement by the G8 and five newly industrialised nations (China, Mexico, India, Brazil and South Africa) to produce a Stern-equivalent review on the value of ecosystem services provides evidence of a change in attitude. Although the study will not conclude until the end of 2010, it is likely to advocate further development of market-based mechanisms that reward sustainable use of ecosystem services.



Fauna & Flora International (FFI) is delighted to be contributing to this important review through the production of this report. In it we summarise the findings of the Ecosystem Services Benchmark, the first investor-focused tool to evaluate company impact and dependence on biodiversity and ecosystem services. The level of activity on this emerging issue is encouraging. However, so much more is needed and fast if we are to have a hope of halting the devastating decline in these vital services on which all of us rely.

**Mark Rose**

CEO, Fauna & Flora International

The degradation of natural habitats by anthropogenic activities has already caused the extinction of several species, and is putting many others in danger. The environmental imbalance caused by such degradation is seriously affecting the functioning of nutrient cycles, water cycles, climate regulation and all the other environmental services that we depend on.

These issues are well known and have been proven by science over the last four decades. In the 21<sup>st</sup> century, the new “economy of nature” is now, not only a theory in academic papers, but a reality. We still have a long way to go until business and society recognize the value of these vital ecosystem services.

The Natural Value Initiative will play a major role in enabling and deepening the shift in the pillars of the world’s macro-economy as it demonstrates the importance of biodiversity and ecosystem services risks and opportunities to the financial sector. The success of companies in the future will not only be judged by economic criteria alone, but also by the measures implemented to reduce its impacts and dependence on scarce natural resources and, consequently, guarantee its productivity in the medium to long-term. The Centre for Sustainability Studies at FGV believes that this is one of the most important changes required to shift our development to a more sustainable path and we are proud to be part of the process.



**Mario Monzoni**

Director, Centre for Sustainability Studies, Fundação Getulio Vargas

The finance sector can play a significant role in incentivising companies to value and account for biodiversity and ecosystem services within traditional frameworks of business risk. An important enabler of this is the ability of investors to understand and quantify risk and opportunities at a portfolio and individual company level. The rapidly declining levels of biodiversity and associated loss of ecosystem services is clearly significant for society as a whole. However, as yet this significance has not yet been translated to material risk exposure on a company level. We hope that the ongoing review by UNEP and partners of the economics of ecosystems and biodiversity – known as TEEB – will provide further evidence of materiality and risk.

In our 2008 briefing to CEOs on biodiversity and ecosystem services – *Bloom or Bust?* – we encouraged the finance sector to take action on the issue of biodiversity and ecosystem services. It is heartening to see investors moving forward on this recommendation and tools emerging to assist them in this. The Natural Value Initiative and its results clearly have an important role to play in the development of these tools and we encourage investors within our membership to follow its recommendations. In closing, I would like to pay special thanks for work beyond the call of duty by Annelisa Grigg, formerly of Fauna & Flora International, and UNEP FI team member, Susan Steinhagen, responsible for our work on biodiversity and ecosystem services.



**Paul Clements-Hunt**

Head of Unit, UNEP FI

# Executive Summary

Each year, it is estimated that we are losing ecosystem services, with an annual value equivalent to around €50 billion, from land-based ecosystems alone. This loss has important implications for the long-term viability of the businesses dependent on these services, in particular those with agricultural supply chains.

As Biodiversity and Ecosystem Services (BES) decline, this is increasingly translating to business risk and opportunity linked to reputational risk, security of supply and legal compliance. Our survey of 31 companies in the food, beverage and tobacco sectors painted a picture of early stage response, of pilot projects, developing but incompletely applied management tools and reactive rather than proactive management. Companies differed in their approaches, a number showed innovative and forward thinking practices. Even these failed to demonstrate comprehensively applied risk assessment processes. Hence, risks may be unmanaged and opportunities to build shareholder value missed.

## 1.1 Overview

The 2008 global financial meltdown has raised the sensitivity of individuals, companies, investors and governments to unmanaged risks. The role that the financial sector plays in enabling BES loss and damage is increasingly apparent, and there is clear evidence that failure to manage BES risks has direct and tangible impacts on financial performance, reputational risks and long-term depositor commitments.

A number of institutions have recognised that these impacts exist. The International Finance Corporation has safeguard policies, for example, which require avoidance, management and compensation of impacts on BES. The Equator Principles (to which 60 financial institutions are now signatories) follow these safeguard principles. Asset managers such as F&C Investments and Insight Investment both have programmes in place on biodiversity.

Recognition of BES as a business risk is not yet widespread in the finance sector, but is growing. Yet tools are lacking that effectively evaluate this risk.

### Box 1 Defining ecosystem services

**Ecosystem services** — also called ‘environmental services’ or ‘ecological services’ — are the benefits that people obtain from ecosystems. Examples include freshwater, timber, climate regulation, protection from natural hazards, erosion control and recreation.

