

# Realising the value of natural capital to UK businesses in the agriculture, forestry and fisheries sector

October 2015



## Introduction

*“Natural capital will become as prominent a business concern in the 21st Century as the provision of adequate financial capital was in the 20th Century”.<sup>i</sup>*

**This practice note is aimed at businesses in the agriculture, forestry and fisheries (AFF) sector, particularly those with an interest in sustainability and environmental management. It may also be of interest to businesses who work with suppliers in the AFF sector. The note sets out the argument for taking account of ‘natural capital’ in business decision making and identifies key tools, expert bodies and initiatives that AFF businesses may find useful.**

## Why should businesses care about understanding the value of natural capital to their operations?

*Businesses have significant dependencies and impacts on natural capital*

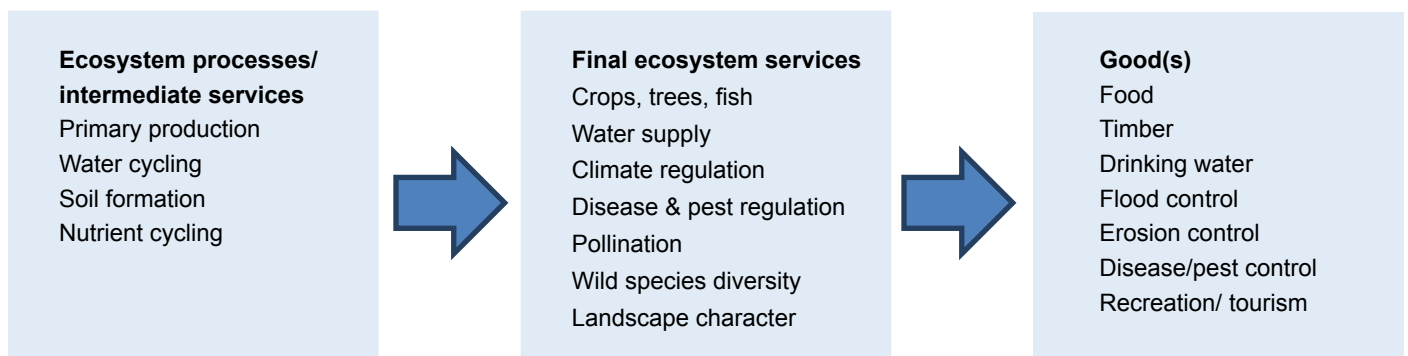
Nature can be thought of as a form of capital that businesses draw on. Natural capital can be defined as *“our ‘stock’ of waters, land, air, species, minerals and oceans, which underpins all other types of capital – financial, manufactured, human and social - and is the foundation on which our economy, society and prosperity is built.”<sup>ii</sup>*

**Businesses in the AFF sector have direct dependencies and impacts on natural capital, including on:**

- soil quality;
- water quality and supply; and
- wild species diversity.

These ‘assets’ provide a range of critical ‘ecosystem services’ to businesses in the AFF sector. While many of these ecosystem services - see Figure 1 below - support the provision of goods that are traded in markets and have established prices (e.g. crops, timber), several others are non-marketed and are thus treated, for all intents and purposes, as ‘free’. For example, agricultural productivity is heavily dependent on a wide variety of species and ecosystem services, including soil micro-organisms, pollinators and pest predators, the genetic diversity of crops and livestock, freshwater supplies, and climate regulation<sup>iii</sup>; and the fishing industry depends on the availability of habitat that supports the growth and reproduction of fish stocks.<sup>iv</sup>

Businesses in this sector are also indirectly dependent on ecosystem services for producing the energy and fuel that they consume.



**Figure 1: Key ecosystem services and goods for AFF sector**

### **Natural capital and the services it provides are under threat**

**Natural capital and the ‘services’ it provides are under threat in many areas** as a result of overexploitation, increasing demand and climate change.<sup>v</sup> Diminishing stocks of natural capital present a significant risk to ‘business continuity’ i.e. ensuring that an organisation’s critical business functions can continue to operate.

