Introduction to the Natural Capital Committee's Corporate Natural Capital Accounting Project

Summary

The Natural Capital Committee (NCC) has as its underlying objective to lay the foundation for the protection and enhancement of England's natural capital. There are a number of building blocks involved in achieving this. One is the creation of a register of natural assets that are at risk from deterioration in their condition. Another is to estimate the aggregate value of our natural assets and incorporate them in national accounts. A further building block is to extend methods for the economic valuation of natural capital and the services it provides and incorporate them and other allied tools into Government appraisal and decision-making. A final objective is to encourage adoption of natural capital accounting by corporations and landowners. This paper is about this latter objective and it describes the way in which the Committee has set about achieving this.

Over two-thirds of England's land area is privately owned or managed. This is a very approximate indicator of the significance of private ownership of natural capital because it does not include natural assets related to air and sea.

This note outlines the work the Committee has undertaken on corporate natural capital accounting and why it matters. It comes in advance of a detailed accounting framework and accompanying user guide, which will be published with the Committee's third State of Natural Capital report to Government in January 2015.

The NCC's Natural Capital Accounting Framework

The NCC has developed and piloted a framework for organisations to account for the natural capital they own, for which they are responsible or on which they are dependent. It has been termed Corporate Natural Capital Accounting (CNCA). Better management of natural capital can have a huge impact on the value we derive from it and CNCA provides a way to document this management.

The aim of CNCA is to establish a framework within which corporations and landowners can account for natural capital, documenting assets and liabilities in a balance sheet format that extends traditional financial reporting. The CNCA framework reports both the private value that an organisation earns from its natural capital (and for which an organisation often already accounts) and external benefits that society derives (for which an organisation does not currently account).

CNCA is a methodology that can sit alongside an organisation's traditional financial and management accounts and should be seen as a complement to them. It enables organisations to gather natural capital information in a coherent and comparable format to aid decision-taking about the management of natural assets, to the benefit of both the organisation and society.

CNCA assists with determining:

- The value to an organisation of natural assets;
- The cost of maintaining them;
- Changes in their condition over time;
- Risks from depleting them;
- Opportunities from utilising them;
- Returns from investing in them;
- Their effect on stakeholders and communities.

The Natural Capital Committee has worked with a Consortium of eftec, the Royal Society for the Protection of Birds (RSPB) and PwC over the course of 2014 to complete this analysis, which will be published in January 2015. There have been three streams of work:

1. Designing a framework for CNCA;
2. Testing the framework with some major landowners and corporations to produce pilot corporate natural capital accounts;
3. Extending the work to a generic framework and guidance that can be used by other organisations.

Who is the Audience for CNCA?

This framework particularly lends itself to organisations that own or are responsible for significant stocks of natural capital, that have an explicit or implied responsibility to maintain their natural assets intact, that see potential benefits from enhancing or better utilising their natural assets, or that seek to reduce operational risks through improved management of them. Due to the way the framework collates information, organisations may also be able to use it to assess and manage their dependence on natural capital for their own operations.

The framework's potential application is broad and appropriate for a large range of different natural capital owning organisations. The pilots undertaken to inform the development of the accounting framework and guidance were deliberately chosen to reflect this diversity of needs and responsibilities.

Underlying Theory

The natural capital that an organisation owns or for which it is responsible has a value both to the organisation and to society. A failure to maintain that natural capital diminishes both the future

commercial potential of the organisation and the benefits that society will be able to derive from it. Failure to maintain natural capital therefore reduces its value and in the same way as organisations account for depreciation of the value of their material assets so too they should account for depreciation of their natural assets. The way this is done is to estimate the cost of maintaining or replacing the assets. Likewise, continuity of natural assets for the benefit of current and future generations as well as the organisation itself requires that the cost of maintaining natural assets be recorded as a liability.

In some cases, organisations, especially utilities such as water and sewerage companies, are under a legal obligation to fulfil environmental standards and to preserve the quality of their natural assets. There are therefore already legal liabilities associated with natural assets, for example in regard to drinking and bathing water quality. However, these often fall short of a full obligation to maintain all of an organisation's natural assets. CNCA therefore accounts both for existing legal liabilities, which are already reported on an organisation's balance sheets, and other maintenance costs, which are not.

On the other side of the balance sheet, organisations (and society) derive benefits from natural assets they own or use. Better management of an organisation's natural capital can increase the benefits that both the organisation and society enjoy. Some of these benefits are revenue generating, for example, yielding charges for entry (to recreational or cultural sites), or sales of goods and services from natural assets (such as timber). In many cases, organisations are only able to capture a small fraction of the total benefits that society derives from natural assets. So, for example, the same woodland that generates revenues from timber also contributes to carbon sequestration. The former is recorded as a revenue entry in an organisation's accounts but the latter is not. The CNCA framework provides a comprehensive account of both commercial income and external benefits and costs that society derives from natural assets.

The CNCA Framework

The CNCA framework establishes an account of an organisation's natural capital. It produces a natural capital balance sheet that records the natural capital assets an organisation owns, is responsible for, or depends on, the value they yield, and the liabilities associated with maintaining them.

This balance sheet is developed from several supporting documents including:

- A natural capital asset register which records all the assets that fall within the boundaries of the organisation as well as a schedule recording the costs of maintaining them;
- A physical flow account of the expected flow of goods and services from the natural capital within the accounting period;
- A monetary account that aims to convert the physical flow into monetary terms.