Biodiversity itself plays a vital role in sustaining our agricultural system – from providing pollinators, to regulating water quality and quantity and ensuring soil quality.

A company **depends** on an ecosystem service if that service functions as an input or if it enables, enhances, or influences environmental conditions required for successful corporate performance. A company **impacts** an ecosystem service if the company affects the quantity or quality of the service.

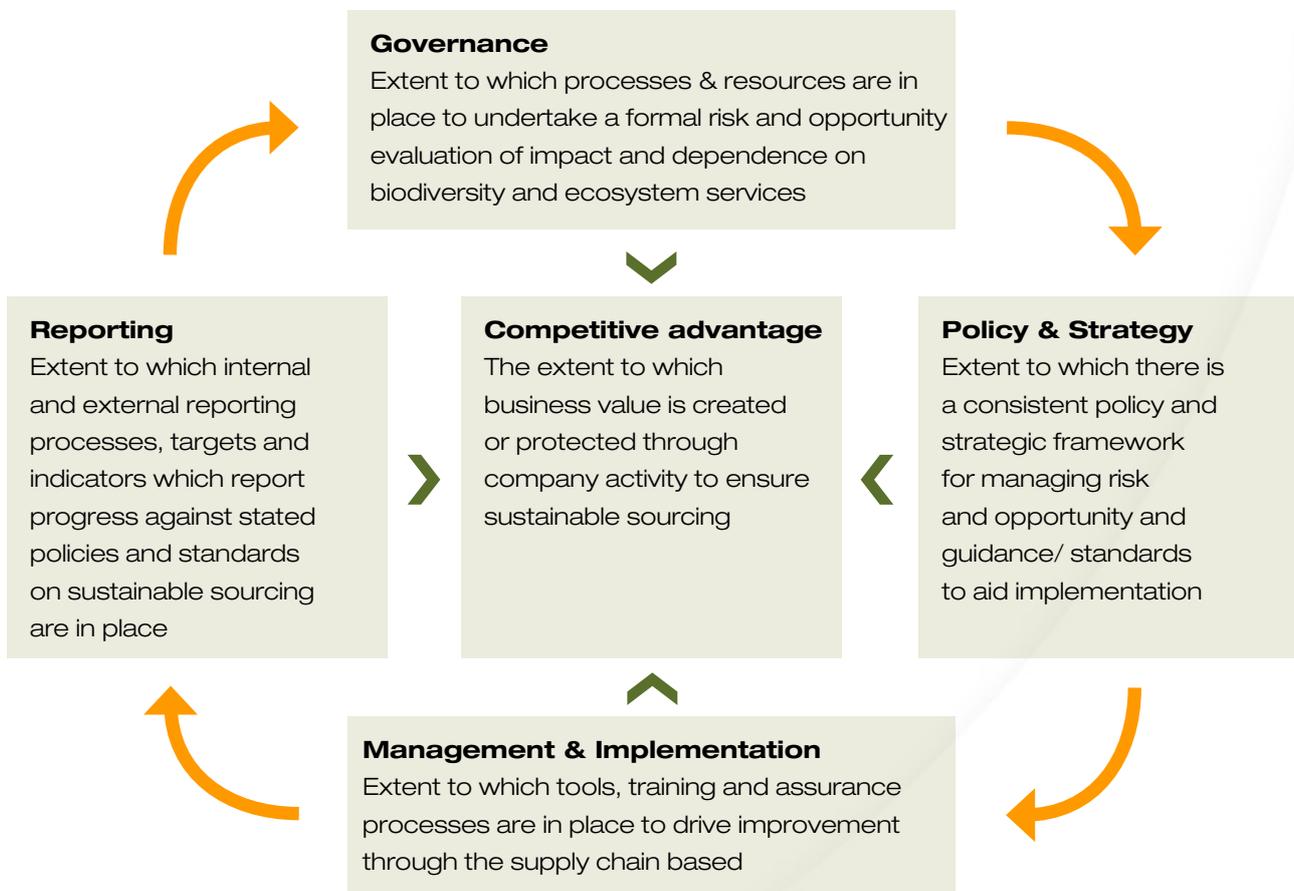
Source: C. Hanson et al. (2008) *The Corporate Ecosystem Services Review*

In recognition of this gap, the Natural Value Initiative (NVI) developed the Ecosystem Services Benchmarking (ESB) tool. Based on a biodiversity benchmarking tool developed by Insight Investment and Fauna & Flora International for the extractive sector (Foxall et al 2005), it was developed in collaboration with investors from Europe, Brazil, the USA and Australia: three UK-based asset managers (Aviva Investors, F&C Investments and Insight Investment); US-based asset manager (Pax World); Brazilian based bank (Grupo Santander Brasil) and a leading Australian pension fund, VicSuper. Collectively, these represent €455 billion (£398 billion, US\$633 billion<sup>1</sup>) of assets under management.

