

Strategic Development Funded Research Programme Annual Report

Programme Name:	Sussex Sustainability Research Programme	Planning and Review meeting Chair	Professor Stephen Shute, PVC Planning & Estates
Programme Director	Joseph Alcamo	Programme Manager	Laura Craggs
SDF investment period	2015-2021	Reporting Period	1 August 2018 – 31 July 2019

SUMMARY OF REPORT:

Although SSRP has an official start date of 2015/2016 it has only been staffed since **mid-2017**. Considering its short operational period, it is showing excellent progress in demonstrating its value and achieving its KPIs.

- **New research collaborations:** With its mottos of “Science for the SDGs” and “SDG synergies and trade-offs” the SSRP is gaining a solid reputation nationally and internationally. These mottos also provide a flexible and action-oriented framework for researchers to come together on campus. Indeed the SSRP has made great strides in building a new and very strong community of sustainability researchers on campus. The SSRP now consists of 20 internally funded projects and 27 newly funded projects from external financing. These projects span **eight Schools and IDS**, including investigators from **15 different departments**. Most of these projects are interdisciplinary or multi-disciplinary. Some are even “deep interdisciplinary” in that they bridge the natural and social sciences. SSRP provides an extensive offering of activities to provide glue for the community such as the annual research symposium and Away Day, and workshops on cutting-edge topics such as sustainability research methods.
- **Substantial new research income:** The SSRP strategy of investing one-half of its capital (£1.5 M) on new cross-campus projects has paid off. External **research income** has reached **£5.1M**, which already exceeds its **end-of-programme KPI** by a factor of **34 x**. Contribution income has almost exceeded its **end-of-programme target**. The policy of the SSRP is to quickly re-invest contribution income in Sussex researchers and it has done so with new seed grants, a fund for visiting fellows, and a fund to increase project impact.
- **Growing academic impact:** SSRP’s research strategy has two main pillars, one top-down and one bottom-up: First, as noted, it promotes ‘Science for the SDGs’ as a flexible framework for all of its work. Second, it encourages the formation of bottom-up “research clusters” that reflect the interests of sustainability researchers. After a run-time of two+ years, this strategy is paying off as important SSRP research themes have begun to crystalize. These include: *a) SDG interactions in food and climate; b) Critical transition zones for SDGs; c) Planetary health and the SDGs; and d) Impacts of economic globalization on the SDGs*. SSRP has already published around 70 articles in peer-reviewed journals, SSRP work is presented in conferences worldwide, and a special issue of the journal *Sustainability Science* featuring SSRP research will be published in early 2020.
- **Achieving societal impact at all scales:** The SSRP has a coordinated strategy of delivering impact on the local, national and global levels. SSRP projects have already provided input to **seven REF-case studies**.

Local: Implementation of global sustainability goals will happen mostly on the ground, so it makes sense that most SSRP projects are local and place-based and that we work closely with local stakeholders and researchers. Our projects are achieving local impact on three continents in the Global South (e.g. helping to establish a public health programme in Wanang forest of New Guinea; improving communication of climate warnings in South India and Kenya; raising awareness of environmental justice issues in Ecuador). But despite their local nature, these studies have also generated many lessons that can be scaled up, and we are busy extracting these lessons and conveying them to policymakers and stakeholders at the national and international scale.

National: We continuously engage with the Parliament and convey results from local and global SSRP research. We have briefed many MPs, presented at two Party conferences, and were quoted verbatim in a key report of the IDC of Parliament.

International: The SSRP has an increasingly important international presence: It has represented the worldwide Science and Technology community at the Heads-of-State SDG Summit at the UN General Assembly in NY in September, 2019; co-sponsored a key Side Event with the government of Ghana at the July, 2018 High Level Political Forum on Sustainable Development at the UN ; organised a Wilton Park International Roundtable on the SDGs in March, 2018.

Five Year Plan – Financial sustainability. Two options for the next Five Year Plan of the SSRP have been prepared. Option One is *Business-as-usual* which would maintain SSRP’s growing influence as an important institution in the UK and Europe. Option Two – *Worldwide leader* – would establish the SSRP as a major go-to institution worldwide for science for the SDGs and sustainability research.

