

CONSULTATION QUESTIONS

Question 1: Do the 2011-2016 strategic priorities remain robust and relevant for the period 2016-2021?

Yes.

Question 2: Do these ‘enabling principles’ set the right context or should additional principles be adopted?

Exchanging Knowledge needs to be stronger than it currently is, and should involve the transfer of knowledge and innovation in both directions. The “interactive innovation model” practiced by the [European Innovation Partnership](#) for Agricultural Productivity and Sustainability (EIP-AGRI) promotes bottom-up approaches to link farmers, advisors, researchers, businesses, and other actors, to stimulate innovation from all sides and help target the research agenda.⁻¹

Question 3: Are the high level outcomes sufficiently clear, if not, what changes would you propose?

Acknowledging and promoting interactions, through interface areas between the three themes, will more readily recognise and value the multiple contributions of complex management approaches such as organic farming.

Question 4: Are the three broad themes identified an appropriate way of structuring our work? If not, what alternatives should be considered?

Question 5: How can the SG maximise the benefits of on-going investment in the MRPs to build and benefit from connectivity with the wider science base?

The Scottish organic sector believes that there is a significant lack of on-going investment for supporting the role of organic food and farming in sustainable agriculture and land-use. Importantly, research and development of organic systems is applicable to the whole of Scottish farming (organic and non-organic) to inform best practice for low carbon and low input agriculture

Although the core strengths of people, facilities and track-record for

¹ European Commission http://ec.europa.eu/agriculture/eip/documents/eip-opportunities_en.htm#eip-origins-of-eip-agri (accessed 25/4/14)

research and development exist within the MRPs (including SRUC which has been running organic trials since 1991 and operates an organic farm at Craibstone Estate²) expertise and resources are underdeveloped and underutilised due to lack of sufficient funding.

Higher levels of on-going investment would enable the MRPs to build better connectivity between each other and the wider science base as well as farmers, industry organisations, public bodies and NGOs concerned with food and farming. Critically, it would also create the capacity required for the effective initiation, coordination and management for research and development of organic systems, and communication of the outcomes to stakeholders including the general public.

Science-based evidence firmly demonstrates that organic food and farming can significantly contribute to meeting the strategy's policy outcomes for Health & Wellbeing, Productive and Viable Land Use and Ecosystem Services.³ (This is acknowledged by the Scottish Government and its commitment to support the Scottish Organic Action Plan.)

- Organic farming systems are proven to help protect ecosystem services and deliver substantial carbon saving, pollution control, water and soil quality and biodiversity benefits.
- Organic certification confers legal status which assures consumers of a product's traceability with high environmental and animal welfare standards and no GMOs, helping to reinforce Scotland's reputation for quality food and drink.
- Organic food and farming systems promote short supply chains, which help keep spend in the local economy and support local businesses, jobs and communities.

Organic food and farming systems should therefore be a high priority on the Scottish research agenda. However, we are lagging behind our European neighbours many of which have dedicated organic centres for initiating, coordinating and managing research, development and innovation. The EU has put innovation at the heart of its strategy for achieving smart, sustainable and inclusive growth, with support for organic food and farming as a delivery mechanism for sustainable food production and land-use. So should Scotland.

² SRUC: http://www.sruc.ac.uk/info/120157/organic_farming (accessed 24/4/14)

³ Scottish Government: <http://www.scotland.gov.uk/Topics/Business-Industry/Food-Industry/national-strategy/support/Organics> (accessed 17/4/14)

IFOAM EU (the European umbrella organisation for organic food and farming) has built a broad and strong coalition by joining forces with civil society organisations, researchers, farmers and companies to established [TP Organics](#)⁴, the organic technology platform, which identifies innovation goals for organic food and farming. Scotland needs to make its contribution, and benefit from learning from other countries, which are investing in organic research to inform robust policy-making for key issues including mitigating climate change, increasing food security, protecting ecosystem services, increasing agricultural productivity and animal welfare, and reducing reliance on costly inputs (including livestock feed and fertiliser).

For example, the French government has pledged more finance via its state funded CASDAR programme (from 2014-2020) to support organic R&D (to produce more and import less), and communicate the outcomes effectively to the [French public](#).⁵ In Denmark, the government set-up The International Centre for Research in Organic Food Systems (ICROFS) in 2008.⁶ [ICROFS](#) initiates and coordinates the management of high quality research at a national level (it also has an international mandate) for organic food and farming, and promotes and disseminates research findings to inform the knowledge-based development of organic food and farming systems.

Question 6: What are your views of the performance and operation of the CoEs to date, are there any additional areas that would benefit from such support?

We would like to see the capacity of the CoEs expanded to inform a more comprehensive and longer-term programme of research, development and knowledge transfer for organic and agroecological food and farming systems, which support robust policy-making for:

- Mitigating and adapting to climate change;
- Increasing food security and creating safe food supply chains;
- Protecting and enhancing ecosystem services;
- Increasing agricultural productivity and sustainability;
- Improving animal health and welfare;
- Reducing reliance on costly inputs including livestock feed and fertiliser.

