

SIRN AGM 2017

Rothamsted Research - 30th November 2017

At the end of the AAB-SIP Sustainable Intensification (SI) Conference in November 2017, SIRN members met with the Leadership team to discuss current and future activities and the role of SIRN in representing the SI community beyond the current project. This page shows major discussions held with additional information on funding and initiatives.

What should be the focus for SIRN future activities?

Members were previously asked to vote on priority activities for the future:



Results showed the following preferences as well as providing additional discussion on SIRN legacy.

- 1st Priority: securing more funding for SI
- 2nd Priority: horizon scanning activities: gaps and opportunities
- Other priorities: sharing resources, improving communication and activities

1st Priority

Discussion on ways to secure more funding:

The Research Councils have a major role in supporting SI research in the UK. The table below shows [the allocation of science and research funding established in March 2016](#) for each individual research council over the next five years. Currently, there is no **possibility for increasing domestic funding but there may be opportunities for international funding in the context of developing countries (see below).**

A challenge for the consolidation of SI research is to be successful in producing high quality systems approach proposals under existing funding mechanisms. SIRN is exploring ways to coordinate our actions to maximize our capacity as a research community to be successful under such schemes.

Research Councils

		16/17	17/18	18/19*	19/20*	20/21*	Total SR15
AHRC	Resource Total	101	101	99	98	-	398
BBSRC	Resource Total	353	356	350	347	-	1,406
	World Class Labs Capital	64	66	53	58	58	241
EPSRC	Resource Total	807	796	790	783	-	3,176
	World Class Labs Capital	52	52	52	54	54	211
ESRC	Resource Total	155	157	154	153	-	618
	World Class Labs Capital	28	26	21	17	12	92
MRC	Resource Total	581	594	597	594	-	2,367
	World Class Labs Capital	33	33	34	47	50	147
NERC	Resource Total <i>Of which the ALI Partition</i>	291 30	294 30	290 30	288 30	-	1,163 118
	World Class Labs Capital <i>Of which the ALI Partition</i>	40 7	39 7	35 7	31 7	31 7	144 28
STFC	Resource Total	388	396	406	414	-	1,603
	World Class Labs Capital	124	117	123	114	115	479
Resource Total		2,676	2,694	2,686	2,676	-	10,732
World Class Labs Total		341	333	318	321	320	1,313

* Indicative only.
Totals may not add due to rounding.
The SR15 period is from 2016/17 – 2019/20.

Department for Business Innovation & Skills – The Allocation of Science and Research Funding 2016/17 to 2019/20 – March 2016. Publication is available from [Government's website](#)

How the community could benefit from existing funding mechanisms?

Different research councils have different systems to prioritize research areas:

BBSRC responsive mode priority calls:

The calls reflect topics or activities within their broader strategic areas that they particularly wish to encourage and promote.

- **SIRN discussions:** *One of the biggest benefits to this type of priority call is that review panels will be established with sufficient expertise to represent the topic area of the projects to be received, and therefore better able to evaluate the proposals. Although highlight calls can increase competition, overall for the SI area will benefit because some projects would be funded.*
- **Actions:** *to encourage SI community to consider:*
 - *making a case for a strategic call*
 - *to become members of BBSRC Strategy Advisory Panels, Committees and the Pool of Experts. These members play a key role in delivering BBSRC's mission by providing expert input and advice that helps shape and develop their strategy and ensures that their investment decisions are supported by expert knowledge and insight from members of the scientific research and innovation community. Besides this, it is useful for potential applicants to see how the review process functions.*

NERC Strategic Research

This funding supports research into environmental areas of major economic and societal importance. It aims to address key science challenges and priorities for the 21st century. NERC plans strategic research funding opportunities via its Strategic Programme Advisory Group, which uses ideas from the community to decide where strategic research should be targeted.

- **SIRN discussions:** *NERC has several routes to funding that can be explored by the SI community such as Highlight topics, Strategic Programme areas, joint strategic response and training.*
- **Action:** *to encourage SI community to consider submitting proposals for these calls.*

What are the opportunities under the new funding landscape?