1. SDF spend position					
Total SDF allocation SDF020	£2,995,000	SDF allocation to 31 July 2019	£2,083,034	SDF spend at 31 July 2019	£1,836,167
Reasons and comments for variances	<p>On the whole, the programme is on track with expenditure.</p> <p>The majority of underspending in 18/19 relates to various delays in project implementation due to staffing issues (e.g. Postdocs leaving or delays with visas) and other circumstantial delays in research implementation. All delays have been communicated to the programme and no-cost extensions have been applied on several projects. Some projects were completed with an underspend and the programme has approved carry-over of funds for impact work.</p>				

2.1 Progress against quantitative Key Performance Indicator in this reporting period			
	Key Performance Indicator		Current position¹ (delete symbols as appropriate)
a.	Gross research income will be double the current base line by mid-term of the SDF investment and triple by the end of the investment		
	Baseline research income	£146,219 for 2014-15	Total research income from Programme start date to 31 July 2019 £ 5,104,161
	<p><i>Comments:</i></p> <p>The SSRP has a strategy of investing ½ of its capital (£1.5 M) on seed funding for new cross-campus projects, which in turn submit bids for larger projects. This strategy has paid off.</p> <ul style="list-style-type: none"> • Research Income has reached £5.1M, which already exceeds the target for the end of the programme by a factor of 34 x and nearly doubles the original £3M investment of the Strategic Development Fund. • SSRP researchers have been very energetic in submitting bids. Total bids submitted amount to > £24M since the programme began. Subtracting pending bids, the success rate of bids exceeds 20%. 		
b.	Three external bids of >£1M Sussex value will be submitted by mid-term of the investment and 6 by the end of the investment		
	<p><i>Comments:</i></p> <ul style="list-style-type: none"> • To date, three external bids of more than £1 million have been submitted by SSRP researchers: <ul style="list-style-type: none"> ○ NERC grant “Towards Forecast-based Preparedness Action” of £1,033,743 (successful) ○ ESRC grant “Centre for Transformative Climate Change Research” of £3,384,046 (unsuccessful) 		

¹ Green: on track to achieve KPI; Amber: some issues causing delays to KPI achievement; Red: significant issues which may result in KPI not being achieved.

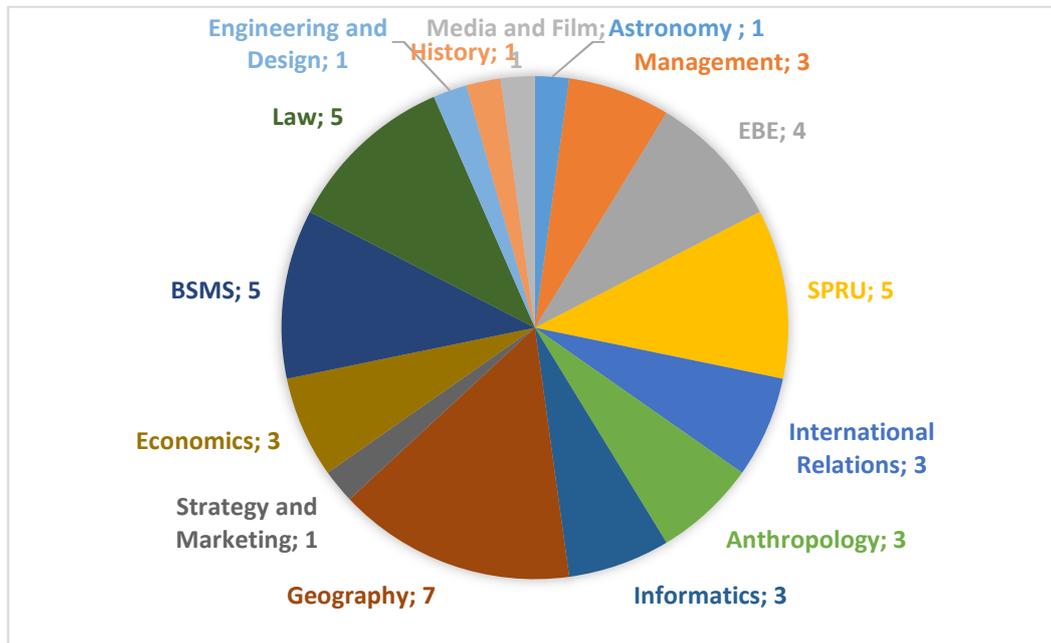
	<ul style="list-style-type: none"> ○ ESRC grant “NEW-SYNERGIES: New Methodology to exploit synergies among the Sustainable Development Goals of £1,697,750 (unsuccessful) • This represents one more than the previous reporting period and achieves the mid-term KPI of three. 																							
c.	Contribution income will be double the current base-line by mid-term of the SDF investment and triple by the end of the investment																							
	Baseline contribution income	£91,260 for 2014-15	Total contribution income from programme start date to 31 July 2019	£232,236																				
<p><i>Comments:</i></p> <ul style="list-style-type: none"> • Contribution income has exceeded its mid-term target and almost reached its end-of-programme target. • The policy of the SSRP is to re-invest this income in Sussex researchers through new seed grants, a fund for visiting fellows and a fund to maximise impact (see section 2.2). <p>This is a breakdown of the SSRP contribution income received by year and by School:</p> <table border="1"> <thead> <tr> <th>School</th> <th>16-17</th> <th>17-18</th> <th>19-20</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Global Studies</td> <td>£52,018</td> <td>£31,065</td> <td>£44,678</td> <td>£127,761</td> </tr> <tr> <td>Life Sciences</td> <td>£39,415</td> <td>£0</td> <td>£31,870</td> <td>£71,285</td> </tr> <tr> <td>Math & Phys Sci</td> <td>£0</td> <td>£13,935</td> <td>£19,255</td> <td>£33,189</td> </tr> </tbody> </table>					School	16-17	17-18	19-20	Total	Global Studies	£52,018	£31,065	£44,678	£127,761	Life Sciences	£39,415	£0	£31,870	£71,285	Math & Phys Sci	£0	£13,935	£19,255	£33,189
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2.2 Progress against qualitative Key Performance Indicator in this reporting period																								

