A COORDINATED AGENDA FOR MARINE, ENVIRONMENT AND RURAL AFFAIRS SCIENCE (CAMERAS) (2011-2016)

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Introduction

1. NFU Scotland welcomes the opportunity to comment on the proposed Co-ordinated Agenda for Marine, Environment and Rural Affairs Science (CAMERAS). NFU Scotland appreciates that this consultation proposes that each public body supporting science relevant to the Scottish Government's policies related to CAMERAS will help align their scientific activities to avoid duplication and promote collaboration between the organisations.

2. NFU Scotland responds to this consultation in general terms, rather than providing answers to the narrow and specific questions raised. In doing so, NFU Scotland is able to set out its primary concerns regarding the direction in which future agricultural, environmental and land-based research will head if these proposal are put into practice.

General Comments

3. NFU Scotland understands the importance of targeting research resources and making best use of what will always be limited funding. However, allowing a purely political or ‘popular’ agenda to drive research priorities is ill-conceived and will not provide for practical solutions or worthy policy measures that will deliver meaningful outcomes. Politics is reactive and often centred on solving existing or historic problems - science is about addressing the problems of the future and driving change for the good.

4. NFU Scotland considers that the CAMERAS proposals are based on a limited view of the science base in Scotland, solely to underpin policy development by providing an evidence base and undertaking assessment of information gaps followed by monitoring of policy-only driven outcomes. That lack of vision threatens Scotland’s future capability and may well degrade its world-renowned research institutions.

5. Any Scottish science strategy should be about delivering solutions and underpinning positive change throughout the world. Such a strategy should recognise multiple and complementary goals and benefits, including: increasing biological efficiencies; developing sustainable systems; delivering quality outputs (food, animal welfare, biodiversity, etc.); adding value to the wider economy, and; playing an active role in knowledge.

6. On the particular issue of knowledge transfer (KT), NFU Scotland is firmly of the view that, regardless of the quality of research being undertaken, a cost-effective interface between science institutes, further education, practitioners and government must be established if that research is the be of any value. Therefore, there is a need to focus funding on both research and KT, in order that the value of independent institutes extend Scotland's knowledge-based economy and so contribute to economic prosperity.

7. Over-arching themes such as climate change are vitally important, but they must be balanced by priorities such as food production and food security as other major drivers of the research agenda. The biophysical, demographic and trade implications of a changing climate will evolve steadily over several decades. The imbalance between demand and supply of food could become more marked. The consequences of the recent economic downturn could also be expected interact with the longer term impacts of changing population, population demands and climate.

8. At the same time, both climate change and food production/security will hinge on developing biological efficiencies relating to issues such as nutrition, soil functions, water quality, disease diagnosis and control, and genetics. This collective of 'biotechnology' research could address the concerns of today and provide the platform for a prosperous economy tomorrow. Across a range of scientific activities, there is both a need and great opportunity for Scotland to translate discoveries from the most appropriate biotechnology into tools and systems that will sustain economic growth and other social and environmental benefits.

Specific Comments

9. NFU Scotland generally accepts that the two broad categories of 'Local Responses to Global Change' and 'Optimising the Potential of Scotland's Natural Assets' are helpful in providing an overlying structure to CAMERAS.

10. That said, in developing any programmes of research that might follow, there is a real need for a balance that gives strong emphasis on economic, social and biological/physical dimensions and the attainment of 'sustainable economic growth' - as per the Scottish Government's own number one priority. There should be strong emphasis on the element of optimising the potential - to bring forward approaches, processes, products and policies that will drive a vibrant agricultural and rural economy in harmony with environmental goals.

11. The consultation asks if the key policy issues and the associated scientific opportunities have been correctly identified. NFU Scotland considers that the main policy issues have been 'mentioned', rather than identified, as most references are too brief and without context or substance. This makes it difficult to assess the priority that is being given to different issues. There is mention of 'globally traded commodities', but no mention of the policy implications in this area of the recent downturn in the global economy, which is likely to influence the Scottish agricultural industry throughout the CAMERAS period from 2011 to 2016.

12. Equally, little weight appears to be given to demographic issues - in the longer term, beyond 2016, these could have a very marked impact on Scotland's rural sector and overall economy. In addition, and related to these two points, food supply chain security is not mentioned explicitly. However, it is clearly becoming a dominant policy issue.

13. NFU Scotland believes that food supply chain security and the impact of future global demographic movements for Scotland must be included as additional issues in any strategy such as CAMERAS. There must also be greater emphasis on science that can best enable the practical benefits of new biotechnology advances to be realised - thereby underpinning both the local (rural) and Scottish economy.

14. In the short term, research must focus on the global economic situation, especially the pattern of recovery, because this will set the overall economic climate in which the agricultural and rural sectors will operate. The 2013 (or earlier) reform of the Common Agricultural Policy will be a significant development that research must also recognise, because this will determine the operating framework for most land-based industries (especially farming) in Scotland and the rest of the EU.

15. The research on the implications of increased volatility of climate must also be a priority, because this is already placing new demands on agriculture in particular through, for example, exaggerated water availability, the risks attached to new enterprises, and the incursion of new diseases.

16. In the medium to long term, ongoing changes in climate and its volatility will further exaggerate existing problems, but also open up new opportunities for productivity and productive efficiency. NFU Scotland believes that balancing the policy drive to reduce emissions from the land with the growing opportunities for Scotland to increase the productivity of its land provides a positive avenue for research.

17. Similarly, global demands and markets for food - as a consequence of a growing, potentially more affluent world population and diminished capability for meeting demands in other parts of the world - could create an opportunity for Scotland and its agricultural industry. However, NFU Scotland fears that this chance may slip if adequate and appropriate research is not put in place now.

18. The right direction and drive for Scotland's science to help its own agricultural and land-based industries to flourish in the light of changing opportunities will bring with it scope to have a wider international impact. For example, research on carbon accounting in the development of arable and livestock management systems would have widespread international relevance.

19. Therefore, and in conclusion, NFU Scotland is firmly of the opinion that CAMERAS must deliver Scottish-based scientific expertise to contribute evidence to key policy issues in relation to farming systems, disease diagnostics and epidemiology (animal and plant), genetics, agricultural and resource economics, food supply chains, rural development, animal welfare sciences, soil sciences, water environment sciences, and biodiversity expertise.