



JOINT NATURE CONSERVATION COMMITTEE

A PROACTIVE JNCC RESPONSE TO THE ECONOMIC RECESSION

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1. Introduction

- 1.1 As the mid-year financial figures emerge, most pundits seem cautiously optimistic about the economy. House prices are no longer plummeting, bank profits are beginning to recover, and the pace of job layoffs has begun to slacken. Caution, however, remains the underlying sentiment. The projected impacts of the government stimulus package are barely visible. A double-dip recession is still a clear possibility. Rising fuel prices and an inflationary surge may yet stymie any rebound. Despite some hopeful signs of economic resurgence, the government's fiscal position will require a longer period of recovery, as government revenues are unlikely to regain their former strength any time soon.
- 1.2 At the end of June, provisional estimates of the government's financial position indicated that the nation had a current budget deficit of £9.9 billion with net borrowing of £13.0 billion contributing to a total net debt equivalent to 56.6 per cent of gross domestic product as compared to 44.5 per cent in 2008¹. On a more positive note, though demands on the social security budget continue to grow, tax receipts have fallen by less than anticipated and debt interest payments are lower than expected². Meanwhile, the French and German economies have reported an unexpected bounce back this past quarter, buoying hopes of an imminent recovery – at least in the Euro zone³. Nevertheless, the national debt generated in addressing the financial crisis and its associated payment requirements will remain on the books for a considerable time to come with unavoidable implications for public sector funding.
- 1.3 Regardless of which political party holds sway following the forthcoming general election, cutbacks in government spending should be expected. In this context it may be appropriate to re-examine JNCC's activities and consider where redefinition and refining of work programmes could be beneficial. Accordingly, examined here in more detail are four proposals raised in the

¹ Office of National Statistics and HM Treasury. 2009. Statistical bulletin: public sector finances. 21 July 2009.

² Institute for Fiscal Studies (IFS). 2009. IFS analysis of today's public finance figures. 21 July 2009.

³ Weismann, G. and Hall, B. 2009. Euro zone data raise hopes for recovery. *Financial Times*. 13 August 2009.
<http://www.ft.com/cms/s/0/4ed29388-87dd-11de-82e4-00144feabdc0.html>

June 2009 Committee paper on 'Environmental Implications of Crisis Economics' (JNCC 09 D04), namely:

- i. expanding the audience;
- ii. understanding the linkages;
- iii. improving communication; and
- iv. strengthening international collaboration.

2. Expanding the audience

2.1 The scientifically rigorous, impartial and transparent data collection and analysis that JNCC undertakes on behalf of the UK government and devolved administrations is widely appreciated across government and beyond. Indeed, if the concept of the 'ecosystem approach' is truly relevant, then virtually all sectors of the economy should be interested in what JNCC has to offer. Increasing cooperation with a broader spectrum of government bodies could not only improve the effectiveness of the nature conservation message, but could potentially provide access to additional resources.

2.2 For example, there is potential for greater collaboration with:

- i. *Department for International Development* (JNCC could provide advice on integrating nature conservation and the ecosystem approach into development aid);
- ii. *Department for Energy and Climate Change* (especially in relation to links between international biodiversity conservation and climate change mitigation/adaptation);
- iii. *Ministry of Defence* (responsible for extensive land areas, many with nature conservation issues, in several Overseas Territories);
- iv. *Sustainable Development Commission* (opportunities to integrate JNCC's environmental expertise with SDC's expertise on social and economic issues).

2.3 Collaboration with these bodies would improve the effectiveness of nature conservation, help the UK government meet its responsibilities under a variety of international agreements, and offer economic and social benefits.

2.4 Success in this regard would require a more proactive approach from JNCC in 'taking the message' – in suitable language – to various government bodies as opposed to merely responding to requests. It is certainly not uncommon to find that government bodies lacking a specific environment-related mandate perceive that they have no responsibility in this area. The idea that sound environmental management, including a responsibility for nature conservation, should underpin all economic activity – indeed that maintaining a healthy

environment, including biodiversity conservation, is as much of a national security issue, and thus government responsibility, as national defence – is by no means pervasive.

