

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

Food Standards Agency Scotland
St Magnus House Guild Street Aberdeen
AB11 6NJ

<p><i>Question 1: Do you agree 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 the Co-ordinated Agenda?</i></p>	<p>Yes, As noted in the consultation, these are necessarily broad themes which encompass a wide range of complex and inter-related issues, and are thus therefore probably fit for purpose. We understand this consultation is necessarily set at a strategic level, but it will be important to ensure that all work that SG requires does indeed fit under these themes and adapt if necessary.</p>
<p><i>Question 2: Are the descriptions of these set out in Section 3 (and Annex 3) comprehensive?</i></p>	<p>Yes, The descriptions given in the consultation are very broad and high level and thus are limited in their detail. Therefore it is difficult to judge if they are comprehensive, covering all areas of interest in Marine, Environment and Rural Affairs (MERA).</p>
<p><i>Question 3: Do these cover the major policy challenges where science can contribute as you see them?</i></p>	<p>Yes, Again as the level of information provided is at a very strategic level it is difficult to tell but we assume that it will be ensured that the science required to inform all MERA policy areas will be included under CAMERAS and thus under these two themes.</p>
<p><i>Question 4: Are they likely to remain broadly relevant over the longer time horizon (well beyond the 2016 focus of this Coordinated Agenda)?</i></p>	<p>Yes, Given that they are very broad and set at a strategic level they are likely to remain relevant over the longer term.</p>
<p><i>Question 5: Do you agree with the description of support for the National Capability Theme set out in Section 3 (and Annex 3)?</i></p>	<p>Yes, We agree with the necessity of having facilities, intellectual expertise and long term datasets available to support current and future strategic needs. However, the qualification 'and enable governments to respond to climate change and to emergencies' seems unnecessarily restrictive. CAMERAS should provide all the scientific support required in its widest</p>

	<p>sense (facilities, expertise etc) to support all MERA policy development and implementation, now and in the future, not just that restricted to climate change and to emergencies.</p>
<p><i>Question 6: What facilities, resources and data do you think are important for Scotland to maintain?</i></p>	<p>Different facilities, resources and data will be required depending on the policy area to be supported. From the FSAS perspective, it is important to maintain facilities and expertise in the areas of fish and shellfish, and in animal diseases, both from a surveillance point of view as well as research. It will be important to ensure that these areas dovetail with work being funded in Scotland by others such as ourselves and the Universities for example. Facilities, expertise and data should be focused on those areas of interest to Scotland in particular, ensuring that any gaps in knowledge required to underpin policy development in Scotland are covered (especially those not prioritised and covered by UK funders). At present the development of the Scottish National Food and Drink policy development sits with Rural Directorate. However, other SG directorates and Agencies will also have a strong interest. Thus research and evidence to continue its development, implementation and extension in the future should also be covered by CAMERAS. FSAS feel strongly that the Scottish National Food and Drink policy should be clearly linked to health and thus coordination of research funded by CAMERAS should be integrated with others funding work in this area to ensure all topics are covered, and duplication of effort avoided. It is essential to horizon scan to the future to ensure research is undertaken and data are collected to support potential emerging future issues.</p>
<p><i>Question 7: Are there other resources that Scotland needs to acquire to support future policy</i></p>	<p>Yes, It is essential that there is adequate capability in knowledge transfer so that the results of the</p>