### **Understanding dependencies on natural capital and accounting for these could maintain business-critical natural capital and thereby protect ongoing operations.**

This is especially important for business in the AFF sector given the need to maintain or increase production in light of rising demand from growing and more affluent UK and global populations.<sup>vi</sup>

## **Action on natural capital in the AFF sector**

The AFF sector is increasingly considering and taking action on natural capital and ecosystem services. Examples from the three sub-sectors are provided below:

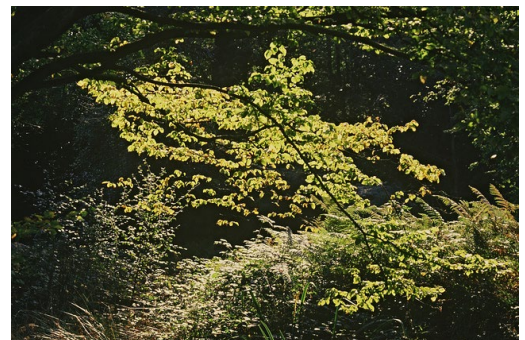
### **Agriculture:**

- There is an increasing focus on ‘**sustainable intensification**’<sup>viii</sup> given the operational risks posed by ecosystem decline (e.g. pollinator declines or reductions in the water available for irrigation<sup>x</sup>). The National Farmers’ Union (NFU) is supportive of the Government’s 2014 National Pollinator Strategy given ‘the importance of pollinators to our food supply’.
- There has been an overall increase in **organic food production** in the UK (despite recent contractions<sup>x</sup>) in response to growing consumer and retailer demand over the past two decades.



### **Forestry:**

- There has been an increase in **certified timber production**, with 87% of UK harvested softwood timber in 2009 certified sustainable.<sup>xi</sup>
- The **UK Forestry Standard** (UKFS), developed by the Forestry Commission, was revised in 2011 to include explicit requirements for sustainable forest management<sup>xii</sup>. By meeting the requirements of the UKFS, forest and woodland owners, managers and practitioners can demonstrate that forestry operations and activities are both legal and sustainable.
- The **Forest Stewardship Council**, established by professional forestry interests and major retailers, also promotes sustainable forest management.



Accounting for natural capital may bring a range of **additional benefits**, including:

- the identification of **new commercial opportunities** (e.g. through carbon or biodiversity offsetting or ‘payments for ecosystem services’<sup>vii</sup> schemes);
- **cost savings** (e.g. through changes in management practices);
- **enhanced brand and reputation** (e.g. related to action to improve management practices or protect and enhance nature’s assets); and
- **better preparedness for possible changes in regulation or certification/accreditation requirements.**

## Fisheries:

- The sector is finding its operations at risk as a result of **declining stocks**; in 2012, only 36 per cent of the assessed fish stocks around the UK (5 of the 14 stocks) were at full reproductive capacity and were being harvested sustainably.<sup>xiii</sup>
- There has been an increase in the range of **products certified** sustainable by the Marine Stewardship Council and growth in the market for these products.<sup>xiv</sup>
- During the 2000s there has been a progressive increase in the percentage of fish stocks **harvested sustainably**
- Recent research<sup>xv</sup> indicates consumers are increasingly looking for fish products from sustainable sources, with 61% of people across 15 countries considering the sustainability of seafood to be an important factor in **purchasing decisions**.<sup>xvi</sup>



However, there are constraints facing the growth of such standards (e.g. restrictive price premiums) and adoption of natural capital accounting by individual businesses. Recent research conducted for JNCC<sup>xvii</sup> found no evidence of AFF businesses undertaking comprehensive quantitative valuation of natural capital dependencies and impacts<sup>xviii</sup>, though some were assessing discrete dependencies or impacts either qualitatively or quantitatively (e.g. on water use, soil, flood risk and carbon sequestration) and one business was reporting internally on a range of environmental Key Performance Indicators through ISO14001 (an internationally accepted standard for effective environmental management). The AFF sector businesses in the study were largely focused on 'eco-efficiency measures' (e.g. monitoring and targeting improvements in CO<sup>2</sup> emissions, water consumption, waste) rather than considering impacts of options on natural capital stocks and ecosystem service flows in a systematic way.

