

**The impact of Common Agricultural Policy reform on UK agriculture
A response from the Society of Biology to the Environment, Food and Rural Affairs Committee**

7 December 2010

Summary

1. There should be no payments without matching public goods; and a balance of economic, social and environmental benefits.
2. Valuation of ecosystem services and natural capital is essential, so that their protection and management can be properly supported by the policy.
3. Research, knowledge and trained people are vital to develop and deliver sustainable agriculture and effective agricultural policy.
4. The Common Agricultural Policy (CAP) needs to enable investment and incentivise resource-use efficiency
5. An effective CAP will allow Europe to maintain security of food production, viable rural communities, and the resilient ecosystems and natural resources upon which we depend for survival, without damaging economies and environments outside Europe.

Will the proposals achieve the correct balance between productivity and sustainability?

6. Agriculture should supply a wide range of goods and services beyond food and non-food commodities. These include social benefits such as employment and recreation in rural areas, and environmental benefits including landscape management, increased biodiversity, water purification, flood protection, fertile soils and carbon storage.
7. Agriculture should aim to minimise ecosystem dis-services, for example pollution, soil erosion and compaction, loss of habitats for farmland species and degradation of landscapes. It should not compromise animal welfare, nor rely on unsustainable inputs of non-renewable resources.
8. A modern society expects more from its agriculture than unregulated intensification where society pays the price through loss of natural capital.
9. The limits to production vary with geography. For sustainable production and a healthy, resilient environment, these limits must determine policy development.
10. There is no consensus about how to define sustainable or efficient agriculture. We support a definition which involves long term economic, social and environmental viability.
11. It is probably impossible to balance all three factors simultaneously at the farm level while delivering the production and food security that we require. However, it should be possible to balance these factors at regional level.
12. The aim of a CAP should be to achieve a balance between the economic, social and environmental benefits of agriculture across the European Union. Policy must explicitly recognise that these factors are interrelated.

13. Much of the present CAP supports inefficient practices. A reward system should be designed around simple metrics that demonstrate that desired levels of production have been achieved with decreasing demand on resources.
14. Incentives, including subsidies, harmful to biodiversity should be eliminated, phased out or reformed.¹

The balance between intensive and extensive production

15. Maximising food production on a given farm may be economically sustainable in the short term, but provides nothing for wildlife or wild plants. If we want to reverse the decline in biodiversity, we must share resources (nutrients, space, water) and agricultural production with them.
16. The "high nature value" agriculture practised in many of our most remote and beautiful landscapes provides sustainability in environmental and social terms, but is not economically sustainable without public support. Livestock production at appropriate stocking density is often the most efficient way to manage such land.
17. All types of farm should be given incentives to protect and create biodiversity features such as ponds, trees and hedgerows, appropriate to the area.
18. Much of Europe's biodiversity relies on its agricultural land. But its remaining wilderness areas also host important wild species. Europe should aim to achieve food security without bringing additional land of biodiversity value into agricultural production. This will be challenging.
19. We need to achieve a balance, where the most agriculturally productive land is farmed intensively, aiming at improved outputs with lower inputs (with regard to animal welfare, and minimising pollution); and less productive land is managed extensively to provide a greater range of public goods.

The role of public subsidy

20. Public subsidy should be for public goods. It should not subsidise production which should be paid for by the market. One aspect of market failure is that the value in agricultural output is largely at the processing and retail end of the chain, not at the farmers' end. This is an issue which European policy should address more vigorously, but not by subsidising the farmer.
21. The CAP should support an improved valuation² of the public goods and services created by agriculture, including the natural resources which deliver them. This would allow public subsidy to pay the proper price for such goods and services.
22. How can a reformed CAP deliver equitability across member states with the objective of enabling European agriculture to be competitive in a global market? To meet this objective there have to be

¹ Draft Strategic Plan for Biodiversity 2011-2020, Convention on Biological Diversity: “**Target 3:** By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.” www.cbd.int/nagoya/outcomes

² The Society of Biology is a partner in the Natural Capital Initiative, which aims to support the development of UK science, policy and practice aligned with the ecosystem approach; a way of looking whole ecosystems in decision making and for valuing the goods and services they provide. www.naturalcapitalinitiative.org.uk

incentives to invest in innovation, which could include: human capital, equipment, infrastructure.

Research and knowledge base

23. Another important role for public funding through CAP is research and training directed towards sustainable agriculture, and translating that research into improved agricultural policy and practice.
24. We have major technical and scientific challenges to overcome if we are to develop a sustainable CAP that reflects multiple demands for food security and productivity, improved environmental quality and better social health, wealth and welfare. However there is currently inadequate investment in all forms of agricultural training and research, and a dearth of suitably qualified and skilled people, particularly in careers for the younger generation.
25. Establishing, implementing and achieving agricultural policy will be entirely dependent upon skilled and trained people across all sectors from farm workers, agronomists, machinery producers to researchers and policy-makers.
26. There should be a greater emphasis on the transfer of information from research into the policy arena. The current regulatory framework is not wholly evidence-based.