<p>development?</p>	<p>research are disseminated in a way appropriate to each policymaker, stakeholder or end user. The Scottish food and drink policy links health and food. It is known that Scotland has a poor record in terms of diet related diseases and we need to influence the choices that consumers make in order to improve the diet of the Scottish population and meet Scottish dietary targets. In order to influence this we need to better understand what influences the behaviour and choices that Scottish consumers make. This will require significant research in the social sciences, with targeted interventions being implemented and evaluated. We would envisage such work being done in partnership across Scotland, including with ourselves.</p>
<p>Question 8: Have we correctly identified the key policy issues and the associated scientific opportunities in Section 3?</p>	<p>Yes, As noted above the consultation document is set at a very strategic level so it is difficult to be certain and as noted in the consultation, the resources managed in the CAMERAS portfolio relates to a large number of policy areas across Scottish Government. The Scottish National food and drink policy currently falls under the Rural Directorate so we particularly welcome the inclusion of 'ensuring that Scottish based food production can contribute positively to the health and wellbeing of Scotland's people'. However, much of the Scottish diet is sourced outwith Scotland and it is essential to understand the diet as a whole and its impact on health. However, the CMO and Public Health Directorate also have policies related to diet and health and it is essential that policies are complimentary to each other. The Food Standards Agency Scotland also has a remit to improve the diet of the Scottish population. Thus it is essential that research and evidence gathering is coordinated across SG directorates and its partners in Scotland. This also links</p>

	<p>to the comment under Question 7 above, that we need more research to understand the drivers to change dietary behaviour. We welcome the recognition of horizon scanning for threats that impact on our communities and industries. We would hope to continue to work closely with Moredun as a provider of expertise in this area with respect to zoonotic animal diseases which are of interest to the FSAS, to improve the safety of the food chain in Scotland. We would also hope to continue to work closely with SAC in understanding the food chain in Scotland and what influences and drives it. We also welcome the recognition of the need for a watching brief on new technologies and processes which are global issues such as nanotechnologies, GM and animal cloning, areas where FSA also have an interest.</p>
<p><i>Question 9: Are there additional issues that should be included?</i></p>	<p>Yes, With respect to diet and health, it should be recognised that Scotland, as with other UK countries, has an increasingly aging population. This brings with it a higher burden of poor health and thus economic burden. Thus research in the area of diet and health is essential to try to mitigate these projected changes in the burden of poor health as the population gets older. Whilst the affordability of food is mentioned, there is no mention of accessibility to affordable, healthy food which is just as important (especially in rural areas of Scotland), and has been the subject of discussion in Work stream 5 of the Scottish Food and Drink Policy. This WS has also looked at the area of food security which does not seem to be included overtly in this consultation document.</p>
<p><i>Question 10: What do you think will be the most important influences on Scotland's future in the Marine, Environment, Rural</i></p>	<p>Within the context of the NFDP, the influence of diet and physical activity on chronic disease such as obesity, cancer, heart disease, stroke etc has to</p>

<p><i>Affairs and related areas?</i></p>	<p>be of major importance, together with devising strategies to encourage behaviour change in these areas. Again the cross cutting nature of the issues and the policies to tackle them is clear, and thus coordination across relevant SG Directorates is required to ensure all gaps in the evidence base are covered. Climate change may affect Scotland in many ways including for example the survival of pathogens and the type of plants we are able to grow for food, either beneficially or detrimentally.</p>
<p><i>Question 11: Why do you think these are important?</i></p>	<p>Diet is a fundamental component of life and health, and poor health has a huge economic cost both to the NHS as well as to industry and individuals. SG is striving for greater sustainability and to so a change in our ability to grow food will be important. It will also have an impact on the economy. Disease is an economic burden so an increase is not desirable.</p>
<p><i>Question 12: Are there other scientific opportunities which should be highlighted?</i></p>	<p>Yes, Whilst the objective of CAMERAS is to provide a coordinated research and evidence base across the interest of MERA, we agree that it is important that the research and expertise provided by other funders both in Scotland, the UK, in the EU and internationally, is well managed and efficiently provided and coordinated within Scotland. As noted above there are several bodies with an interest in many of the topics covered in this consultation, and who fund research in this area, FSAS being one of them. Therefore working in partnership, especially across Scotland, will be essential. As noted above a knowledge exchange strategy that delivers for stakeholders and end users as well as MERA officials is essential.</p>
<p><i>Question 13: What existing areas of Scottish based scientific expertise should be maintained</i></p>	<p>From FSAS point of view we have interests in the areas of fish and shellfish, zoonotic diseases in food</p>

