

Report on the Evaluation of the Reponses for the Rural Affairs and Environment Research Strategy for 2016-2021 Consultation

Contents

Acknowledgements	3
Executive Summary.....	4
Introduction.....	5
Findings	8
Conclusions.....	25
Annexes.....	27
ANNEX 1: Consultation Questions.....	27
ANNEX 2: List of Respondents	29

Acknowledgements

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Executive Summary

The Scottish Government funds research across the Rural Affairs, Food and Environment portfolio on a five yearly basis, and in preparation for the next period (2016-2021) sought to engage stakeholders from across that portfolio regarding its future direction and emphasis.

A draft strategy for Rural Affairs, Food and Environment research was put out to public consultation between 28 February and 25 April 2014, and in response, 43 responses were received stakeholders, who ranged from individuals to producer organisations, from across Scotland and the rest of the UK.

The overall direction of the responses indicated that the current strategic priorities which operate for our research now are suitable for the next period for funding from 2016-2021, and that the proposed simplification of the structure of the research was to be welcomed. There was however a clear caveat that the proposed “three Theme” structure, and the links between those themes, needs to be more clearly articulated.

There was general recognition that a feature introduced in the last round of research funding – the Centres of Expertise – had been broadly successful in achieving their aim and should feature in our future approaches to science delivery and interpretation for policy.

Many of the comments raised were about ensuring that the range of connections and activities noted within the strategy document were clearly articulated. For example, what routes to encouraging innovation will be taken, how and who we will seek future opportunities for co-funding. A desire to see improved visibility and accessibility of all research supported by the Rural Affairs, Food and Environment portfolio was also reflected in many responses.

Introduction

The Scottish Government is a significant funder of science in the Rural Affairs, Food and Environment sectors, investing over £50 million of funding each year in a portfolio of strategic science and research.

Most of this research is carried out through the Scottish Government's Main Research Providers (MRPs¹). Research in these institutes differs from universities in being both directed and long-term. In addition, specific initiatives to increase utilisation of results from that research are also supported. Three Centres of Expertise have been established which deliver policy-relevant advice, while the two Strategic Partnerships seek to create bridges between the science carried out in the MRPs and industry.

Scottish Government funding of science forms an important part of Scotland's science base, enhancing Scotland's reputation for excellence and relevance in rural, agricultural and environmental research.

As part of identifying the Scottish Government's future needs and priorities for the Rural Affairs, Food and Environment portfolio, a public consultation on the Scottish Government's proposals for the next funding period (2016-2021) and the strategy behind it, was held between 28 February and 25 April 2014.

The distribution of the consultation was entirely online, with the key stakeholders in the wider public sector, academia, industry and voluntary sectors, alerted to the publication of the consultation.

The [consultation on the draft Research Strategy 2016-2021](#) sought to set out a high level vision for that period, seeking comments on:

- the key underlying principles for the future funding of the programme,
- the priority outcomes and themes for future support,
- funding and delivery mechanisms; and
- knowledge exchange and performance management approaches to be adopted.

Since the consultation closed, all responses that we were given permission to publish have been made public on the [Scottish Government website](#).

This report contains an assessment of the responses obtained in the consultation, and details of how we intend to revise the draft Research Strategy 2016-2021.

Analysis and reporting

Given the open nature of many of the questions posed, and the additional narrative which accompanied most responses to the individual questions, a thematic analysis of the consultation responses was carried out, based around a structured template.

¹ [Biomathematics and Statistics Scotland](#), [The James Hutton Institute](#), [Moredun Research Institute](#), [Rowett Institute of Nutrition and Health](#), [Royal Botanic Garden Edinburgh](#), and [Scotland's Rural College](#).

Due to the low number of total responses, the number responding to each question and the numbers of non-respondents are also reported. In the case of a number of questions, there was a high level of non-response, but this should not necessarily be inferred as indicating those respondents have no views on the topic at hand.

For textual responses, qualitative analysis sought to identify key issues and themes per question. All comments made by respondents at each open question were noted. As the range of issues mentioned in responses were often highly varied, grouping these issues proved difficult. Therefore, in many cases, a listing of the main topics raised by one or more respondents has been provided in the analysis of results.

Wherever possible, views offered from respondents that did not match the specific question to which it was attributed were still noted and assessed.

While the consultation gave those who wished to comment an opportunity to do so, figures quoted here cannot be extrapolated to a wider population outwith the respondent sample.