- 2.5 Extending JNCC activities to serve a new clientele would require JNCC staff to reach beyond their comfort zone – expand their circle of contacts, hone communication skills and be sensitive to the needs of a new audience who may be unfamiliar with ecosystems thinking, biodiversity and nature conservation. JNCC staff will no longer be preaching to the converted.

3. Understanding the linkages

- 3.1 In this time of economic crisis there is imminent danger that urgent financial needs will eclipse longer-term considerations of environmental sustainability. Being able to elucidate the relationship between the literally ‘green’ environment and larger social and economic goals is critical.
- 3.2 The fundamental challenge for many scientists and economists currently is to understand the extent to which biodiversity underpins ecosystem services and the relationship between ecosystem services and various economic sectors and local communities. Understanding better the linkages between ecosystems and economic sustainability will become increasingly important as decision makers at all levels attempt to allocate scarce financial resources. Both the on-going TEEB (The Economics of Ecosystems and Biodiversity) project and the recently launched UK National Ecosystem Assessment are attempting to expand decision-makers’ understanding of these important relationships. JNCC is contributing to both of these important initiatives.
- 3.3 Biodiversity indicators provide a snapshot of the countryside, especially with regard to the status, current and over time, of species or habitats. What are the broader implications for the economic sectors and communities that depend on the associated ecosystems? If nature conservation and its constituent biodiversity are to be perceived as significant contributors to social and economic welfare and to addressing current problems, such as climate chaos, poverty, pollution and environmental change, scientists must do a better job of explaining the present and potential role of the natural environment. An improved understanding of the implications of the state and trend of biodiversity indicators would be helpful to decision-makers, not only to aid their understanding of the larger picture but to enable them to develop a stronger case for environmentally friendly policy options.
- 3.4 JNCC plans to explore the possibility of explaining the implications of one or more of the UK biodiversity indicators⁴ as a prelude to a wider discussion of social and economic implications. Possible candidates include Indicator 1c, bats, or Indicator 11, invasive species. For instance, bats, themselves a good indicator of the health of certain ecosystems, may play an important role in consuming certain insect pests, which in turn can be linked to damage to one or more commercial crops. One could therefore assess the role of bats in

⁴ JNCC 2009 <http://www.jncc.gov.uk/page-4231>

providing the 'ecosystem service' known as 'pest control'. Accordingly, bats could be seen to be an important link in the food production chain, contributing ultimately to social as well as economic welfare. To the extent that such links can be quantified and monetised, it would be possible to determine a value, lower bound, for this species. A better understanding of the value of biodiversity and ecosystem services should lead to better policies and decision-making.

4. Improving communication

- 4.1 Nearly three quarters of the UK population either do not understand what biodiversity is or what it means.⁵ With such a lack of public understanding, how can government expect to receive a sympathetic reception for policies promoting nature conservation? For whatever reason, scientists have in effect failed to effectively communicate the concept and relevance of biodiversity. Focusing mainly on the 'bad news' – a dangerous promotional technique from a marketing perspective – we have by and large failed to engender wide understanding and meaningful support for nature conservation. Biodiversity can and does contribute enormously to social and economic welfare, and more emphasis is needed on explaining and illustrating these linkages. The upcoming International Year of Biodiversity in 2010 offers an opportunity to highlight this message.
- 4.2 Natural systems and structures have for millennia provided inspiration for human innovation.⁶ JNCC is currently preparing a new element for the JNCC website designed to highlight inventions, designs and practices that take their inspiration from natural products, processes, or species. Illustrated with an appropriate photo or two and linked to the original scientific publication, this element, tentatively called 'Natural Solutions', will interpret the innovation or product in terms of biodiversity. It will highlight the specific contributions of nature in form and function to economic products or processes as prime examples of biodiversity at work for human well-being. In some cases, such as bioremediation, engineers employ ecosystem processes to provide utility services. This piece will not only provide interesting information about commonplace items, but concrete examples to illustrate the relevance and very practical utility of biodiversity conservation.
- 4.3 If JNCC is to reorient or reinterpret its work to meet the needs of a wider audience within government it will need to understand the context of these new stakeholders, i.e. their political role, institutional culture and social persona as well as their scientific base. What biodiversity means to Defra may be different than what biodiversity means to DFID. For instance, whereas wild food collection may be of marginal economic importance in the UK, it

⁵ European Environment Agency (EEA). 2009. *Progress towards the European 2010 biodiversity target – indicator fact sheets*. EEA technical report no. 5/2009. Copenhagen.