<p><i>to contribute evidence to key policy issues?</i></p>	<p>production animals and the food chain, diet and health, GM, new technologies and processes in the food chain, animal cloning, and thus would wish to see current expertise in these areas maintained in Scotland (currently at FRS, Moredun, SAC, SCRI, and RNIH). Experts funded under the CAMERAS programme need to interact closely with other research funders especially in Scotland, as well as with policy makers and associated Agencies Expertise in food production in Scotland such as that provided by SAC, SCRI and Moredun will be essential to deliver the NFDP in Scotland.</p>
<p><i>Question 14: How clear is the relationship between the scientific areas and the key policy issues?</i></p>	<p>It is clear at the strategic level. Many areas of science cut across several policy areas and thus good coordination between policy makers in several Directorates is required, as well as between policymakers and scientists, to ensure no duplication of effort, and to ensure that emerging policies are likely to be complimentary to each other. In addition, from FSAS point of view we are a UK wide Agency in a devolved setting which can bring challenges as well as opportunities for both FSA and SG. We need to be coordinated in both our science and our policymaking so that consumers are not confused. It is clear that SG wish to have policies based on good scientific evidence which the CAMERAS objective will hopefully achieve. This is also a core value in our proposed Strategy for 2010-2015. In some areas such as Marine, there are clearer links between the science required and the policy issues.</p>
<p><i>Question 15: In which areas of science can we continue to make use of expertise supported elsewhere e.g. at the UK, EU and international levels?</i></p>	<p>We can continue to make use of research conducted elsewhere in the world if it provides the evidence we require for policy making or implementation in Scotland. Expertise in Scotland supported by money from UK or EU sources is also especially</p>

	<p>valuable to Scotland's policymakers. However, it is also important to maintain scientific resource in key areas of major importance to Scotland.</p>
<p>Question 16: In the time frame for CAMERAS (2011-2016) what new emerging areas of science are likely to mature and become available for more general use or application?</p>	<p>There are likely to be continual developments in the technologies and tools available for scientific research which will reduce the costs in some circumstances but increase costs in others due to the ability to utilise that new technology in a variety of applications. The link between human genetics and disease in the area of diet and health is likely to increase rapidly in the coming years both in Scotland and internationally. We must ensure that small research level interventions designed to test how best to change human behaviour, especially with respect to choosing a healthy diet, are then scaled up and implemented across Scotland. As noted above, we must ensure we make best use of the research we fund, whatever the field of interest, ensuring its uptake by policymakers, stakeholders and end users.</p>
<p>Question 17: Do we have the expertise available to be able to use these new opportunities?</p>	<p>Yes, We must ensure that we continue to attract strong scientists with an International reputation to Scotland, both in terms of the scientific funds and facilities available, but as a pleasant place to live and work and raise a family. It has sometimes proved difficult to attract good calibre candidates to FSAS in Aberdeen.</p>
<p>Question 18: In which areas does Scotland need to be self reliant?</p>	<p>It is essential that Scotland has access to its own impartial scientific expertise to advise policymakers so that we are not reliant on others from across the rest of the UK and elsewhere who may have some conflict of interest, or who do not understand the background or complexity of policies being developed in Scotland.</p>
<p>Question 19: Knowledge</p>	<p>Yes, Excellent Knowledge Exchange is</p>

Exchange is essential for scientific activity to achieve impact. Do you agree that KE should be an explicit and integral aspect of the delivery of this Coordinated Agenda?

essential to make best use of the results generated by the research funded under the CAMERAS objective. Therefore it is important that it is an explicit and integral aspect of the delivery of this coordinated agenda.

Question 20: How can we continue to improve the integration of evidence from a diverse range of sources into forms that are accessible to end users?