Industrial Challenge Funding:

BBSRC has made a case for agricultural sciences to be funded under this scheme. This is still under consideration and we should hear more soon.

- Other activities were carried out by [representatives of agricultural sectors](#) at the House of Lords Science and Technology Committee during its inquiry into [Life Sciences and the Industrial Strategy](#). Representatives from Rothamsted Research, the Royal Veterinary College and Syngenta made the case for inclusion of agricultural sciences in the strategy.
- **Action:** *to monitor developments and keep the community informed*

Global Challenge Research Fund:

Around half of the total fund (1.5 billion) was allocated to RCUK. This money was distributed in two ways: by a Collective Fund and to Individual Research Councils.

The GCRF Collective Fund has funded 2 major initiatives:

- [Growing research capability to meet the challenges faced by developing countries](#) with 37 successful projects including:
 - [Development Trade-offs - Social and environmental trade-offs in African agriculture](#) led by Dr Barbara Adolph - International Institute for Environment and Development, London - ESRC award amount: £ 5,630,400.39 ¹
 - [Ensuring dams promote sustainable Development - Resilient and sustainable interventions in water-energy-food-environment mega-systems](#) led by Prof David Hulme - The University of Manchester - ESRC award amount: £ 8,162,095.57
 - [A drought in water research - Sustainable water and food security in drylands of sub-Saharan Africa](#) led by Prof Justin Sheffield - University of Southampton - NERC award amount: £ 5,481,342.75
 - [Keeping moisture in the soil - Environmental physics, hydrology and statistics for conservation agriculture research](#) led by Prof Murray Lark - NERC British Geological Survey - NERC award amount: £ 5,141,662.47
 - [Sustainable interactions with marine ecosystems for health, wellbeing, food and livelihoods](#) led by Prof Mel Austen - Plymouth Marine Laboratory - NERC award amount: £ 5,847,901.75

- [How animal health affects humans - One Health Regional Network for the Horn of Africa](#) led by Prof Matthew Baylis - University of Liverpool - BBSRC award amount: £ 7,898,299.29
 - [Designing climate-smart policy for growth - Agricultural and food-system resilience](#) led by Prof Timothy Benton - University of Leeds - BBSRC award amount: £8,022,074.17
 - [The elusive second Green Revolution - Research and empowerment for sustainable food supplies](#) led by Prof Howard Griffiths - University of Cambridge - BBSRC award amount: 7,035,021.59
 - [Improving African weather forecasting - Building science for weather information and forecasting techniques \(SWIFT\)](#) led by Prof Alan Blyth - National Centre for Atmospheric Science - NERC award amount: £7,971,410.23
- [RCUK GCRF Interdisciplinary Research Hubs call](#) – in development

The GCRF Funding for Individual Research Councils:

BBSRC responsive mode priority calls:

Most of the BBSRC funding for agricultural related research has been allocated to 2 calls:

➤ **GCRF Foundation Awards for Global Agricultural (£16.3 million)**

The research councils have each received directly allocated portions of the GCRF and BBSRC, MRC, ESRC, AHRC and NERC drew on their individual allocations to support an opportunity for Foundation Awards in Global Agriculture and Food Systems. BBSRC led and managed the call on behalf of the other funders with a BBSRC budget in the region of **£12 million** and funding support from MRC, ESRC, AHRC and NERC. The Foundation Awards resulted in [35 grants being awarded](#)

➤ **The Sustainable Agriculture in Sub-Saharan Africa call (£10 million)** – in development

Action: *to monitor developments and keep the community informed*

What other international opportunities could be explored?

EU FACCEP-JPI programme: Knowledge Network on Sustainable Intensification (KNSI)

KNSI was launched in 2016 to align sustainable intensification research in Europe. The network brings together research institutes, policy makers, funders, and other relevant stakeholders with an ambition to create a strong expert community across Europe, and beyond, and to identify opportunities for working more closely together. The KNSI initiative is led by the FACCE JPI governing board members from the UK and The Netherlands and supported by Defra and the FACCE Secretariat. Each country has a National Funder Representative and National Research lead. Currently these positions are occupied by a representative from Defra and Andy Whitmore.