d.

	d. What difference has the programme made both inside and outside the institution?
	<p><i>Comments:</i></p> <p>1a) Making a difference <u>inside the University</u> – Building the research community</p> <p>The SSRP is making a big difference inside the University in two particular ways. First it is fulfilling one of the main aims of the SSRP, namely to build a new and very strong community of sustainability researchers on campus. It has fostered numerous new research collaborations across campus, most of which are interdisciplinary or multi-disciplinary. Some are even “deep interdisciplinary” in that they bring together the natural and social sciences. The SSRP now consists of 20 internally funded projects and 27 new projects funded by external financing. These projects span eight Schools and IDS, including investigators from 15 different departments (Figure 1). These projects bring together researchers from across and beyond the SSRP core Schools including Engineering/Informatics, the Medical School, Maths & Physical Sciences and Music, Film and Media.</p> <p>In July 2019, the SSRP launched a Visiting Fellowship Fund which aims to deepen collaborations with partners especially in DAC list countries, strengthen SSRP’s international research network of SSRP, and increase the presence on campus of top sustainability researchers from abroad. This Fund is financed by our Contribution Income, and is an example of SSRP policy to quickly recycle the financial gains of the programme back to the researchers.</p>

. The aim of the fund is

Figure 1. Departments involved in SSRP projects (no. of investigators)



1b) Making a Difference Inside the University – Events & Activities

The second way the SSRP is making a difference on campus is by organising numerous events to stimulate and solidify research collaborations and raise awareness about critical sustainability issues.

- *SSRP Symposium 2019* - The second SSRP research symposium was an open campus-wide event, bringing together people from core SSRP schools and beyond. The Symposium focused on “Science for SDG implementation” and on four of the several themes in which the SSRP is producing new results (See Box 1). A poster session presented findings from SSRP-funded projects; the posters in digital form are being used to raise awareness about SSRP results via the SSRP website and social media. [See slideshow of posters.](#) **Lord Jack McConnell**, the Co-chair of the All Party Parliamentary Group (APPG) on the SDGs, addressed the Symposium and spoke about the important role of the academic world in helping to achieve the SDGs. Lord McConnell agreed that SSRP findings were very relevant to the work of the APPG and that the two institutions should work closely together.

- *Workshop on Methods for Sustainability Research* – The aim of this workshop was to exchange knowledge on the host of methods available for sustainability research, especially those methods used within SSRP projects. The workshop engaged 30 participants from 10 departments across 6 schools and IDS. A key note was delivered by Prof. Sigrid Stagl, Head of the Institute of Ecological Economics at the University of Vienna. An important output of the workshop is SSRP’s *Online Guide to Sustainability Research Methods* which will go live before the end of 2019.
- *Workshop on Working with Nature in Farming and Conservation* – The purpose of this workshop was to discuss findings of the SSRP project “Delivering food security, community resilience, and biodiversity through rewilding and community agriculture” led by Chris Sandom. The workshop involved both Sussex participants and experts and guests from various academic and community organisations in the region, and was a step in achieving impact from the project.
- *Workshop on Supply Chain Management and the SDGs* – This workshop brought researchers from across the University as well as practitioners from international firms and NGOs, working on the intersection of forests, trade, communities, and commodity supply chains. This was a follow-up to an SSRP project of Ilzabela Delabre and Anthony Alexander and was useful in planning activities to increase the impact of the project.
- *Sustainability Debate #4: ‘Future Forests: use them or fence them in?’*. “Sustainability Debates” are ongoing public events organised by the SSRP to raise awareness about important sustainability issues among a wider audience on campus. This fourth debate in the series was held on the occasion of the International Day of Forests. Alex Antonarakis moderated a discussion with guest and University speakers on diverging ideas about how to use forests in the UK and worldwide. The theme of the debate complemented SSRP’s work in forest margins in low and medium income countries.