Innovative research conducted under this coordinated agenda will often not be the only source of evidence required to change or influence a policy decision. Peer review of research and surveillance data is important to ensure the validity and accuracy of conclusions before being used in policy making. The FSA uses a series of Independent Scientific Committees and Working Groups to advise it on a variety of topics. The work of these Independent Committees and Working Groups helps ensure that the Agency's advice to consumers is always based on the best and most recent scientific evidence. For example, the Scientific Advisory Committee on Nutrition is a UK-wide Advisory Committee set up to replace the Committee on Medical Aspects of Food and Nutrition Policy (COMA). It advises the UK health departments as well as the Food Standards Agency. The General Advisory Committee on Science (GACS) is a new committee, established in December 2007 that provides independent advice on the Agency's governance and use of science. Full details of these Committees and Working Groups and their remit is available on our website (www.food.gov.uk/science/ouradvisors) Short life Working Groups can also be very effective to assist in the development of a particular policy, reviewing all the available evidence. A recent example of this is in the development of SG policy around the improvement of the nutritional standards of schools meals, although there are several others currently in existence in the nutrition area. it is

	<p>essential however that the appropriate people are appointed to these groups, and that the agendas are well thought through to ensure they deliver. Some groups have not delivered to their objective, whilst others have been very successful and thus we need to learn from these experiences.</p>
<p><i>Question 21: How can we reconcile the requirement for science to be responsive and flexible to short term demands while at the same time ensuring that longer term strategic research continues to progress our knowledge and understanding?</i></p>	<p>This requires a balance of longer term basic research, running alongside more applied research which is often medium to short term. Multidisciplinary groups may be required. Those engaged in the longer term research will have expertise which can be used to assist in short term projects, perhaps such as reviewing the evidence in a particular area of interest. It will be essential to have a varied portfolio in order to meet this objective. In addition to full time researchers, it may be important to employ scientists with the appropriate specialist knowledge who can both undertake part time research as well as critical and analytical comment of particular areas of science in a shorter time frame often required by policy makers. The CSO funds Units which we believe have a balance of short term research to directly inform policy, as well as undertaking longer terms pieces of work. Investigation of how well these units deliver for policy makers in Scotland could be investigated and any good practice copied.</p>
<p><i>Question 22: How can we ensure that the 2 way flow of knowledge from science to policy and from policy to the academic community is optimised?</i></p>	<p>This requires making time on the part of both the scientists and policymakers. For scientists, it might be built into a scientist's job description so that a certain percentage of their time is available for this purpose (as opposed to 100% research). Scientists get judged on their papers published in peer reviewed journals and thus reducing their time on research would potentially reduce the number of papers published. Thus we need to give the scientist due recognition of their input</p>

	into the policy making process.
<p>Question 23: Are there alternative structures/systems or new approaches/organisations that could enhance these flows?</p>	<p>Yes, Each Institute might have a lead scientist whose role would be interacting with the policymakers, identifying their needs in terms of expertise or research, and effecting Knowledge Exchange with policymakers. This person would act as a point of contact and a conduit, as a facilitator. This is already beginning to happen in some areas of research funded by RERAD. Also, appointing key contacts in policy is important. Scientific Committees and Working Groups as mentioned above may be relevant for some topics. One problem with some policy makers is that they are not scientists so it can be difficult for them to engage with scientists and understand the true meaning impact of the data being collected. Rather than engaging with the policy makers directly, the scientists might better engage with for example the Research and Analysis division, who can put their new findings in context for policymakers. This is done in FSAS by our Science Branch whose role it is to interact with the scientific community on behalf of policy makers in Scotland.</p>
<p>Question 24: Are there science delivery models which could provide examples of good practice for Scotland to follow?</p>	<p>Yes, See comments above.</p>
<p>Question 25: We would also welcome any other general comments you may have on any of the issues raised in this document.</p>	<p>We welcome the alignment of the scientific activities supported through the CAMERAS research portfolio. We welcome the integration of individual activities in support of high level priorities through to the National performance framework and the overarching Science and Innovation Strategic frameworks. We agree that CAMERAS should strengthen the linkages, collaborations, a sharing of knowledge sharing between the organisations funded. The development</p>

of specific programmes of science and research funded by CAMERAS must take into account the needs of Scotland. The strategy should provide a high level focussed coordinated agenda for all the scientific activities in the Marine, Environment and Rural Affairs and related areas of government in Scotland. FSAS look forward to seeing more detail and working in partnership through CAMERAS in areas of relevance to our remit in the coming years.