The **natural capital accounting hierarchy** shown below may be useful in thinking about the extent to which natural capital thinking has been embedded within your business.

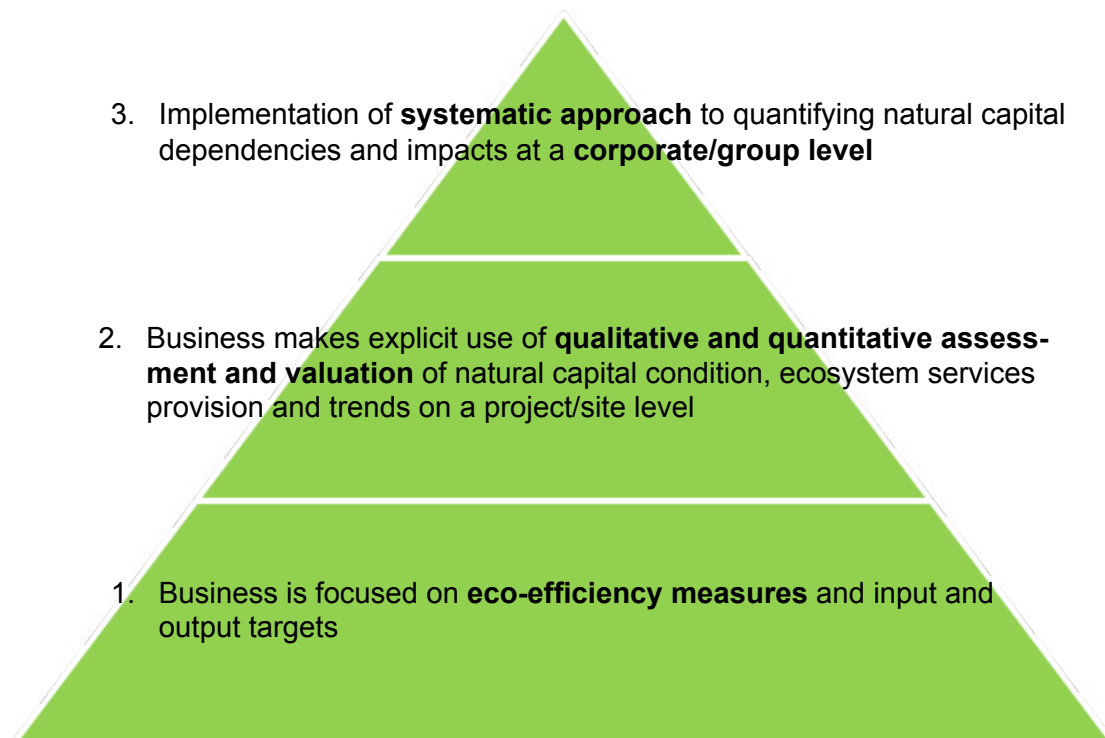


Figure 2: Natural capital accounting hierarchy

## What tools, expert bodies and initiatives can support AFF businesses in realising the value of natural capital to their operations?

Some of the most commonly accessed and used tools and information sources that were identified by AFF sector businesses through interviews conducted in early 2015 include:

### Tools:

- **Woodland Carbon Code and tools:** the Forestry Commission's voluntary standard for UK woodland creation projects which account for the CO<sub>2</sub> they sequester. Independent certification provides assurance and clarity about the carbon savings of sustainably managed woodlands. [www.forestry.gov.uk/carboncode](http://www.forestry.gov.uk/carboncode)
- **CALLM (Carbon Accounting for Land Managers) tool:** the Country Land & Business Association's tool for farming operations to assess their farm carbon footprint. The calculator measures emissions of carbon dioxide, methane and nitrous oxide from land-management businesses and any carbon which is stored in soil and trees. [www.calm.cla.org.uk](http://www.calm.cla.org.uk)
- **Linking Environment and Farming (LEAF) annual audit/review:** LEAF works with farmers, consumers and the industry to promote sustainable food and farming. The annual audit/review involves reviewing progress on integrated farm management (IFM) and generating action plans, policies and review dates to evaluate and map out improvements over time as well as highlighting areas to focus on in the future. The review process covers economic performance, environmental quality and social health. [www.leafuk.org/leaf/farmers.eb](http://www.leafuk.org/leaf/farmers.eb)
- **ISO14001:** an internationally accepted voluntary standard that sets out how to establish an effective environmental management system. Land managers can use it to monitor a range of environmental key performance indicators e.g. water and natural gas use, waste flows. The latest version published in September 2015 includes a requirement to protect the environment from harm and degradation. <http://www.bsigroup.com/en-GB/iso-14001-environmental-management/ISO-14001-revision-new/>

### Expert bodies:

- **International Integrated Reporting Council (IIRC):** the International Integrated Reporting (IR) Framework is a process that results in a periodic integrated report by an organisation about value creation over time. The aims of IR of most relevance here, include a focus on communicating and creating enhanced accountability and stewardship of the broad base of capitals, explicitly including natural capital. [integratedreporting.org/the-iirc-2](http://integratedreporting.org/the-iirc-2)
- **Linking Environment and Farming (LEAF):** LEAF works with farmers, consumers and the industry to promote sustainable food and farming. See tools above for further details.

### Natural capital initiatives:

- **Prince of Wales' Accounting for Sustainability Project (A4S):** works with the accounting and finance community to support a fundamental shift towards resilient business models and a sustainable economy. [www.accountingforsustainability.org](http://www.accountingforsustainability.org)
- **Cambridge Institute for Sustainable Leadership:** CISL is an institution within the University of Cambridge. It seeks to challenge, inform and support leaders from business and policy to deliver change towards sustainability. [www.cisl.cam.ac.uk](http://www.cisl.cam.ac.uk)

### Additional tools and initiatives (including emerging tools) that may be of use:

- **Farming Futures:** this website sets out a series of case studies detailing the steps taken by some farms to address issues such as sustainable irrigation, soil management, biodiversity conservation, and climate change adaptation. [www.farmingfutures.org.uk](http://www.farmingfutures.org.uk)
- **Corporate Ecosystems Services Review:** this report from the World Resources Institute provides a structured methodology that helps managers develop strategies to manage business risks and opportunities arising from their company's dependence and impact on ecosystems. [www.wri.org/publication/corporate-ecosystem-services-review](http://www.wri.org/publication/corporate-ecosystem-services-review)

- **Natural Capital Protocol:** this is an ambitious project to develop a harmonised framework for understanding and valuing dependencies and impacts on natural capital in business decision-making being led by the Natural Capital Coalition. The Natural Capital Protocol is under development and is due to be launched globally in mid-2016. [www.naturalcapitalcoalition.org/natural-capital-protocol.html](http://www.naturalcapitalcoalition.org/natural-capital-protocol.html)
- **Framework for corporate natural capital accounts:** this framework provides a systematic quantitative monetary approach to business-wide natural capital accounting. The process involves documenting natural capital assets (renewable and non-renewable), the costs (liabilities) of maintaining those assets, and changes in asset values and liabilities. [www.naturalcapitalcommittee.org/corporate-natural-](http://www.naturalcapitalcommittee.org/corporate-natural-)

## Enquiries

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## Images

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- vii. See Payments for Ecosystem Services Best Practice Guide [www.gov.uk/government/publications/payments-for-ecosystem-services-pes-best-practice-guide](http://www.gov.uk/government/publications/payments-for-ecosystem-services-pes-best-practice-guide)
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- xii. Covering biodiversity, climate change, historic environment, landscape, people, soil and water.
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- xviii. It should be noted that only five businesses were interviewed in this sector, therefore the findings should be treated as indicative rather than representative.