As it is important for the analysis to represent views from all perspectives, the report may also contain analysis from responses that may be based on a misunderstanding or on misinformation but that, nevertheless, reflect strongly held views. In a number of instances (e.g. in relation to visibility of knowledge exchange activities) these may in themselves be relevant findings.

Responses

Seventy five stakeholders were contacted directly to make them aware of the publication of the consultation. The organisations contacted represented a wide range of potentially interested parties, spanning research funders, industry and non-governmental organisations. Bodies representative of wider groupings (e.g. trade organisations) were also targeted as potential conduits for wider dissemination of the consultation.

A total of 43 responses were received, which broke down into the following categories:

Respondent categories	Number of responses
Higher Education Institute/Main Research Provider/Centre of Expertise	9
Industry bodies – companies, trade associations, etc.	6
Individual respondents	7
Non-Departmental Public Bodies	6
Civil society e.g. charities, NGOs	6
Local Government/Other government departments	3
Others	4

The responses are weighted towards either current research providers or other researcher groups (Annex 2). However, the mix of responses taken as a group is

relatively even, with key stakeholder groups including industry bodies, civil society and NDPBs represented in the responses.

Findings

The following section contains summary tables for the responses to each question, together with a qualitative assessment of the responses received, and our summary assessment of the messages contained in the views expressed.

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

	No response	Agree	Broadly agree, with caveats	Disagree	Suggestions for improvement	Other comments
Total	5	20	11	5	17	2

The three strategic priorities adopted for 2011-2016 were:

- **supporting policy and practice;**
- **supporting innovation and the economy; and**
- **scientific resilience.**

Many respondents agreed or broadly agreed that the strategic priorities set out for the 2011-2016 strategic research programme, remain robust and relevant for the period 2016-2021. A further five respondents expressed disagreement with that assertion.

Some respondents welcomed aspects of the strategic priorities including their alignment to the whole systems, multi-disciplinary approach of the Global Food Security Programme, a focus on enhancing collaboration across research themes, as well as the support for innovation. Priorities relating to scientific excellence and impact and multi-disciplinary working were also highlighted as positives.

However, while supportive comments were made on a range of topics, others disagreed with the premise of the question, citing a lack of detail and clarity around the priorities, particularly in relation to the links between the outputs of the programme and the potential support it may provide to policy and innovation.

Of the responses containing suggestions for amendments cover a wide range of topics, a few recurrent themes emerged:

- 'Supporting innovation and the economy' should have greater priority;
- a more explicit focus on the environment; and
- a need for research and development to satisfy the local needs of farmers and rural communities.

The topic of resilience stimulated much comment, with several respondents reflecting that the focus on resilience should not be restricted to scientific resilience alone, but should encompass other facets. There was occasionally a view that the

strategy should reflect an ambition to enhance Scotland’s leadership in the field of rural affairs and environmental science, and support work that promotes improvements in both natural, local and community resilience.

In summary, we interpret the balance of the consultation responses to Question 1 to:

- broadly support the strategic priorities, and would welcome further detail being made available;
- indicate that the topic of resilience would benefit from further consideration as a more prominent topic within the research portfolio.

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

	No response	Agree	Broadly agree, with caveats	Disagree		
Total	5	8	21	9		

The enabling principles consulted on were:

- **Exchanging Knowledge** - effective knowledge exchange is essential to ensure that knowledge is clearly communicated to end users and that relevance and impacts are maximised for them.
- **Inspiring Innovation** - symbolises the aspiration to constantly look for new and novel approaches including facilitating interdisciplinary research; enhancing the funding base; and collaboration and cross-partner working to deliver solution focused impacts.
- **Maintaining National and International Capability** - supporting and sharing the physical and intellectual assets within the science base including infrastructure, equipment, data and expertise and other research platforms (e.g. farms) to safeguard the continuous development and retention of internationally recognised expertise within Scotland.

Most respondents agreed or broadly agreed that the ‘enabling principles’ in the draft Strategy set the right context, however around one third of respondents expressed varying degrees of disagreement with the principles as set out above.

Both the negative and positive comments received spanned a range of views, rather than focussing on particular issues.

On the ‘Exchanging Knowledge’ enabling principle:

- there was consistent support for actions that seek to maximise knowledge exchange (KE) from the programme, in a two-way process that focusses on ensuring the needs of end users – however defined - are understood and met;

- some respondents qualified that view with notes of caution that this approach must balance with the longer-term aims of the research base and the services it supports;
- a greater emphasis to be placed on sharing intelligence and data widely to identify common solutions and prevent duplication, on quality rather than quantity of outputs, and improving the dissemination of results, was noted in individual responses.