**The tool was created to enable institutional investors to understand how well their investments were managing their impacts and dependence on BES. It provides essential information for investors to engage individual companies in areas of poor performance.**

This report summarises the results achieved from the first application of the ESB to 31 companies within the Food, Beverage and Tobacco (**FBT**) sectors in the UK, Brazil, the USA, Australia, Switzerland, Malaysia, the Netherlands and France representing market capitalization of over Euro 790 billion at 15th September 2009. These sectors are amongst those that are most dependent on ecosystem services, but also have the potential to have a significant impact on biodiversity. This report outlines the potential risks associated with a company's impact **and dependence** on BES; sets out leading company and sectoral responses; identifies areas of common weakness and sets out recommendations for investors and companies within the FBT sectors to enable a risk focused response to managing impacts and dependence on BES.

**Figure 1 The components of the ESB analysis**



1. Figure is composed of the following: Aviva Investors (Euro 222.1 billion as at 30 June 2009), F&C investments (Euro 101 billion as at 30 June 2009), Grupo Santander Brasil (Euro 1.3 billion as at 30 June 2009) Insight Investment (Euro 125.2 billion as at 31 March 2009), Pax World (Euro 1.6 billion as at 30 June 2009) and VicSuper (Euro 3.4 billion as at 1 May 2009). Currency figures are calculated based on historic rates at the date stated for each company's assets under management.

The Ecosystem Services Benchmark Guidance document provides further information on our approach

## 1.2 Our approach

The companies included within our analysis are outlined in Table 1. They were selected on the basis of interests held by collaborating investors during the period of analysis and to ensure representation from all stages of the supply chain as well as companies from both the developed and developing world. For the latter, we elected to focus on Brazil for two reasons:

1. Brazil plays a vital role in the global food web and is responsible for 25% of the world's food production. It exports a number of agricultural commodities such as beef, coffee, cotton, maize, orange juice, pork, poultry, soya, sugar, tobacco and derivative commodities such as processed meat<sup>2</sup>.
2. Brazil has an increasingly engaged private sector with the recent development of sustainability criteria for the Brazilian stock exchange (Bolsa de Valores, Mercadorias & Futuros de São Paulo – BOVESPA).

The Ecosystem Services Benchmark (ESB) was conducted from September 2008 to March 2009 based on publicly available information (company websites, sustainability/ environmental reports, annual reports, and media searches). The ESB considers five interdependent categories of performance: Competitive advantage, Governance, Policy and strategy, Management and implementation, and Reporting. It assigns levels of performance ranging from 1 (poor performance) to 4 (best practice).

To increase the accuracy of our data and the quality of our findings, each company was invited to verify their results based on our review of public material, provide additional information not currently in the public domain, and later to confirm the accuracy of ESB findings at the end of our process. Of the 31 companies, 22 (71%) took up this request.

Each company received a final summary of their results, highlighting strengths, weaknesses and recommendations for improvement. The information presented here, combined with these detailed company level summaries will be used by our investor colleagues to identify underperforming companies within their portfolio and to enable focused engagement with those companies on areas of risk.

## 1.3 Key findings

### 1.3.1 Analysis of results by sector

As one would expect, the sectors that perform best within the Ecosystem Services Benchmark are those facing immediate pressures, such as consumer interest, NGO campaigns, investor expectations, or those where the materiality of ecosystem service dependence is very clear and already affecting the bottom line. Table 2 shows the companies evaluated as best in class and the key findings by sector.

There is considerable activity across all sectors of relevance to BES. However, with the exception of the beverage sector, all sectors showed an average score that was at least 50% lower than the 'ideal'.

Our research found that only one of the companies analysed (**Unilever**) fell within the realm of best practice (level 4), albeit on the lower end of the scale. **M&S** came a close second. Both companies were distinguished by their well-documented, strategic and risk-focused approach that provided the ESB assessors with comfort that they had understood and were beginning to manage the issue.

