



Natural Capital Initiative: Valuing our Life Support Systems Report

25th June 2015, 6-9pm, Macmillan Room, Parliamentary Estate

This event was the parliamentary launch of the [Natural Capital Initiative \(NCI\) Report, Valuing our Life Support Systems Report](#). This report sets out a number of key messages to policy makers, researchers and business emerging from the 'Valuing our Life Support Systems' natural capital summit in November 2014.

The report sets out the need for methods of valuing natural capital, but also the risk that natural capital could be traded as a commodity without the development of an ethical framework to ensure 'the appropriate use of natural capital valuation to enhance fair distribution of the benefits of natural capital'. The report also highlights the requirement for natural capital concepts to be robust, coherent and based on evidence. The Government is committed to funding the [Natural Capital Committee](#) for a further five years to develop natural capital accounting concepts.

Chair's Introduction

The event was chaired by **Barry Gardiner MP** for Brent North and Shadow Minister for Environment, Food and Rural Affairs. In the opening statement, the Chair welcomed the report, which he would be using as a source of quotes. He noted a number of statements from the summit summarised in the report, including '*the UK is a world leader in environmental science and in writing policy; it is not a world leader in taking subsequent action*' and '*our natural capital debt is arguably more pressing than our financial debt*', which he suggested should be over the portals of Defra and Treasury respectively. He also commended the vision of accountants as revolutionaries and the straightforward argument for natural capital accounting '*that measuring nature makes its contribution to the economy and our wellbeing visible and allows for effective decision making*'. The only statement he disagreed with was the contention that until '*recently humanity did not explicitly realise its connection to and dependence on the earth's natural systems*'; it was more the case that this was just starting to be re-understood. He stated that 'in this place we are very good in the bidding to be done and very bad at the doing', highlighting that the scorecard analysis in report had a high score for conceptual framework in place for the definition of natural capital and natural capital in government policy but a low score for mainstream adoption of these in practice. The scorecard of future priorities for making progress also scored mainstream adoption of good practice by business as the most important. However, business needs a framework set by Government and the argument for this needs to be made to Government.

Attendees then heard from five speakers:

- **Professor Rosie Hails**, Science Director for Biodiversity and Ecosystem Science at the Centre for Ecology and Hydrology (CEH).
- **Professor Mike Acreman**, Science Area Lead on Natural Capital at the Centre for Ecology and Hydrology and visiting Professor at University College London.
- **Will Evison**, Assistant Director & Environmental Economist in the sustainability and climate change team at Price Waterhouse Cooper.
- **Professor Bill Sutherland**, Miriam Rothschild Professor in Conservation Biology, in the Department of Zoology at the University of Cambridge
- **Dr Ruth Waters**, Head of Profession for the Ecosystem Approach in Natural England.

Slides and audio from each presentation are available on the POST website [here](#)

Summary of Presentations

Professor Rosie Hails: The Natural Capital Initiative was a forum created by four different organisations, 2 of which were learned societies (the Society of Biology and the British Ecological Society) and 2 research institutes (CEH and the James Hutton Institute), with aim of building links between academia, policy and business to promote cross sectoral dialogue based on the best available science. The inaugural summit was in back in 2009 when there was far few organisations and initiatives involved in this area; the mushrooming of activities and organisation is indicative that the concept is gaining some traction. The second summit in 2014 looked at progress made, lessons learned and the steps forward to be made in the future. The NCI have been working on follow up activities including cross sector fora, policy development and one day dialogues on specific areas. This includes a one day dialogue on the ecosystem approach and natural capital management being arranged by the James Hutton Institute, a one day dialogue on linking management of catchments, coastal zones and open sea (natural capital without boundaries) and a one day dialogue on integrating natural capital into city planning being arranged by CEH. The devolved administrations are all taking different policy approaches to natural capital; the Scottish Government developing their Natural Capital Asset Index and England developing the 25 year plan for Natural Capital. The NCI are seeking to encourage the benefits of cross working, with the individual organisations all promoting natural capital according to their areas of professional expertise: the Society of Biology advising on Government policy; the British Ecological Society promoting the use of ecological knowledge; the CEH have set up the Environmental Information Platform; and, the James Hutton Institute have developed new tools, methods, approaches and science for natural capital.