On the ‘Inspiring Innovation’ enabling principle:

- a number of respondents provided suggestions as to how this might be reformulated, with an overall greater emphasis on the process of collaboration between funding organisations to help to facilitate inter-disciplinary research and cross-partner working.

On the ‘Maintaining National and International Capability’ enabling principle:

- suggestions received from respondents proposed that this enabling principle should include the development of skills capacity and intellectual assets as well as physical infrastructure and equipment.

In summary, we interpret that the balance of the consultation responses to Question 2 to indicate:

- support the broad approach of the three enabling principles that have been set out; and
- that further detail underneath to better define each of the principles will be required.

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

	No response	Agree	Broadly agree, with caveats	Disagree	Suggestions for alterations proposed	Other comments
Total	6	7	9	14	24	7

A small majority of respondents agreed that the outcomes listed were broadly in the right areas. However, there were a large number of modifications/additions proposed, from both those in agreement and those disagreeing with the outcomes. One respondent suggested that the outcomes in the consultation document were offering an illustration, rather than a definitive list.

The additional areas of research/outcomes offered by respondents were considerable, and covered a wide range of topics:

- Improving ecosystem services in the urban environment

- Good air quality for people and the environment including urban air quality
- Sustainable soil use and management
- Tangible & intangible cultural services to be identified and integrated into sustainable land use policies
- Understanding the multiple benefits of land use options and their potential contribution to a diverse and sustainable economy
- Appropriate, sustainable and integrated land use
- Reduced emissions and climate change impacts through appropriate land use
- Sustainable resource use
- Realising and implementing the circular economy
- Transition to a low carbon, resource-efficient economy
- Development of low carbon and resource efficient technologies and systems
- Optimised climate change mitigation and adaptation strategies
- Adaptation to climate change
- Manage the change in biodiversity in an adapting climate
- Achieving ecological status objectives for the water environment
- Modal shift through more active travel
- Integrated pest and disease management.
- Healthy crops
- High crop yield and quality / better crop varieties for yield, agronomics, resistance and quality / Realising the potential of genetics and crop breeding through modern technologies
- Dealing with emerging plant diseases
- Impacts of a changing population in Scotland and its impacts on food security
- Food groups to be farmed in Scotland that support improvement of the nation's diet
- Sustainable Tourism

In summary, we interpret the balance of the consultation responses to Question 3 as indicating:

- support for the selection of research areas/broad outcomes was mixed;
- there may be a wide range of potential additional topics that may require further consideration; and
- a need for further review of the outcomes in conjunction with the strategic research themes to provide a more comprehensive and clearly expressed vision of the research.

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

	No response	Agree	Broadly agree, with caveats	Disagree	Suggestions for alternatives proposed	Other comments
Total	4	9	10	20	21	5

The Strategic Research themes consulted upon were (1) Health & Wellbeing (2) Productive and Viable Land Use, and (3) Ecosystem Services.

There was an almost even split of views between respondents who agreed and disagreed with the three Theme structure proposed, with many respondents providing alternate descriptors for the Themes proposed. A considerable variation in the interpretation of the content of the themes by respondents was noted in the response overall, as was the view by some respondents that the theme definitions were unclear.

A large part of total respondents suggested changes to the themes – the ecosystem services theme was noted most frequently for review or redrafting. In particular comments were noted that the range of research in the Theme was not well described by the existing title, and may be better so recognised through use of terms such as “natural assets” or “natural capital”. Respondents also individually suggested other areas of research that could benefit from more explicit recognition including biodiversity, crop research, water, land-water-atmosphere interaction, catchments. Respondents suggested additional themes on healthy and vibrant communities and on climate change adaptation.

A common topic for many responses was the need to integrate the science across the theme boundaries rather than to allow scientific silos to be erected. However, one respondent suggested that the proposed way of separating the issues would lead to research partners doing what they do best in their fields of expertise. Overlaps between the different themes were noted and were either seen to help cross-theme integration or, conversely, to confuse the issues and make a proper understanding of the relationships and trade-offs between the different themes more difficult. The responses ultimately beg the question of how collaboration and a ‘systems approach’ is going to be achieved. One respondent specifically suggested encouraging distinct cross-theme research projects to further that end, another proposed that the core of the research portfolio be constructed around a small set of questions that require a cross-disciplinary response.