2. Greenpeace (2009) Slaughtering the Amazon

Table 1 **Companies within the analysis with key market data**

Company	Stock exchange	Market capitalisation (€ billion)
<b>Producers</b>		
Açúcar Guarani (ACGU3)	São Paulo	0.63
Bunge (BG)	NYSE	5.46
COSAN (CZZ)	NYSE	1.56
Grupo André Maggi	Private company	0.00
SLC Agrícola (SLCE3)	São Paulo	0.59
United Plantations (UTDPLT)	Kuala Lumpur	0.53
<b>Processors</b>		
Cadbury plc (CBRY)	London	11.95
Dean Foods (DF)	NYSE	2.23
Groupe Danone (BN)	Euronext	24.57
Hain Celestial (HAIN)	NASDAQ	0.45
Nestlé (NESN)	SIX Swiss Exchange	105.21
Parmalat Brazil (LCSA4)	São Paulo	2.80
Sadia (SDA)	NYSE	0.94
Unilever (UN)	Amsterdam	52.15
<b>Tobacco</b>		
Alliance One International (AOI)	NYSE	0.29
British American Tobacco (BATS)	London	44.11
Imperial Tobacco Group (IMT)	London	20.18
Philip Morris International (PM)	NYSE	62.56
<b>Beverages</b>		
The Coca-Cola Company (KO)	NYSE	81.41
Diageo plc (DGE)	London	26.67
Foster's Group (FGL)	Australian Exchange	6.36
Heineken N.V. (HEIA)	Amsterdam	15.11
PepsiCo (PEP)	NYSE	62.48
SABMiller plc (SAB)	London	25.68
<b>Retailers</b>		
Ahold (AH)	Amsterdam	10.23
Carrefour (CA)	Euronext	21.93
M&S (MKS)	London	6.57
Sainsbury's (SBRY)	London	6.91
Tesco (TSCO)	London	34.46
Wal-Mart (WMT)	NYSE	134.79
Woolworths (WOW)	Australian Exchange	20.78

Note: abbreviations after company name refer to company 'Tickers'. Click on company name to link to Investor Relations web page. Source: [www.corporateinformation.com](http://www.corporateinformation.com) and [www.google.com/finance](http://www.google.com/finance)  
 Figures quoted on 15th September 2009

The overall poor performance was not because the companies evaluated were inactive or disengaged, but because they could not readily demonstrate that the extent of their activity to manage this issue was commensurate to the risk involved. It is quite possible that BES does not pose a material risk to some of these companies. However, the complexity of their supply chains and lack of risk assessment processes means that risk exposure is difficult to establish by an external assessor.

### 1.3.2 Remaining challenges

Activity is required in a number of areas before a comprehensive and credible picture of risk and opportunity assessment and management can be demonstrated.

#### **Corporate risk assessment processes frequently did not adequately address biodiversity and ecosystem services**

Despite a clear reliance of the companies evaluated on an agricultural supply chain dependent on healthy biodiversity and continued access to ecosystem services, only 15 (48%) companies had a well-communicated risk and opportunity assessment in place. **Unilever, Dean Foods, United Plantations, M&S, SABMiller** and **BAT** are examples of this. Aspects of risk assessment were comprehensively addressed by many of the companies assessed, for example, direct operational footprints on water and climate. However, on the whole companies are not yet undertaking a thorough analysis of the risks and opportunities relating to BES, which addresses all elements of risk and considers the supply chain as well as direct operations.

The lack of a documented and well communicated risk and opportunity assessment makes it extremely challenging for any stakeholder, including investors, to determine whether a company has 1) identified and understood risk exposure and 2) is managing it. Without a clear roadmap for action that is informed by a comprehensive analysis of the business' impacts and dependence on ecosystem services, it is difficult for companies to adopt a proactive rather than a reactive approach to the issue. Risks may remain unidentified and opportunities undeveloped. In such circumstances a company may be caught unawares by unpredicted issues, and actions may be dictated by whichever issues based group shouts the loudest, rather than strategic priorities.

#### **Disclosures on BES were often inadequate for evaluating corporate performance**

Less than half of the (48%) companies achieved level 3 or more (half marks) on the ESB's evaluation of the quality of their reporting on BES. Even the companies most advanced in their thinking on BES struggled to report a complete picture of how they are managing the associated risks and opportunities. Furthermore, our analysis showed that there was an average gap of 6% between the scores companies attained based on publicly available information compared to those based on undisclosed information. Some BES elements, such as water, were addressed with greater regularity than others, but frequently reporting focused on direct operations, while assessment throughout the supply chain is incomplete or absent. As a result it was challenging for stakeholders to determine whether a company has understood and is managing its risk exposure.

Although over half of the companies used the Global Reporting Initiative (GRI) reporting framework, none of the companies surveyed reported against the GRI biodiversity indicators in full. The absence of clear risk assessment activities on this issue makes it difficult to determine whether this lack of reporting is due to inadequacy of the metrics or perceived lack of relevance of the issue to the company.

#### **Companies often lacked clear policy and strategy frameworks to drive action**

Although 58% of the companies evaluated disclosed a statement of management approach on single commodities, only five (16%) companies had a clear BES policy and strategy framework. **BAT** was unique in disclosing a biodiversity statement. Ambiguous policy statements that only address a proportion of the supply chain are common in all sectors. This may lead to a lack of clarity and enforceability of corporate requirements of suppliers. Effectiveness of risk management will vary considerably as a result. **PepsiCo** offers a good model to follow having integrated ecosystem services into a stand alone policy on sustainable agriculture.