Action: to continue promote any of their funding opportunities to the UK community

Activities with China:

Currently UK-China Governments are funding [several collaborative initiatives](#) including:

Recent funding calls:

Innovate UK and BBSRC are investing up to £8 million (£4 million each) in projects that use cutting-edge technologies to solve agricultural challenges in China under [Newton UK-China agritech challenge 2017](#)

Virtual Centres:

- [Virtual Joint Centre for Closed-Loop Cycling of Nitrogen in Chinese Agriculture](#) led by University of Aberdeen (Prof Pete Smith) under BBSRC through Newton Fund and China funding (£7,000,000)
- [The UK-China Virtual Joint Centre for Improved Nitrogen Agronomy \(CINAg\)](#) led by Rothamsted Research (Prof Tom Misselbrook) under BBSRC through Newton Fund (£2,438,488)
- [The Joint UK-China Centre for the Sustainable Intensification of Agriculture \(CSIA\)](#) led by Rothamsted Research (Dr Simon Vaughan) under BBSRC through Newton Fund, CAAS

Networks:

- [UK-China Sustainable Agriculture Innovation Network \(SAIN\)](#) led by University of East Anglia (Dr YueLai Lu) and funded by Chinese Ministry of Agriculture (MOA) and the United Kingdom Department for Environment, Food and Rural Affairs (DEFRA).
- [Agri-Tech in China Network+](#) led by Rothamsted Research (Prof John Crawford) under STFC, Newton Fund (£2,022,363)

Action: to explore synergies and ways of collaboration

2nd Priority: Horizon scanning activities: gaps and opportunities

Discussion focused on SIRN's role in setting the agenda for SI research in the UK or in acting as a facilitator in these discussions.

SIRN discussions:

- This is an ideal time to carry out a horizon scanning activity. Priority should be given to how research can progress based on what has already been achieved in programmes like SIP by identifying knowledge gaps and potential 'easy' wins.
- Activity should be structured and outcomes should be communicated properly. There is scope to explore different aspects such as ways of working, thematic topics or resource needs.
- To consider producing an additional document on the Defra SIP project to summarize outcomes in a different way: that is to address what has been achieved so far, and therefore what is still needed.
- To explore ways to influence policy and practice, taking into consideration that **BBSRC has more emphasis on the scientific opportunities and less on user needs and policy.**
- Any foresight activity should bring together new researchers especially middle-career, and not only the 'usual suspects'. This will bring new thinking, expertise and creativity as well as better securing the future of SI research.
- To consider running activities similar to the [Global Food Security Policy Lab on multi-functional landscape](#) where early/middle-career researchers were challenged to present innovative solutions for a problem. This could bring additional benefits for researchers involved such as mentoring, grant writing and networking opportunities.

Action:

- *to consider allocation of resources for running a workshop or commissioning a piece of work to look at a gap and opportunity analysis. Outputs could be of benefit for the SI community and funders.*
- *Ask SIP leads for summary of key outputs and identify areas of future promise and lessons learnt*

Other priorities: Sharing resources, improving communication and activities

Due to time constraints, discussions on future activities were limited but some aspects were raised.

SIRN discussions

- There is a need to continue expanding and consolidate the network.
- It is important to gather more information on our membership, for instance which funding agencies the SIRN community is benefiting from, and which ones are absent.
- There is a desire to create an interactive relationship map for the SIRN community. This information should be available to all to show the existing connections and potential gaps.
- A review of our current communication tools is needed in order to understand if key messages are assimilated properly. **For instance, despite the information available on financial support for researchers to run a workshop, few offers requests have been made.**

Actions:

- *to consider running a survey amongst members to review current practices and look for ways for improvement*
- *SIRN leadership team to identify more effective ways to encourage better engagement*

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December 2017***

¹ Information on projects and award amounts was obtained from [RCUK Gateway to Research](#)