The areas of cross-integration mentioned include integrated land use, biodiversity and ecosystem function which underpins the benefits land provides to society, land use and ecosystem services to promote farming efficiency, focus on sustainability as a principle that pervades all themes, interdependence of human, animal and environmental health.

In summary, we interpret the balance of the consultation responses to Question 4 to be:

- supportive of the move towards a smaller number of themes;
- indicative of a broad requirement to define themes more sharply to clarify their scope, with a review of theme names – particularly “Ecosystem services” and the possible addition of a theme;
- indicative of a need for more explanation on how cross-theme integration will be achieved, and on which topics it will focus.

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?

	No response				Suggestions for improvement	Other comments
Total	11				32	12

The majority of those participating in the consultation provided suggestions on how Scottish Government could maximise the benefits of on-going investment in the Main Research Providers to build and benefit from connectivity with the wider science base.

The suggestions offered covered a range of topics including collaboration with other funders in commissioning, funding requiring collaboration between MRPs and HEIs, joint staff appointments/secondments/placements, improving communications and eligibility for RCUK funding.

Suggestions provided included:

- improving the linkages between the work undertaken by MRPs and the programmes supported by other government and scientific funders;
- examining how the SG can work with other major research funders to deliver coordinated and integrated funding opportunities which promote collaboration between MRP, HEI and NGO research providers;
- provision of funding mechanisms/funding to promote mutually beneficial collaborations from consortia of MRPs and HEIs, including supporting individual posts;
- including the level of collaboration with HEIs in the assessment of impact and setting collaboration key performance indicators for the MRPs;
- expanding the CoEs' role with appropriate funding to encourage HEI involvement as well as encouraging wider collaboration outside the Scottish HEIs;
- opening up more of the strategic research programme to competitive and collaborative tendering from HEIs as well as MRPs;
- creating short-term staff exchange/fellowships between organisations, an exchange/ secondment system joint appointments and internships/ placements across MRPs, HEIs and the SG;
- opening up access to research infrastructure and clustering activities, in particular encouraging HEIs to use MRP resources in their research;
- using the network of research farms owned and/or managed by JHI/SRUC to develop research, trial and demonstration partnerships;
- open calls for proposals and consultations and involving rural residents in research proactively;
- improving the communication of RESAS funded research, as opportunities and outcomes;
- increasing levels of on-going investment to allow the MRPs to enhance capacity and build better connectivity between each other and the wider science base;
- continuing to support the MRPs and retaining the critical mass of expertise and infrastructure in strategically important areas;

- examining the utility and use of the MRPs' assets including: whether properties are being used for collaborative research/demonstration and whether datasets are being made available to the widest possible user base;
- assessing knowledge gaps and research needs prioritisation and/or assessments of state of knowledge/scientific consensus across areas identified as important by end users;
- undertaking a gap analysis of capability and capacity and the commissioning of specific projects to address these gaps;
- identifying where investments in MRPs provide greatest returns and encouraging government and industry investment;
- adopting the commissioning model employed by European Structural Funds and the cultural sector;
- making fuller use of potential European funding sources.

In summary, we interpret the balance of the consultation responses to Question 5 to encourage us to:

- look carefully at the existing mechanisms through which MRPs interact with the rest of the HEI sector;
- identify areas where better use can be derived from existing assets that are supported through SG funding, and explain how we intend to encourage that use.

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?

	No response	Positive view	Mixed view	Negative view	Suggestions for potential additional areas of CoE support	Other comments
Total	6	13	13	3	20	5

Users of the advice provided by CoEs indicated they were very positive about their utility, relevance and responsiveness.

Responses from CoEs themselves recognised an initial slow period of settling into their role. Respondents noted that effectiveness of a CoEs was seen as very much dependent on a strong policy-science interface and the requirement for professional management of the centres was stressed. There were a number of suggestions for improving the effectiveness of the Centres, but no opposition to the model itself was expressed.

Given the positive experience by policy customers, a range of additional areas in which it could have utility were identified by different respondents:

- Plant (& tree) health;
- Animal welfare;
- Biodiversity;

- Landscape value and change - in the context of the land use strategy;
- Organic and agro-ecological food and farming systems;
- Cereals particularly barley;
- Soil science;
- Rural economy;
- Food, health and nutrition.

Some responses called for additional CoEs as science hubs, as opposed to the current model, in which a Centre of Expertise provides policy-focussed expertise and access to scientific advice.