Professor Mike Acreman: Attendees at the conference were asked how much progress there had been on the natural capital agenda and what the priorities should be for the future. The first of these involved scoring natural capital categories against levels of progress; most progress has been made in the conceptual thinking, but practical implementation is some way off. For the priorities, the main message was let's get moving and let's support business on this. From these exercises, main messages were distilled down for different sectors:

- For business leaders - the perception that the environmental is a problem needs to be changed to the opportunities for investment in natural capital; to understand natural capital in their supply chains by forming partnerships with research teams and local stakeholders to identify impacts and provide access to research, data and measurement; and the need to develop effective methods of natural capital accounting based on sound science.
- For researchers - the need to combine natural capital with other four types of capital, make sure language is correct you are trying to link to, such as businesses and land managers/planners; and, how to turn long term environmental monitoring data, such as biodiversity data, into metrics for natural capital.
- For policy makers and planners - the benefits from safeguarding natural capital and to encourage behaviour change, as present lifestyles are not going to be sustainable. Natural capital valuation needs to be scientifically sound but also socially and ethically acceptable; Business can thrive on natural capital opportunities but they have to have the right policy framework to enable this and better understanding of how to achieve this is needed.

Will Evison: summarised a brief history of consideration of natural capital in business. In the last century, businesses further down the value chain did not start thinking about the importance of natural capital for supply chains until about 2004 when a number of reports started to be produced. In 2004, the F&C report 'is biodiversity a material risk for companies was published, which was followed by a series of key reports over subsequent years including the TEEB business report, the WBCSD guide to corporate ecosystem valuation in 2011 and the EFTEC report on developing natural capital accounts. This activity has got natural capital on the business agenda and culminated in the

creation of the Natural Capital Coalition. In response to the summit's messages, he noted that while restoring natural capital assets can provide economic opportunities there is a need to identify them, particularly those that will generate significant economic value. Despite the gaps in the available evidence there is awareness of the need to act on the state of natural capital along the business chain to ensure the long term viability. There is also growing recognition of the risks, but we are still a long way from businesses repositioning to seeing natural capital as an investment opportunity, with only 4 of the FTSE 100 companies mentioning natural capital in their company reports. Requirements for universal disclosure may increase this, but there is risk of pushing towards the lowest common denominator. While there are some companies that have substantial impacts on natural capital and should be required to make a disclosure, there is a large group of other companies that just need the opportunities and risks highlighted to them. Understanding company supply chains can be complex, but there are some outstanding examples of how to do it, such as Puma and Gucci. Examples of where companies have worked with outside expertise and stakeholders to do this include Dow working with Nature Conservancy and a number of academics to understand the benefits from ecosystem services across a range of their sites and the WBCSD working with the Stockholm Resilience Centre, World Resources Institute and a group of leading companies. The Natural Capital Coalition have a role in developing natural capital accounting, but he agreed that there is a tendency to oversimplify valuation. While it has to reflect sound science and complexity, there is need to simplify enough for it to be useable for corporate value chains.

Professor Bill Sutherland: The conceptual framework for natural capital is more or less in place and there is at least some understanding of the implications of why we need to conserve natural capital, but there are only limited tools and evidence available and mainstream adoption is some way off. The EU use the term of 'nature based solutions' for using environmental solutions to address a range of societal challenges, for instance physical and mental wellbeing has proven to be widely acceptable. They are interested in applying these to urban environmental problems, with a wide range of possible measures that could be applied, many of which will provide multiple benefits. For example, creating natural drainage systems in urban areas can reduce flood risk, as has been done in Glasgow with the White Cart Water Flood Scheme. In the US, impact investing, allows developers to pay into a fund that supports a third party to build wetlands to Nature Conservancy standards, which will deliver a range of different ecosystem services in addition to reducing flood risk. Natural capital assets clearly contribute to the quality of life, but researchers need to work with businesses to provide them with the information they need to realise benefits. For example, in 2012 there was a collaborative cross-sectoral exercise to identify the key knowledge needs for evidence based conservation of insect pollinators, which led to a number of research projects and a business spin off. Policy-makers also don't look at primary literature; they want summaries of the relevant evidence and decision support tools. The details matter in terms of what will actually work in a given context, as is the case for green roofs for rainwater management and planting trees to improve air quality. The Conservation Evidence initiative has used the medical model of classifying measures (beneficial, likely to be beneficial, unknown and needing to trade off harms against benefits etc.) for 950 biodiversity interventions with the intention of extending this to all biodiversity and ecosystem services. Approaches and technologies available for monitoring are changing completely, with eDNA, citizen science initiatives, drones, digital recorders etc., providing a whole set of techniques that can be used to measure natural capital. More detailed maps of natural capital assets and biodiversity are being produced, but they need to be on a finer scale in order to make trade-offs and to find optimal solutions for different parts of watershed. Although challenging to achieve, it will be needed to make more sophisticated decisions. Measuring cultural services remain the most difficult to assess and more research is needed. There are at least 300 known interventions that may improve ecosystem service delivery, but evidence is needed about whether they work. Mainstream adoption of good practice ends being about interventions and we need to know to what works.