Optimising research for bringing average organic yields up to average conventional crop yields is a key area, which the organic sector would like

⁴ IFOAM-EU website: <http://www.ifoam-eu.org/en/what-we-do/research-innovation> (accessed 17/4/14)

⁵ Organic Market: <http://www.organic-market.info/web/Europe/France/France/220/227/0/14903.html> (accessed 17/4/14)

⁶ ICROFS: http://www.icrofs.org/Pages/About_ICROFS/index.html (accessed 17/4/14)

to see more investment directed at. A [study](#) by Warwick University concluded from a Defra field study of carbon footprints and yields for farms in Lincolnshire and West Sussex, that forcing production using conventional inputs (energy, water, fertiliser, pesticides) can lead to wasted resources, higher carbon footprints, but not necessarily higher yields.⁷ Directing resources instead at increasing yields in organic systems may pay greater dividends for the environment and production levels.

From a sustainable investment perspective, it therefore makes sense to increase funding for research and development for optimising organic yields in Scotland (The Defra study also demonstrated that carbon footprints and yields vary geographically, largely depending on climate and soil). Other areas which would benefit, and help to support optimising organic yields, include:

- Agroecological farming systems e.g. agroforestry: to produce high yielding crops, with high nutritional quality resilience to climate change and disease.
- Genetic diversity: to conserve and develop the genetic resources of heritage plant varieties (including protein crops) and livestock varieties, which are naturally adapted to local/regional environmental conditions in Scotland.
- Soil: to better translate learning from Scottish Government funded soil research into practical action on the ground by farmers and growers. This will support Scotland's ongoing commitment to "International Year of Soil 2015".

Question 7: Do you agree with the SG's proposal to end support for SPs and to explore alternative mechanisms to strengthen engagement between its investment in research and the business sectors it aims to support?

Question 8: Do you have any proposals for how the research portfolio can better link to the business community to deliver the desired outcome?

⁷ Rob Lillywhite, Warwick Crop Centre, University of Warwick: The influence of location and agronomy on the carbon footprint of field grown crops (accessed 25/4/14) http://www.sruc.ac.uk/downloads/file/1649/robert_lillywhite-the_influence_of_location_and_agronomy

This is an ideal opportunity to engage with the [European Innovation Partnership](#) for Agricultural Productivity and Sustainability. We support the EIP's aim of supporting "bottom-up approaches... linking farmers, advisors, researchers, businesses, and other actors in Operational Groups" to promote innovation, and marry productivity and sustainability⁸.

Whilst there is a wealth of information held by various organisations around existing best practice for sustainable agriculture, we believe that its potential for R&D could be further enhanced by improving the two-way flow of knowledge and information, in particular from the farming community to research bodies. This approach will help to increase knowledge transfer between the farming community and research bodies to help inform research and inspire innovation for sustainable [agriculture](#)⁹.

To maximise the benefits of the investment which is being made into sustainable agriculture by the Scottish Government, Soil Association supports practical R&D through its Field Labs, which empower farmers to design field experiments using their combined know-how and experience to pinpoint solutions to practical challenges. In particular, this model can aid the identification of gaps in current knowledge, where research could make a real difference for farmers in the field. Through linking the farming community with research bodies, the Field Lab approach is helping to inform more formal research that is relevant, respected and responsive to Scotland's farmers.

Question 9: Is the purpose and value of underpinning capacity sufficiently clear, if not how can it be improved?

Question 10: Do you have any views regarding the performance and use of the Contract Research Fund including how it could be improved?

Question 11: Could the overall delivery model be further simplified in a way which still enables SG to meet its strategic priorities for the portfolio, if so how?

⁸ http://ec.europa.eu/agriculture/eip/documents/eip-opportunities_en.htm#eip-origins-of-eip-agri (accessed 17/4/14)

⁹ http://www.ifoam-eu.org/sites/default/files/page/files/tpo_eip_briefing_arc_201310.pdf (accessed 17/4/14)

[]

Question 12: Do you have specific suggestions as to how the RESAS research strategy can contribute to the delivery of the objectives of the CAMERAS partnership?

The RESAS research strategy could contribute to delivery of CAMERAS objective through closer interaction with other organisations, and by recognising and supporting farmers as innovators. This would complement the European Innovation Partnership for Agriculture, and the proposed Operational Groups (assuming Scotland intends to implement these), and position Scottish agriculture well to exploit opportunities in Horizon 2020.

Question 13: Do you have any suggestions for developing the partnership with other research funders?

[]

Question 14: Do you have any particular suggestions as to how greater engagement with the HEI sector might be achieved?

[]

Question 15: Are the research outputs from the RESAS portfolio of research readily accessible or can this be further improved, if so how?

By engaging more directly with farmers (who are integral to many of the outcomes under each of the three research themes), farming organisations, extension staff and other operators, research outputs could be much more widely disseminated and would be more accessible to farmers in whose name that research is often done and who are often end users of that research. For example, this could be achieved through the creation of an easy to access online knowledge hub for farmers and growers. Too much information is currently scattered across a large range of websites, and is often buried too deep to be found quickly and easily by the end user.

In some cases research outputs could be disseminated more effectively to policy makers (or their advisers) through direct contact with researchers, either one-to-one or one-to-many. Currently, policy makers are often inaccessible to researchers who wish to communicate their findings, and there is a need for a structured framework which would enable more effective communication between scientists and policy makers.

Question 16: Is the current performance management approach fit for purpose or can it be improved, if so how?