In summary, we interpret the balance of the consultation responses to Question 6 to support:

- the model and the continuing existence of the current CoEs;
- review of the effectiveness and remit of the current CoEs so they remain relevant;
- assessment of the scope for additional, policy-relevant Centres of Expertise.

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?

	No response	Agree	Partially agree, but explore alternate ideas	Disagree	Suggestions for alternatives	Other comments
Total	20	17	3	1	6	2

There was strong agreement that alternative mechanisms should be explored. The one respondent that disagreed indicated that it was too early to judge the success of Strategic Partnerships (SPs).

There were some specific criticisms regarding the manner in which SPs were set up. It was suggested that alternative mechanisms should build on successful models and not make an already crowded landscape more complex.

In summary, we interpret the consultation responses to Question 7 to:

- send a clear challenge to define and implement alternative mechanisms to support business innovation from the Strategic Research programme.

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

	No response	Yes – proposals suggested		No comment		Other comments
Total	6	31		5		2

Given the open-ended question, a wide variety of proposals were forthcoming from respondents. Aggregating views together, some key topics emerged for further consideration:

- Many respondents encouraged us to not only join with, but also learn from other funders;
- There were many contributors who proposed that we adopt a more structured would approach to consulting with industrial partners and securing their involvement in the commissioning of projects
- A small number of respondents also noted that some of the CoE models, with structured KE events, were opportunities to build upon for engaging industry;

Taking into account the responses to Question 7, we interpret those provided to Question 8 as:

- inviting us to develop more structured approaches for our engagement with the business sectors, which build upon, rather than replicate, the work of other funders.

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

	No response	Agree	Broadly agree, with caveats	Disagree	Suggestions for improvement	Other comments
Total	16	12	7	5	14	4

The larger part of the responses to this question agreed that the purpose and value of underpinning capacity was clear, however, there was some disagreement with this proposition, and many suggestions made regarding potential improvements.

Individual respondents noted positive aspects of underpinning capacity funding in terms of the opportunities it provides for flexibility and the development of novel science opportunities through new collaborations both in Scotland and further afield. In contrast, replies disagreeing or providing caveats focussed on a perceived lack of

clarity as to the purpose of this funding, and whether it was possible to determine if best value had been obtained from investment in underpinning capacity.

Some suggestions for improvements included:

- giving a fuller description of what constitutes underpinning capacity, including a more detailed breakdown of costings and a register of assets and work streams which are of critical value;
- clarifying the purpose and value of underpinning capacity to end users of research, placing more emphasis on outcomes rather than outputs;
- examining where there may be overlapping and aligned capacity – particularly with CoEs - to improve leverage and reduce duplication;
- making primary data accumulated through the main SG funding streams readily available to other researchers and a wider groups of stakeholders.

We interpret the contributions to this Question 9 as indicating that:

- underpinning capacity is generally seen as a positive aspect of our overall funding;
- greater visibility of the resources and outputs of this funding is seen as desirable, as is the development of measures of value for money for this portion of research investment.

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

	No response	Positive	Mixed	Negative	Suggestions for improvement	Other comments
Total	23	14	2	2	8	7

There was a notably low level of response to this question, although most that did so, had positive comments to offer.

Many of those responding positively noted, in different terms, the value in having a funding resource that can act flexibly in the rapidly changing environment of policy, and can support research in areas that are not viewed as being core priorities in the strategic research programme. The use of Contract Research Fund as a lever to develop co-funding opportunities with others was also noted.

In contrast, some respondents expressed concerns that it was difficult for external research providers to access and engage with this fund, and specifically, the absence of published information on Contract Research Fund reports was noted as a significant weakness.

Suggestions for improvements were varied, including:

- investigating whether more innovative use could be made of the CRF to leverage funds from other sources;

- encouraging ways in which Contract Research Fund can help to encourage collaboration and identify common priorities for CAMERAS, and maximise the benefit from the work done;
- improved communication on the role and objectives of the CRF to increase awareness, including the interaction it has with Centres of Expertise and other parts of the overall research budget.

We interpret the contributions to Question 10 as indicating that:

- the flexibility which the Contract Research Fund has is a key feature that needs to be preserved;
- flexibility needs to be balanced with consideration for the opportunities which may exist on a more strategic basis for co-funding and co-production with other funders;
- it has been noted by potential users that visibility of the outputs from this funding needs to 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?

	No response	Agree	Broadly disagree, with caveats	Disagree	Suggestions for improvement	Other comments
Total	27	4	3	2	11	2

The majority of respondents did not provide comments to this question, and comments largely focussed on suggestions for potential improvements.