**Table 2 Summary of findings by sector showing the percentage of companies scoring more than 50%**

	Competitive advantage	Governance	Policy and strategy	Management and Implementation	Reporting	Overall benchmark scores
Percentage scoring > 50% i.e. level 3 and over						
<b>Producers:</b> Operational and compliance risk from dependence on ecosystem services, e.g. pollination, access to water for irrigation, healthy soils. Reputational risk from potential impact on biodiversity						
sector result	<b>Best in class: United Plantations</b>					
	<ol style="list-style-type: none"> <li>1. No company had a comprehensive risk assessment process that included BES, although Bunge was evaluating impacts on sensitive sites in Brazil</li> <li>2. Policy commitments too high level to act as a framework to drive action</li> <li>3. Sustainable agriculture initiatives were underway in all companies e.g. water management plans, integrated pest management, use of certification schemes</li> <li>4. Only Bunge produced a CSR report and reported against relevant GRI indicators</li> </ol>					
	67	33	67	17	33	33
<b>Processors:</b> Exposed to operational and reputational risk through the supply chain, e.g. the Dove campaign against unsustainable palm oil						
sector result	<b>Best in class: Unilever</b>					
	<ol style="list-style-type: none"> <li>1. 50% (4) of companies showed elements of a risk assessment process (with water &amp; carbon well addressed). Unilever was particularly strong</li> <li>2. 50% of companies had high level policy commitments on BES, recognising its importance. These were too high level to act as a framework to drive improvements</li> <li>3. Tools used to manage the issue included biodiversity action plans, incorporation of standards into supplier contracts, certification schemes and NGO collaborations</li> <li>4. Targets were commodity focused with the exception of Cadbury which committed to "sustainably source 50% of agricultural commodities"</li> </ol>					
	75	75	63	25	63	63
<b>Tobacco:</b> Operational and compliance risk from dependence on ecosystem services, e.g. pollination, access to water for irrigation, healthy soils. Reputational risk from potential impact on biodiversity						
sector result	<b>Best in class: BAT</b>					
	<ol style="list-style-type: none"> <li>1. None had yet undertaken a comprehensive risk assessment, 50% (2) had strong building blocks e.g. risk and opportunity assessment tools, two companies had or were identifying potential impacts on biologically sensitive sites as part of this.</li> <li>2. BAT was the only company in the survey with a standalone biodiversity policy</li> <li>3. 50% of the companies used tools that enabled evaluation of supplier performance on BES, this was used to target and address weak suppliers through local audits</li> <li>4. Two companies had pilot projects that addressed security of supply issues</li> </ol>					
	50	50	50	50	50	50
<b>Beverage:</b> Beverage dependence on water as key ingredient exposes sector to operational risk. Agricultural supply chain also has dependence on ecosystem services regulatory and reputational risks						
sector result	<b>Best in class: SABMiller/ Foster's</b>					
	<ol style="list-style-type: none"> <li>1. Diageo &amp; Heineken had evaluated impacts on protected areas, 22% companies had undertaken risk assessments that included water and carbon but none had undertaken a comprehensive risk assessment that included BES and the supply chain</li> <li>2. PepsiCo was unique in having a sustainable agriculture policy including BES</li> <li>3. Standards are in place in 60% of companies, but voluntary</li> <li>4. Only sector using payments for ecosystem services as a tool to manage dependence (SABMiller). There are untapped opportunities to build shareholder value on this issue.</li> </ol>					
	50	83	83	0	66	83
<b>Retailers:</b> Reputational risk linked to consumer desire for ethical goods combined with high-profile NGO campaigns						
sector result	<b>Best in class: M&amp;S</b>					
	<ol style="list-style-type: none"> <li>1. 86% (6 companies) had undertaken commodity focused risk assessment, comprehensive assessments were lacking, activity appeared reactive rather than proactive</li> <li>2. 43% had internal standards covering aspects of BES, these were not disclosed due to concerns about competitive advantage and often did not cover the entire supply chain</li> <li>3. Only one company (M&amp;S) had a strategy/action plan of relevance to BES</li> <li>4. Companies were piloting projects aimed at ensuring sustainability of supply Sainsbury &amp; Carrefour were unique in addressing the issue of pollination</li> <li>5. The sector showed a high level of responsiveness to NGO concerns</li> </ol>					
	86	86	57	43	57	57

**Supplier performance standards are in place which incorporate BES, but these are often limited in scope or voluntary in nature**

Whilst 45% of the companies evaluated had standards or detailed guidelines for sustainable agriculture or guidelines for sustainable sourcing that encompassed BES, only three of these (**BAT, Imperial Tobacco** and **United Plantations**) covered the majority of the companies' raw materials supply. These companies are characterized with relatively simple supply chains. Few standards were mandatory or enforceable through contracts. Hence their ability to ensure consistency of performance and compliance with company standards was restricted. **Unilever, Dean Foods, Fosters, SABMiller, M&S, Carrefour** all offer useful models to follow.