The balance sheet requires there to be a baseline for the natural capital assets. This baseline provides a reference point for the account, against which changes in value (which may arise from changes in asset condition) are reported. The CNCA framework is flexible in that the baseline chosen for the inception of the account can be set in line with an organisation's or society's objectives.

One approach is to consider the baseline as a reference point against which losses are to be avoided; then, as a minimum, liabilities should be determined by the maintenance costs required to sustain the baseline condition of natural capital over time. Other options include a historical reference point to which natural capital should be restored or enhancing natural capital to a target level.

The CNCA Pilots

Having developed the framework, the NCC and the Consortium evaluated the methodology by piloting it with the National Trust, The Crown Estate, United Utilities and Lafarge Tarmac. The framework was also considered by a wider group of organisations including the Government, PLCs, accounting bodies, academics, NGOs and other landowners.

An extract from the National Trust Wimpole Hall Estate pilot is included below. The pilot provided an opportunity to apply the framework to a lowland arable farm that had recently undergone changes in land management regimes, shifting from intensive arable management to an organic farm in Higher Level Stewardship[1].

Data from the farm have begun to show improvements in the condition of natural capital stocks. The CNCA framework provides an opportunity to document these changes over time, including the financial impacts.

The motivation of the National Trust to participate in the pilot was threefold, to:

- Improve reporting of environmental outcomes and link these to investments;
- Improve the process for internal budget allocations;
- Support the National Trust's public policy discussions.

Wimpole Hall Estate pilot

Wimpole Hall is situated in Cambridgeshire on an estate that covers 1,200 hectares of semi-ancient woodland, open parkland, semi-natural grassland, enclosed farmland, and open water bodies. This provides habitat for 25 nationally scarce species, including water vole, great crested newts, marsh harrier, and barbastelle bats. The site attracts over 270,000 visitors a year.

[1] Environmental Stewardship (ES) is an agri-environment scheme that provides funding to farmers and other land managers in England in return for delivering environmental management on their land. Higher Level Stewardship (HLS) is one of three elements of ES. HLS aims to deliver significant environmental benefits in high-priority situations and areas.

Wimpole Hall farm, covering 400 hectares of the estate, is the largest lowland farm managed in-house by the National Trust. Prior to 2007, the management of the farm was contracted out and farmed at intensive levels. Informed by the results of a soil survey undertaken in 2008 which showed the soil to be in poor condition, the decision was made to take management of the farm in-house, convert to organic farming and enter the Higher Level Stewardship (HLS) scheme. It was hoped that this change would improve the quality of the soils, provide a richer habitat for biodiversity, and enhance the visitor experience.

The farm produces organic cereals, wheat, barley and oats in rotation with other crops, such as beans. Rare native breed livestock graze on the grassland. While the farm has to be financially sustainable, it is not managed to maximise profits, but rather to maintain and enhance the Estate's agricultural history and landscape.

The pilot provides a partial account of the Wimpole Estate natural capital assets with the account baseline set in 2008 and the account reporting-year being 2013. The components of the natural capital assets are:

Food provision: net revenues of the two farming systems in 2008 and 2013 are based on consultation with the farm manager with appropriate adjustments applied to product prices and input costs. Net revenues from the two farming systems, before and after conversion to organic farming, are expected to be approximately equal;

Recreation: the whole estate attracts over 270,000 visitors a year. The CNCA reflects the value associated with the 30% of visitors who visit the parkland and farmland (not the Hall) without charge. A review of the non-market recreation valuation literature suggested that a value of £2 per visit is a reasonably conservative estimate;

Carbon storage: the soils at the estate, as well as the biomass above and below ground, sequester carbon. Soil surveys were carried out at Wimpole in 2008 and repeated in 2013, the results of which are still pending final review;

Wildlife: an important component of the natural capital value derived at Wimpole is the support of wildlife and the associated landscape value. Through farming system conversion and participation in the HLS scheme, this value is likely to have been enhanced during the accounting period.

The National Trust natural capital **balance sheet** reports changes in asset values and liabilities over the period of transition from conventional arable management to organic farming under HLS. The balance sheet shows that the natural capital assets annually provide significant value both to the National Trust (£14.1m) and to society (£12.3m), in contrast to a relatively small annual input cost of £5.1m. The account shows that both private and external values were enhanced between 2008 and 2013 partly as a result of the change in land management practices and that the value to society increased by £4.4m.

More detail on the composition of the balance sheet will be explained in papers to be published in January 2015, but for illustrative purposes, we have provided a snapshot below.

Natural capital balance sheet – Wimpole Estate (2013)

		Year 2013			
		Renewables		Total	Of which reported in fin accts
		Private	External	Value	
		£'m	£'m	£'m	£'m
Assets					
1	Baseline value (2008)	14.1	12.3	**26.4**	
2	Gains/(losses)	1.7	4.4	**6.1**	
3	Additions/(disposals or consumption)	1.7	1.6	**3.4**	
4	Revaluations and adjustments			**-**	
	Gross asset value	17.5	18.4	**35.8**	
Liabilities		Private	External		
5	Legal provisions				(4)
6	Other maintenance provisions	(3.6)	(1.5)	**(5.1)**	
	Total maintenance provisions			**(5.1)**	(4)
Total Net Natural Capital				**30.7**	

The Wimpole pilot has shown that the framework can be used practically and feedback from the site manager has suggested that it has potential for wider use across the organisation.

Conclusion

Undertaking the pilots and responding to comments from various stakeholders, the NCC has been able to produce a generic account and a set of guidelines which other organisations should be able to use in undertaking their own CNCA.