While one respondent commented that further simplification would be challenging, as the consolidation which took place in the 2011-2016 funding round should be allowed to bed in, most comments received indicated a desire from respondents to see further simplification and improvement.

Suggestions on how delivery model may be simplified included:

- combining the funding streams previously used for both Strategic Partnerships and the Contract Research Fund;
- delegating as much authority as possible to MRPs against clear strategic objectives;
- integrating the R&D and KE activities more closely within programmes to provide efficiencies and improve practical interpretation and delivery to industry;
- creating a simplified delivery model composed of fewer elements to increase the efficiency of research delivery, for example through ensuring that individual effort in MRPs is not divided into many parts.

The contributions to Question 11 are interpreted as indicating that:

- there are further simplifications and improvements that can be made to the current delivery model 2011-2016;
- further work is encouraged to identify delivery models operated by other funders which may help guide this process.

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?

	No response				Suggestions provided	Other comments
Total	26				15	8

Suggestions provided by respondents to this question focused on a range of topics, including the role of the Contract Research Fund, the links between RESAS and CAMERAS, the links between RESAS and the Main Research Providers (MRPs) and links to potential industrial partners.

Suggestions included:

- ensuring that the RESAS and CAMERAS research strategies are complementary in delivering the rural affairs and environment research needs of the SG and society;
- involving CAMERAS partners in the strategic programme development and review process and creating a place on the Strategic Research Programme Board for a CAMERAS partner representative;
- encouraging the MRPs to discuss proposed Strategic Programme work streams with CAMERAS partners at an early stage and to involve them in the steering groups for relevant work streams and projects;
- facilitating closer alignment between the MRPs and CAMERAS, for example through encouraging MRPs to help develop CAMERAS Evidence Plans;
- holding specific, targeted CAMERAS KE events jointly organised by MRPs to illustrate achievements and impacts;
- considering the wider aspects of environmental research and using the wide expertise within the MRPs to help the relevant CAMERAS partners with the development of greater multidisciplinary work e.g. urban regeneration, future cities and urban green space.
- encouraging the CAMERAS partners to identify research needs with the private sector, and help identify funding streams to help support these needs.

Responses to Question 12 were interpreted as indicating:

- that there is further work to do in terms of combining the interests and expertise of CAMERAS partners with the overall Strategic Research programme;
- that opportunities exist for potential co-construction with CAMERAS which should be explored in more detail.

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

	No response				Suggestions provided	Other comments
Total	20				20	8

Around half the respondents provided suggestions for developing the partnership with other research funders. The suggestions made focused largely on maximising funding opportunities available within the UK and EU as well as promoting collaboration and engagement with other UK bodies, and included:

- embedding better communication and a joined up approach and developing more holistic methods of working for all publically funded initiatives;
- including within the SG strategy references to potential partnership mechanisms such as LWEC and GFS, UK Government funding, additional funding potentially available in EU programmes such as Horizon 2020 and other European national programme coordination mechanisms such as ERA-Nets and the Joint Programming Initiatives;
- appointing a secondee having experience of working with other funders to work with SG to examine co-funding opportunities;
- holding formal and transparent discussions with the MRPs and research councils at UK and EU level to identify key areas of interest and potential research topics;
- ensuring continued and evolving structured dialogues and engagement between RESAS and other funders to ensure strategic planning cycles are aligned and duplication of effort is avoided;
- ensuring RESAS is represented on other funders' key committees and they are represented on RESAS key committees;
- working with the NGO sector as a significant potential contributor of research partnership opportunity;
- improving integration with other sectors of SG policy such as health, community empowerment and place-making.

We interpret the responses to Question 13 as encouraging us to:

- adopt a clearer structure in our approach in working with other funders,
- make that co-operative working more visible to the wider research and research-user community;
- continue to develop co-funding opportunities with other funding bodies.

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

	No response				Suggestions provided	Other comments
Total	19				24	6

Suggestions covered a range of topics including greater collaborative funding, new funding initiatives, co-funding of studentships, greater use of the CoE model, holding tailored events and staff exchange mechanisms.