**Activity to build shareholder value and ensure continued raw material supply is widespread, but it may not be proportional to corporate impact or risk**

It was encouraging that 65% of companies had some form of pilot programmes in place or were engaging with initiatives aimed at overcoming barriers to sustainable supply such as the Roundtable on Sustainable Palm Oil. However, often these were small initiatives at local level rather than company wide schemes that deal with issues at a scale equivalent to the company's global footprint. Such programmes often reflected a reaction to immediate risks rather than being part of a longer-term strategic risk assessment that anticipated 'natural resource' crunch before it becomes a reality. Our research showed that **SABMiller** was the only company experimenting with payments for ecosystem services as a means of ensuring continued access to raw materials (in this case, water).

**Management tools that encompass BES issues exist but often only address a small part of the company's supply chain**

17 companies (55%) had developed tools relevant to the management of BES. It is encouraging to see a range of tools develop in this area – self-assessment checklists, audit protocols, farmer engagement programmes, contractual incentives, commodity trackers, biodiversity action plans, and guidelines for better management practices. However, these approaches are not yet widely or uniformly employed.

### **1.3.3 Areas of strong performance**

It was encouraging to see activity to manage aspects of BES throughout all sectors.

**Companies are actively managing material short-term risks**

Many of the companies evaluated were actively managing their direct operational footprints and putting in stretch targets for water and climate impact management. This reflects the recognition that these pose the most immediate material risks.

**Piloting of activities to ensure sustainability of supply is common**

Throughout the entire supply chain companies are experimenting with approaches to minimising impacts on BES: 81% of the companies that we evaluated had pilot projects in place to address one or more aspects of ecosystem service dependence or biodiversity impact. The challenge will be to take the lessons learned from these initiatives and scale them up across the business, prioritising them according to levels of corporate risk and opportunity.

**Activity to unlock shareholder value was well developed in some sectors**

65% of the 31 companies were undertaking activities to differentiate corporate brand based on strong sustainability performance that incorporated some aspects of BES impacts and dependence. Activities such as third party certification against respected sustainable agriculture standards, consumer facing campaigns on sustainable sourcing or co-branding of products with environmental NGOs position these companies well to realise competitive advantage.

### Engagement with stakeholders was used by a significant number of companies to build corporate capacity on BES

Partnerships with NGOs were relatively common, with 13 (42%) of the companies demonstrating close engagement with environmental NGOs to understand and address impacts and dependence. Such collaborations were used to inform, develop and implement strategy or to address specific issues of concern such as sustainable sourcing of fish, palm oil, timber or soya. **M&S**, for example, worked with WWF to define and implement Plan A, their 100 point environmental strategy. **Carrefour** is working with WWF to create a trial computerised self-diagnostic sustainable development tool for suppliers.



## 1.4 Relevance for investors

Failure to manage BES risks may have direct and tangible impacts on company financial performance, reputational risks and long-term commitments – which makes the investment analysis decision more challenging. In the same way that we have observed in the past nine years the increased coverage of environmental pollution (especially green house gases) by environmental, social and governance research analysts and increased demand from investors to understand perceived or actual risks, the emergence of BES as a systemic risk to the value of ongoing business operations as an investor issue is likely.

In the short term emerging risks are:

- **Increased reputational risks:** to institutions involved in controversial lending or investing. The reputational risks in this situation are generally at the corporate level and not transaction level;
- **Liabilities:** that may become apparent as national laws, banking regulations and reporting requirements become more demanding and increasingly seek to incorporate non-financial issues.

In the longer term, emerging risks are:

- **Lower and less secure investment returns:** loss of investment return as a result of clients' revenue dropping as they fail to achieve repayments or business growth targets as a consequence of failing ecosystem services and loss of biodiversity.

Opportunities to capitalise on BES are increasingly evident, and a number of financial institutions are now servicing new and mainstream markets particularly for forest linked carbon credits and water.

## **1.5 Recommendations**

There are a number of steps that investors and companies can take to be ahead of the game in managing risks associated with the impacts and dependence of investments / business operations on BES.

### **1.5.1 For investors**

Investors that undertake the following will be well positioned to manage risks associated with BES as they crystallise.

- 1. Develop a clear policy of recognition and intent in relation to BES.**  
Commitment should be made to comply with the law and to avoid financing operations in areas of important biodiversity or providing significant ecosystem services
- 2. Build capacity to engage on the issue of BES**
- 3. Identify areas of risk and opportunity within your portfolio**
- 4. Identify high-risk companies (companies that are failing to manage their impacts and dependence on BES) using the Ecosystem Services Benchmark**

Companies and their investors have long taken ecosystems services for granted, as if they came for free. Yet recent pressures on natural resources suggest that in future such services will start to command a premium, or, worse, become unavailable. This could have a profound impact on the strategies and valuations of companies in high-risk sectors.