Agri-environment measures

27. The transaction costs for agri-environment measures are high – inspection and administration have cost up to one fifth of some schemes.. The way forward would seem to be to pay for results rather than inputs. In Scotland, a single inspection regime has reduced costs to farmers.
28. Although there are examples of successful landscape-scale initiatives, current agri-environment schemes are piecemeal, because take-up is determined at farm scales, leading to weaker outcomes and a lack of additionality. Future schemes should include landscape-wide initiatives.

Do the proposals place the UK in a good position to help meet future food supply challenges?

29. Sustainable, diverse production systems have the potential to provide a long-term resilience to the productive capacity of the UK landscape. Supporting distinctiveness of local means of production and the diversification of local products and services will enhance the competitiveness of UK agricultural products.
30. The UK has much productive capacity on its agricultural land. However, the most productive land is often at risk from housing, commercial and infrastructure developments.
31. CAP reform must take account of the biophysical and socio-economic differences between member states. The Water Framework Directive shows how this can be done.
32. An effective CAP will allow Europe to maintain the security of its food production, the livelihood of its rural communities, and the biodiversity and natural capital upon which we all depend for our ultimate survival, without damaging the economies and environments of countries outside Europe.

The **Society of Biology** is a single unified voice for biology: advising Government and influencing policy; advancing education and professional development; supporting our members, and engaging and encouraging public interest in the life sciences. The Society of Biology is a charity, created by the unification of the Biosciences Federation and the Institute of Biology, and is building on the heritage and reputation of these two organisations to champion the study and development of biology, and provide expert guidance and opinion. The Society represents a diverse membership of over 80,000 - including practising scientists, students and interested non professionals - as individuals, or through the learned societies and other organisations listed below.

We are committed to ensuring that we provide Government and other policy makers - including funders of biological education and research – with a distinct point of access to authoritative, independent, and evidence-based opinion, representative of the widest range of bioscience disciplines.

The Natural Capital Initiative (NCI) is a partnership between the Society of Biology, Centre for Ecology and Hydrology and the British Ecological Society. The NCI aims to support the development of UK science, policy and practice aligned with the ecosystem approach; a way of looking whole ecosystems in decision making and for valuing the goods and services they provide. www.naturalcapitalinitiative.org.uk

This consultation response was developed through contributions from a task force comprising Fellows and member organisations.

We are pleased for this response to be publicly available and will place a version on www.societyofbiology.org with permission from the select committee. For any queries, please contact Dr Barbara Knowles, Society of Biology, barbaraknowles@societyofbiology.org

Member Organisations represented by the Society of Biology

Anatomical Society
Association for the Study of Animal Behaviour
Association of Applied Biologists
Biochemical Society
Breakspear Hospital
British Andrology Society
British Association for Lung Research
British Association for Psychopharmacology
British Bariatric Medical Society
British Biophysical Society
British Crop Production Council
British Ecological Society
British Lichen Society
British Microcirculation Society
British Mycological Society
British Neuroscience Association
British Pharmacological Society
British Phycological Society
British Society for Ecological Medicine
British Society for Immunology
British Society for Matrix Biology
British Society for Medical Mycology
British Society for Neuroendocrinology
British Society for Plant Pathology
British Society for Proteome Research
British Society for Research on Ageing
British Society for Soil Science
British Society of Animal Science
British Toxicology Society
Experimental Psychology Society
Fisheries Society of the British Isles
Genetics Society
Heads of University Biological Sciences
Heads of University Centres of Biomedical Science
Institute of Animal Technology
International Biometric Society
Laboratory Animal Science Association

Linnean Society
Marine Biological Association
Nutrition Society
RNID
Royal Entomological Society
Royal Microscopical Society
Royal Society of Chemistry
Science and Plants for Schools
Scottish Association for Marine Science
Society for Applied Microbiology
Society for Endocrinology
Society for Experimental Biology
Society for General Microbiology
Society for Reproduction and Fertility
Society for the Study of Human Biology
SCI Horticulture Group
The Physiological Society
UK Environmental Mutagen Society
University Bioscience Managers' Association
Zoological Society of London

Supporting Member Organisations

Association of the British Pharmaceutical Industry (ABPI)
Association of Medical Research Charities
AstraZeneca
BioScientifica Ltd
Biotechnology and Biological Sciences Research Council (BBSRC)
GlaxoSmithKline
Institute of Physics
Lifescan (Johnson and Johnson) Scotland Ltd
Medical Research Council (MRC)
Pfizer UK
Syngenta
The British Library
Wellcome Trust
Wiley Blackwell