Suggestions provided included:

- developing more tailored incentives through the SFC and other agencies to encourage HEIs to engage collaboratively in delivering innovation and KE in priority areas;
- aligning the RESAS portfolio and SFC priorities to ensure availability of funding streams and that success criteria for HEIs recognises societal benefit through supporting and contributing to policy and action;
- establishing formal engagement links between RESAS and the SFC;
- removing the artificial barriers of eligibility of the MRPs to particular funding streams to promote better engagement with the HEI sector;
- releasing additional response mode funding or providing flexible funding through studentships , including CASE-type awards, or short-term projects to facilitate collaborations between the HEIs and MRPs;
- ring fencing a percentage of the funds provided to MRPs specifically for collaboration with HEIs through strategic programmes;
- engaging with Interface on how their experiences can be better utilised to support collaboration between HEIs and MRPs, for example through support for competitive calls with industry for exploitation of research;
- using the CoE model by using the CoEs to formalise and strengthen the collaborative links between HEIs and the MRPs through funded or co-funded research posts, secondments or sharing of datasets and modelling capacity;
- ensuring the best available expertise is engaged on research projects through more open competition and encouraging gatherings of Scottish Environmental Research funders to consider collaborative funding of specific policy research areas;
- promoting CAMERAS Strategies as indicators of priority research areas and developing the funding of relevant PhDs;
- encouraging MRPs to hold open days to demonstrate what they can offer to HEIs;
- establishing an exchange or secondment system of professionals between organisations;
- broadening the SG portfolio of experts and projects and taking a more proactive role in facilitating partnerships and collaborations.

In summary, we interpreted the consultation responses to Question 14 as encouraging us to:

- consider in more detail how we can encourage mechanisms which help MRPs engage with HEIs and *vice versa*;
- identify areas where joint working with other funders can best help to strengthen the wider science base of Scotland in the areas of rural affairs, environment and food topics.

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

	No response	Agree	Broadly agree, but with caveats	Disagree	Suggestions for improvement	Other comments
Total	9	4	8	13	23	2

Respondents who expressed an opinion were evenly split between those that felt research outputs were accessible, and those that did not. Almost all respondents had proposals potential improvements which could be made. There was little commonality in the views expressed, except for an observation by a number of respondents that they felt information on outputs is often scattered and deeply buried and therefore not easily accessible to the average farmer, crop grower or business. There was also some evidence of a lack of visibility to some respondents of existing online resources, such as the Knowledge Scotland website.

Suggestions for improvements in the accessibility of research outputs included:

- increasing awareness of dissemination routes, including use of social media;
- creating a single website to provide links to all the research outputs along with provision of briefings to end users;
- establishing an online resource for searching past and current research;
- regular programme reviews and the development of report repositories and publication listings;
- creating a post specifically to increase public understanding of RAE research;
- improving co-ordination with relevant RAE related outputs from research providers outwith the MRP community;
- creating a mechanism for feeding in requests for research briefs to the SRP or CoEs from the private sector;
- utilising new technologies and industry collaboration to measure impacts directly and to feed this back to inform research as well as end users;
- developing a structured framework to enable more effective communication between scientists and policy makers;
- use of the proposed Knowledge Transfer (KT) and Innovation Fund under the 2014-2020 SRDP to disseminate research outputs to end users;
- using the CoEs as a KE interface for relevant aspects of the programme;
- encouraging the sharing of knowledge between the research base and business through people, networks and holding events focusing on fewer, high profile, high impact events rather than more local disparate initiatives;

- considering whether there would be uptake for briefings/evidence reports similar to the EU Science for Environmental Policy Briefings.

In summary, we interpreted the consultation responses to Question 15 as indicating that:

- there is demand for greater information on the outputs from the research we fund which is being only partly met at present;
- we need to consider how to improve the profile of the materials which we already publish;
- creating greater access to the information generated and expertise we fund, is required both online and through more traditional KE methods.

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

	No response	Agree	Broadly agree, but with caveats	Disagree	Suggestions for improvement	Other comments
Total	24	0	5	2	12	4

The majority of respondents did not provide a response to this question. Five respondents expressed broad agreement that the current performance management approach is fit for purpose, with two disagreeing. Within the responses elicited, there were twelve respondents who offered suggestions for improvements to performance management.

All those who expressed broad agreement that the current performance management approach is fit for purpose still felt there was room for improvement. Respondents who did not agree that it is fit for purpose noted concerns regarding the time involved in reporting.

Common messages from respondents included:

- a desire to have more visible and more timely outputs derived from performance management of the Strategic Programme;
- a greater involvement of end users in the process of assessment and the Strategic Research Programme Board;
- a balanced use of metrics, including the development of objective measures that capture the impact of the more applied research the programme supports; and
- a clearer pathway created between expectations at the outset of the programme – from specific end user, through to national scale - and the research outcomes and outputs generated.