**Karina Litvack**, Head of Governance and Sustainable Investment, F&C Investments

#### **5. Engage with companies identified as high risk and ask the following questions:**

- Does your process for identifying and managing environmental risks and opportunities include an assessment of potential impacts and dependencies on BES? If not, why not?
- What risks and opportunities have you identified from this process, and what is your strategy to address them?
- What policies and standards have been set in relation to sustainable sourcing of agriculturally based products and do they address BES? If not, why not?
- What tools and incentives are in place to encourage your suppliers to adhere to internal standards and requirements related to this issue?
- What assurance processes (monitoring, auditing, self-assessment) are in place to ensure that your suppliers are meeting your internal standards relating to this issue?

#### **6. Disengage from companies that are known to be infringing legal requirements and / or consistently underperforming on the issue**

### 1.5.2 For companies in the sectors evaluated

We recommend that companies:

- 1. Understand how the company is both impacting and dependent on biodiversity and ecosystem services using a stakeholder inclusive risk and opportunity assessment process.** A number of mapping and prioritisation tools are emerging that can assist companies in this. These include the World Resources Institute and World Business Council for Sustainable Development's Corporate Ecosystem Services Review<sup>2</sup>, WBCSD Global Water Tool and the Integrated Biodiversity Assessment Tool (IBAT).
- 2. Make clear policy commitments and develop a time-bound strategy or road map, with publicly communicated targets.** This could include commitments to understand, avoid, minimise and offset impacts on biodiversity and ecosystem services.
- 3. Act to manage those ecosystem services which are the most critical to the business** through setting standards, ensuring supply chain management tools address BES and by building the capacity of suppliers to understand and manage impact and dependence on BES.
- 4. Monitor the supply chain** to ensure that policies and standards are adhered to and to support suppliers in meeting requirements to conserve biodiversity and manage priority ecosystem services
- 5. Disclose activities to understand and manage risks and opportunities in relation to BES in more detail.** Disclosures should include: an outline of material risks and the process used to identify them, policy and strategy, management tools, performance against measurable and time-bound targets, potential impacts on sensitive sites and action taken to mitigate them.



### **1.5.3 For governments**

A significant barrier to corporate action on the issue of biodiversity and ecosystem services is the failure of society to place a value on them. Measures of wealth fail to factor in the cost of ecosystem services. In the face of a rapidly increasing global population and fluctuations in resources compounded by a rapidly changing climate, these measures need to change. The ongoing review of The Economics of Ecosystems and Biodiversity (TEEB) is examining this issue. The final outputs of the TEEB review are likely to deliver recommendations for policy makers that encourage the internalisation of some of these costs and incentivise protection of BES. Governments are encouraged to take on the recommendations from TEEB. The private sector is advised to engage with this initiative which has the potential to significantly change the parameters of corporate reporting and management.

The Natural Value Initiative can provide support with this as these groups move forward on these recommendations.

### **1.6 A final note**

Fifteen years ago the Convention on Biological Diversity was created, in recognition of the significance of global loss of biodiversity to society. Four years ago the Millennium Ecosystem Assessment showed that action was urgently needed on this issue. Biodiversity loss and ecosystem service degradation remains, however, an intimately linked but poor cousin to climate change.

The period 2009-2011 will witness significant activity on the issue of Biodiversity and Ecosystem Services. It is encouraging to see that a number of companies in this analysis have started the journey to understand and address their impacts and dependence on ecosystems. These early activities will position these companies (and those investors with an interest in them) well to respond efficiently and rapidly to the challenges that will inevitably be posed by this increasingly resource-constrained world. More needs to be done, but lessons learned from this early work combined with active engagement with cross-sector collaborations will be invaluable to help ensure this vital issue is tackled.

## Project teams

Project Team at the United Nations  
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Grigg, A., Cullen, Z., Foxall, J.,  
and Strumpf, R. (2009)  
The Natural Value Initiative (2009)  
*Linking shareholder and natural value.  
Managing biodiversity and ecosystem  
services risk in companies with an  
agricultural supply chain.*  
Fauna & Flora International, United Nations  
Environment Programme Finance Initiative  
and Fundação Getulio Vargas.

Photographs: Juan Pablo Moreiras/  
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## About the Natural Value Initiative

([www.naturalvalueinitiative.org/](http://www.naturalvalueinitiative.org/))

The Natural Value Initiative (NVI) – an initiative led by Fauna & Flora International (FFI) in collaboration with the United Nations Environment Programme Finance Initiative (UNEP FI) and Brazilian business school Fundação Getulio Vargas (FGV) – aims to create a toolkit for institutional investors to enable them to understand risk and opportunity relating to the impacts and dependency of their investments on biodiversity and ecosystem services.