Ruth Waters: Natural England has been developing measures to implement the ecosystem approach since the 1990s, and as understanding of ecosystem service provision increased, through exercise such as the National Ecosystem Assessment, the need to protect the natural capital assets giving rise to them has become clear. Protection of natural capital will require an integrated package delivered through the ecosystem approach. There has been considerable policy activity, with the 2011 Natural Environment White Paper leading to the creation of the Natural Capital Committee, England's Biodiversity 2020 Strategy, the Defra Accounting for Environmental Impacts Supplementary Green Book Guidance, Scotland's land use strategy, the 2020 Challenge for Scotland's Biodiversity Strategy and Wales' strategy for the sustainable management of our natural resources (Shaping a More Prosperous and Resilient Future). The messages from the summit are based around three themes: evidence, policy levers/regulation and integration. Natural England have carried out a number of evidence reviews, but more evidence is needed particularly for valuation methods to avoid cherry picking ecosystem services and get to a point where social and ethical values are taken account of, not just financial values. Involving cultural values is challenging and the nature and wellbeing agenda will be critical for this. Moving from net loss to net gain will require transparency about values and putting some of that value back into natural capital assets. Business and local people are more aware of the importance of natural capital, but they need a clear and long term framework to work within where the 'rules of the game' are clearly delineated. Policies and regulations could also be used to kick-start markets for ecosystem services; for instance, the Peatland Code currently relies on corporate and social responsibility to drive the buying of carbon credits, but requires additional policy levers to make progress. Natural capital assets that are not easily incorporated into markets will require regulation to protect them and there are a lot of opportunities to do more. Integration of policies has been in the past, but there are now collaborative frameworks in place, such as the North Devon Nature Improvement Area. There needs to be more joined up approaches at a range of scales, across the Governments of the UK, across Government, across sectors and disciplines and across the evidence, policy and delivery divide. There is a lot of detail and complexity that could distract from the long-term goal, and while there are some good examples we need to find what works to achieve widespread implementation. The range of sectors and actors involved is increasing, but communication on natural capital to the public hasn't been done. Investment in natural capital assets also remains an issue to be addressed.

A number of points were raised in the discussion between attendees and the panel members:

- While data and evidence are important, it will not be enough in the battle to win hearts and minds over the importance of conserving natural capital. It will take time to engage with all the different sectors involved, but dialogue approaches have been shown to be successful. Evidence may not change people's values, but it is important for determining what works. Changing values could be addressed through reconnecting with nature, such as use of 'forest schools'.
- The public sector currently has 'policy based evidence', which allows the subsidising of activities that damage the environment, such as the €3.5 billion spent on CAP. By contrast, the private sector has strategy based evidence provided by consultants.
- The green bond market could play a role in investing in natural capital, although it mainly relates to climate change at present and only accounts for about 1% of the \$1 trillion bond market. The long term sustainability of corporate business models is likely to drive interest in this area – if you lend money to a corporation, you want to know it will still be business to pay it back in ten or twenty five years. For example, Unilever has recently issued a £250 million sustainability bonds.
- Economic valuation will need to use the scientific knowledge that is most relevant. It will require interdisciplinary working, with some of the different ways of approaching valuation set out in the National Ecosystem Assessment Follow-on and various arts and humanities research projects are ongoing on ecosystem services.

- There is a need to learn from the experience of engaging the business sector over climate change. Only a relatively small number of companies have large emissions and similarly only a small number of companies have big land use effects; mandatory reporting is unlikely to address this issue. The natural capital agenda will have to achieve in 5 years what the climate change agenda did in 15 years.
- To stop wasting public money, we should stop doing the things that don't work and start doing the things that do work, as well as stopping paying perverse incentives for activities that have impacts elsewhere that then have to be addressed. In particular, this needs to be taken account of more seriously in the planning regime.
- There are places where it would be prohibitively expensive to restore natural capital and others where it would be more cost effective. For example, a more strategic approach is required to agri-environment measures to better co-ordinate at the catchment level rather than by direct payment from Government.
- Corporate natural capital accounting is being piloted, but the public sector has a role to play in its adoption and the ONS work in this area needs to be enthusiastically supported.