

Rural Affairs and Environment Consultation on the Research Strategy for 2016-2021

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

We suggest that the high level outcomes are not sufficiently clear and that greater clarity is required. To this end we suggest the following:

Productive and Viable Land Use (PVLU)

With respect to this strategic high-level research theme we are somewhat surprised that crops, unlike livestock, are not explicitly mentioned. We suggest that the following sub heading "Realising the potential of genetics and crop breeding through modern technologies" should address this. The crop sector is the most successful and profitable in the Scottish Agri-food and drink arena.

Furthermore, this explicit identification of the importance of crops (genomes to products, the translational pipeline) then makes the identification of *Integrated pest and disease management* as a sub-heading much more logical, and chimes with the RESAS aim for a systems approach to the next strategy.

We would also suggest that the subheading **Food security and sustainable intensification** (Ecosystem Services, ES) is much more logically placed in the **PVLU** theme, alongside the crops and livestock activities, IPDM etc., thereby further aiding a holistic systems delivery approach for policy, economic development and translation to stakeholders.

Health and Wellbeing (HW)

This pillar should be renamed Vibrant Communities (VC) or the Outcome "Resilient communities" should become the theme name, and "Health and Well-being" should be an Outcome. The "Health and Wellbeing" name does not describe the activities planned/described. The aspects of healthy and sustainable diets to be delivered here (nutritional and health beneficial enhancement, antinutrient reduction & food chain nutrient and health value) build on existing and well known nutritional/health requirements that can be used as targets for the crop and livestock activities planned as part of the 2016-2021 strategy. Furthermore these would be delivered in conjunction with socioeconomic studies to elucidate the local food and drink production requirements and economic implications for delivery of these foodstuffs (or raw materials for processors).

Ecosystem Services (ES)

Within this Theme we would argue that the first subheading below is intimately linked with the second from HW (or VC as we suggest).

- Development of low carbon and efficient waste management systems
- Encouraging the uptake of key low carbon and other behaviours contributing to broader societal wellbeing (HW [or VC as we suggest])

We suggest replacing these with *Realising and Implementing the Circular economy* and placing it in HW [or VC as we suggest]). The concept of the Circular Economy is well established in Europe¹, the UK² and Scotland³ and is generally accepted as a model of production and consumption more that is more resource efficient (doing more with less, and minimising waste), while also laying the foundations for a more circular model of resource use. In the context of the RESAS 2016-2021 strategy will combine aspect of behaviours to reduce waste (as detailed in RPP2 to achieve a low-carbon Scotland) and also develop strategies and activities to realise value, at the local to international levels, from waste materials, e.g., bio-refining crop and livestock wastes for food ingredients, pharma, fuel etc.

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

We welcome the desire of the strategy to increase inter-disciplinary working by means of changing the structure to three high level research themes. We feel the proposed structure should encourage greater research provider cross fertilisation and interdisciplinary activities thereby aiding systems based delivery to policy and stakeholders. The strategic high-level research themes, as graphically represented, have common areas of interest that will be addressed via complementary approaches. We also welcome the emphasis on "system's thinking", but we think that there needs to be careful thought about what this actually means.

¹ http://blogs.ec.europa.eu/orep/tag/circular-economy/

² http://www.wrap.org.uk/content/wraps-vision-uk-circular-economy-2020

³ http://www.scotland.gov.uk/Resource/0043/00435308.pdf