## Key partners

### Fauna & Flora International (FFI)

([www.fauna-flora.org/business.php](http://www.fauna-flora.org/business.php))

FFI is the world's first established international conservation body, founded in 1903. FFI acts to conserve threatened species and ecosystems worldwide, choosing solutions that are sustainable, are based on sound science and take account of human needs. Through its Global Corporate Partnership Programme, FFI aspires to create an environment where business has a long-term positive impact on biodiversity conservation. FFI leads the Natural Value Initiative collaboration.

### UNEP Finance Initiative (UNEP FI)

([www.unepfi.org](http://www.unepfi.org))

The United Nations Environment Programme (UNEP) Finance Initiative is a strategic public-private partnership between the UNEP and the global financial sector. UNEP FI works with over 170 financial institutions that are signatories to the UNEP FI Statements, and a range of partner organisations to develop and promote linkages between the environment, sustainability and financial performance.

### FGV – GVCes (FGV)

([www.ces.fgvsp.br/](http://www.ces.fgvsp.br/))

Fundação Getulio Vargas (FGV) is a pioneer school in business education in Brazil and one of the main centres for business education, research and consultancy in the country, as well as in South America. The Centre for Sustainability Studies (GVCes) aims to disseminate the concept and practices of sustainability through educational activities, training, research, publications and communication.

## Steering Committee

The project is guided by a multi-stakeholder steering committee whose members include: Agribusiness Responsável Brasil, Banco do Brasil, Nic Bertrand, Bunge, Business for Social Responsibility, the Global Reporting Initiative, Grupo Santander Brasil, IUCN, KPMG, Pax World, Kerry ten Kate, Strathclyde University, WWF, Sadia, Strategic Environmental Consulting and VicSuper.

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## The investors collaborating on this initiative include:



### **Aviva Investors** (<http://www.avivainvestors.co.uk>)

Aviva Investors is a global asset management business dedicated to building and providing clients with focused investment solutions. Wholly owned by Aviva plc, the world's fifth-largest insurance group with assets under management in excess of € 222.1 billion across a range of equity, fixed income, property, money market and alternative funds as at 30 June 2009, Aviva Investors' client base ranges from among the largest financial institutions to individuals saving for the future.



### **Grupo Santander Brazil** (<http://www.santander.com.br>)

Grupo Santander Brasil, which includes banks Santander and Real is the largest commercial bank in Brazil. Grupo Santander Brasil is part of Banco Santander (SAN.MC, STD.N), a commercial bank based in Spain. It is the largest financial group in Spain and Latin America, with leadership positions in the UK and Portugal and has a large presence in Europe through its Santander Consumer Finance unit. In the first half of 2009, Santander recorded a net attributable profit of € 4.519 billion and as at 30th June 2009 has € 1.271 billion of assets under management.



### **F&C Investments** (<http://www.fandc.com>)

F&C is an active fund manager with £88.3 billion (€ 101.1 billion) of assets under management at 30 June 2009. F&C invests globally and is a worldwide leader in Sustainable Investment strategies. F&C uses its influence as one of Europe's largest shareholders to engage companies, promoting the adoption of better environmental, social and governance practices to improve long-term business performance. Areas of engagement include biodiversity and ecosystem services, and F&C has published 3 research reports on this theme.



### **Insight Investment** ([www.insightinvestment.com](http://www.insightinvestment.com))

Insight Investment is a UK-based asset manager with £116.6bn in assets under management (as at 31 March 2009). Insight has had a commitment to Responsible Investment since it was launched in 2002. Insight has published two benchmarks of biodiversity management within the extractive industry and a research report on biodiversity offsets as part of its programme of engagement on ecosystem management.

### **Pax World** (<http://www.paxworld.com/>)

Pax World Investments is a leader in the field of Sustainable Investing with \$2.2bn of assets under management as at 30 June 2009. The Pax World investment process combines rigorous financial analysis with equally rigorous ESG analysis in order to identify leading companies that are financially strong and meet positive standards of corporate responsibility and sustainability. By constructing investment portfolios made up of such companies, Pax seeks to deliver – to individuals, financial advisors and institutional investors – higher returns with lower risk over the long term.



### **VicSuper** (<http://www.vicsuper.com/>)

VicSuper Pty Ltd is the Trustee of VicSuper Fund; one of Australia's fastest-growing public-offer superannuation funds with over 247,000 members and AUD6 billion in net assets as at 31 May 2009. Sustainability is VicSuper's central operating principle and guides every decision. At VicSuper, sustainability investing is a long-term approach that, when applied to investments in company shares and other assets, considers the implications of economic, governance, financial, strategic, environmental and social challenges on long-term profitability and shareholder value.



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