In summary, despite a the low level of responses to Question 15 which made it difficult to provide detailed interpretation, we interpreted the consultation responses to indicate:

- a consistent message for greater transparency in all aspects of the performance management processes that we employ to monitor and manage our research programmes.

Conclusions

The consultation attracted responses from a wide range of respondent views. Due to the low numbers of responses overall, on many occasions the narrative discussion provided by respondents was helpful in providing additional context for the contributions received.

The main points that we will seek to retain, and the actions which we need to undertake in redrafting the Research Strategy 2016-2021 are as follows:

Main points in the draft Research Strategy 2016-2021 to be retained:

1. The strategic priorities identified for the 2011-2016 Strategic Programme remain valid for 2016-2021.
2. The three enabling principles of 'exchanging knowledge', inspiring innovation and 'maintaining national and international capability' are sound, albeit that in the final research strategy, all three need to be developed in further detail.
3. The high level outcomes proposed require further refinement to ensure that they are consistent both with the research to be commissioned, and the overall vision of the next Research Strategy.
4. The proposal to move to a smaller number of Themes than the present programme is a positive step.
5. Centres of Expertise as a model for connecting advice and science, will continue.
6. Strategic Partnerships will not continue and will be replaced by alternate means to encourage science-science and science-industry collaboration.
7. The funding of specific services as underpinning capacity is valued and will continue as discrete funding stream.
8. The flexibility of the Contract Research Fund is a key feature that needs to be preserved.
9. Efforts are to be maintained in seeking strategic co-funding opportunities with other research funders, particularly where that can lead to more collaboration with Scottish HEIs.

Main points identified for further consideration in redrafting of the Research Strategy 2016-2021:

1. Resilience was an important topic for many respondents and requires additional consideration in the next round of research funded.
2. To review the Theme titles to consider how, in particular, work on ecosystems was represented.

3. To look again at the interaction between the Themes chosen and the outcomes desired, and include greater articulation on how cross working will be encouraged and secured between Themes.
4. Clearer statements on how greater use of and accessibility to the existing assets – both intellectual and physical resources – will be encouraged.
5. Provide further indication of other topic areas in which Centre of Expertise–type initiatives may be considered.
6. Clearer indication of what routes to innovation will be taken, and how end-users will be engaged.
7. A clearer explanation of the approach to be adopted for co-funding opportunities.
8. Improving the visibility and accessibility of all research outputs from the Rural Affairs, Food and Environment portfolio.
9. Improve the visibility and accessibility of the results of assessment of performance management from the Rural Affairs, Food and Environment portfolio.

Annexes

ANNEX 1: Consultation Questions

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

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

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

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?

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?

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?

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?

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?

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?

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

ANNEX 2: List of Respondents

Organisations

Association of Deer Management Groups

Centre of Expertise on Climate Change (CXC)

Archaeology Scotland

Scotch Whisky Research Institute

Scottish Environment Protection Agency (SEPA)

British Society of Plant Breeders (BSPB)

Biodiversity Scotland, Scottish Biodiversity Science and Technical Group

Food Standards Agency

University of Aberdeen, Rowett Institute

Nourish Scotland

Farm Animal Welfare Committee

The James Hutton Institute

Centre of Expertise for Waters (CREW)

National Farmers Union Scotland (NFUS)

Scottish Water

RSPB Scotland

Organic Growers Alliance

Agriculture and Horticulture Development Board

Interface - The knowledge connection for business

The Game and Wildlife Conservation Trust

University of Edinburgh

The Royal Society of Edinburgh

Royal Botanic Garden Edinburgh

Moredun Research Institute

Scottish Natural Heritage

Quality Meat Scotland (QMS)

Stirling Council

Scottish Organic Forum

Soil Association Scotland

Forestry Commission

Scotland's Rural College (SRUC)

Crichton Carbon Centre

Department for Environment, Food and Rural Affairs (Defra)

University of Glasgow, College of Medical Veterinary and Lifesciences

Research Councils UK (RCUK)

Scotch Whisky Association

Individuals

Professor Mark Woolhouse – University of Edinburgh, Centre for Immunity, Infection and Evolution

Professor Jim Scudamore – Chair of the Steering Group for the Centre of Expertise on Animal Disease Outbreaks (EPIC)

Dr Graham Jellis – Independent consultant

Dr Dominic Mellor – University of Glasgow, School of Veterinary Medicine

Mr Brendan Burns – Burns, Burns & Burns

A further two respondents indicated they did not wish to have their details made public



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