⁶ Cf. Beattie, A. and P.R. Ehrlich, 2001. *Wild solutions: how biodiversity is money in the bank*. Melbourne: Melbourne University Press; Forbes, P. 2006. *The gecko's foot: how scientists are taking a leaf from nature's book*. London: Harper Perennial; Benvus, J.M. 1998. *Biomimicry: innovation inspired by nature*. London: Perennial (HarperCollins). Paturi, F.R., 1978. *Nature, mother of invention*. Harmondsworth: Penguin. See also <http://www.greenerdesign.com/resources/resource/natures-100-best>.

may be vital in a developing country. Understanding these differences will be the key to effective communication of the nature conservation message going forward.

- 4.4 In the current economic climate, the potential economic advantages of adopting an ecosystem approach and employing ecologically engineered solutions to address major problems should be highlighted and promoted. Good economic, as well as social and environmental, arguments can be made for biodiversity conservation which in turn preserves ecosystem function and protects ecosystem services. Innovative and imaginative interpretations of the conservation message need to be communicated across sectors and at all levels. Moving beyond anecdotes to formulating practical tools is critical.

5. Strengthening international collaboration

- 5.1 Globalisation is a cross-cutting characteristic of all major problems today – climate change, economic recession, habitat loss, and so on. Any real solution to current problems, though critically dependent on many different local actors, will require cross-border cooperation. Domestic environmental policy is increasingly shaped by global multilateral agreements (MEAs), such as the Convention on Biological Diversity, and EU policies/legislation. Closer cooperation with like-minded international and EU bodies would be beneficial for several reasons. Firstly, it will build alliances that can strengthen influence and help to ensure that developments within EU policy and MEAs adequately reflect UK conditions and concerns. Secondly, the exchange of information will provide wide access to evidence that may be able to facilitate the response to assessment needs.
- 5.2 JNCC staff already work closely with partners in the EU and beyond on many aspects of international nature conservation, including climate change, ecosystem services, migratory species protection, marine protected areas, and invasive alien species. But there is potential for greater collaboration on some issues, to enhance JNCC's effectiveness as a source of evidence and advice to the UK government and an interpreter of international trends in biodiversity and nature conservation for the country conservation bodies. For example, collaboration with other Member States and EU bodies on MEAs will be explored at a Brussels-based event in 2010. Opportunities will also be explored for closer collaboration with the other EU nations with Overseas Territories responsibilities as well as with the UN programme on Small Island Developing States.

6. Conclusions

- 6.1 Although good news continues to trickle in, it is perhaps best to be cautious about economic recovery. The fiscal situation, essentially the national budget, is unlikely to change significantly in the near term, as the political situation remains uncertain. Meanwhile, global crises, especially climate change and economic contraction, have implications for nature conservation which demand the participation of organisations such as JNCC, able to provide technically rigorous and impartial advice on key issues of nature conservation.

It would be too easy to let biodiversity concerns slip from the table as financiers and engineers jostle for influence in shaping future development agendas and the climate change cohort attempt to corner the environmental debate.

- 6.2 Preparations are proceeding apace for climate change negotiations at the end of 2009. It is likely that these will dominate much of government's activity on environmental issues over the coming quarter. Currently, nature conservation enters this debate only to the extent that the natural environment is perceived to be able to play a role in climate change mitigation and/or adaptation. Despite decades of work detailing the structure and condition of the natural environment in support of various conservation initiatives, the role of the environment more broadly in shaping economic growth and development seems yet to be fully appreciated.
- 6.3 JNCC's challenge is to provide technical advice on the interpretation and analysis of nature conservation aspects of today's headline issues – climate change mitigation and adaptation, economic recovery, and food security. This will require an expanded interaction with the diversity of players, better understanding and explanation of the linkages, clearer communications and increasingly an active role in the international arena.