2) Making a Difference Outside the University:

The SSRP is making a big difference outside the University through its growing local, national, and international impact.

- Our work is achieving local impact on three continents in 15 low and medium countries in the Global South
- We continuously engage with the Parliament and convey results from local and global SSRP research.
- The SSRP has an increasingly important international presence at the UN and other international arenas.

Please see Section 2.1 h “Impacts” for a description of these impacts.

The SSRP is also making a difference off campus through the public events it presents. During the current reporting period (May) we organised an event in Brighton with local coffee companies called **‘What is the future of coffee?’**. The main topic was the impacts of the global supply chain of coffee on sustainability issues. Global supply chains are also a topic of SSRP research (See Box 1). The event was very well attended and generated interesting discussions about how consumers can make more ethical decisions, and explored issues around recycling, violence (at coffee production sites), gender, biodiversity and local economies, and how coffee houses and consumers can be more sustainable. The event received good local coverage and one of the speakers has been invited to speak in a University module. The SSRP believes that the sustainable production and consumption of coffee could get us a step closer to achieving the SDGs.

Box 1. Emerging Research Themes of SSRP

a) *SDG interactions in food and climate*

SSRP research has found that food and climate early warning systems can be important tools for achieving the End Hunger and Climate Action goals in the Global South. However, research in Kenya and South India shows that reforms are urgently needed to improve the communication of early warnings to the most vulnerable part of the population including poor farmers and fishers. SSRP research in East Africa has also shown that “climate-smart agriculture” is not fulfilling its promise of helping achieve goals for climate and agriculture, in large part because of the conflicting goals of governance actors at the local, national and international levels.

b) *Critical transition zones for SDGs – Forest margins and peri-urban zones*

SSRP researchers have identified a land category particularly important to implementation of the SDGs. They have dubbed these areas “critical transition zones” where land use changes are rapid relative to surrounding areas, and where inhabitants are particularly vulnerable to change. Because of these characteristics, we expect that people living within these zones have particular difficulties in achieving the SDGs. Critical transition zones can therefore serve as test beds of SDG implementation. SSRP research is focusing on two types of these zones – peri-urban areas (Wuhan, China) and forest margins (in Ecuador, Peru, and New Guinea).

c) *Planetary Health and the SDGs*

Medical and ecology researchers are working together worldwide under the new umbrella of “planetary health” to combine programmes for public health and conservation. These programmes have a high potential to help achieve multiple SDGs. The SSRP is extending the concept of planetary health by examining the role of poverty in health-conservation interactions. Three case studies are being investigated: combined health and conservation programmes among low income residents in forests of Papua – New Guinea; poverty as a factor in the health impacts of air pollution in two very polluted cities, New Delhi and Beijing; and the relationship between climate-related drought and HIV drug resistance in uMkhanyakude district of South Africa, where HIV and diarrhoeal diseases are the two leading causes of death.

d) *Impacts of economic globalization on the SDGs*

SSRP researchers have found economic globalisation to have an important impact on achieving the SDGs. For example, international trade and global supply chains can lead to transboundary environmental impacts that hinder several SDGs, and international debt severely reduces the competence of many countries to fund programmes needed to achieve the education, environmental, and other SDGs. However, SSRP research has also shown that global solutions can help move the SDGs forward. These solutions include “sustainable supply chain management” and sustainability assessments embedded in international trade agreements. These are just two of the many solutions that can help reduce the negative impacts of economic globalisation and help achieve multiple SDGs.

e) Other key SSRP research themes:

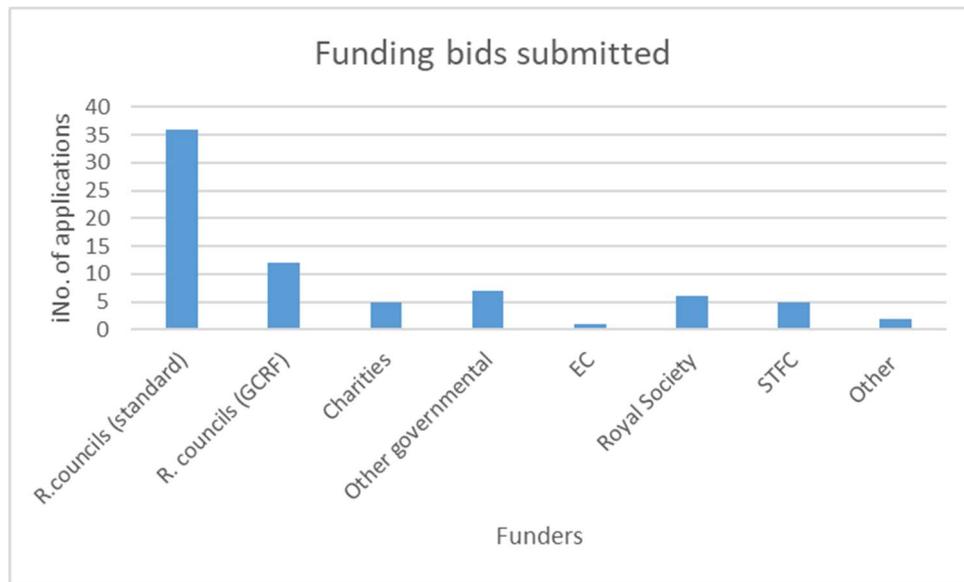
- SDG governance
- A rights-based approach to the SDGs
- ‘Sustainability Observatory Sussex’ – a cooperative scheme for harmonizing local sustainability projects
- Methods of sustainability research

e. Are programme-flagged applications submitted to a **diverse portfolio of funders**?

Comments:

SSRP flagged applications have been submitted to a diverse range of funders from research councils, to charities and government. Figure 2 below presents the spread of applications submitted over the lifetime of the programme. Just under half were submitted to a number of different research councils and the other half demonstrates a wide spread across various different types of funders.

Figure 2. Funders receiving SSRP funding applications



f. **Research capacity:**

- How has the SDF investment grown capacity at Sussex in this area? Include details on research activity and income generated by staff directly funded from the SDF investment plus current levels of PhD studentships.
- Has external income been generated to cover costs of researcher salaries and studentships?

Comments:

Funds allocated in the two rounds of the SSRP Fund have led to the creation of 20 post-doctoral researcher posts. These posts have been working on high quality, highly interdisciplinary or multi-disciplinary research projects which is leading to further external funding, with the intention of supporting the researchers beyond the life of SSP funding. Follow-up and associated projects have extended or created more than 20 post-doctoral posts. Through this process we are building and growing a cohort of researchers experienced in interdisciplinary working, enhancing the University's reputation for interdisciplinarity. Follow-on external funding to build on SSRP projects has also created new postdoctoral researcher positions.

The SSRP currently has 25 PhD studentships – 6 in the Business School; 7 in Law, Politics and Sociology, 5 in Life Sciences, 7 in Global Studies.

Replacement teaching capacity from SSRP flagged awards

Name	School	%FTE	Start	End
Dave Goulson	LIFESCI	60	01 Nov 2017	31 Oct 2019
Adrian Ely	USBS	11	01 Nov 2017	31 Oct 2019
Martin Todd	Global Studies	10	01 Oct 2017	31 Aug 2019

g.	<p>Reputation: provide indicators of the Programme’s success in gaining:</p> <ul style="list-style-type: none"> • Public reputation • Academic reputation • International recognition • External collaborations
	<p><i>Comments:</i></p> <p><u>g.1 Public and on-campus reputation</u></p> <ul style="list-style-type: none"> • SSRP website traffic was up 96% during the reporting period, with 4,742 users accessing the site , 88% of which were external to the University. The average time spent on the site is over 27 minutes, much higher than the University site average, and indicates that people are spending time reading and engaging with content on our research. • Growing media coverage both of general messages of the SSRP, e.g. coverage of Prof. Alcamo’s speech at the Earth System Governance conference in The Ecologist, and of research resulting from SSRP funding, such as coverage of research into drivers for the murder of environmental activists in the The Guardian and resilience of groundwater in Africa to climate change in The Telegraph (see case studies in ‘Impact’ section). • There has also been considerable coverage of the SSRP on the University news site, which has raised the programme’s profile on-campus. For example, the SSRP was quoted in the story regarding Sussex declaring a climate emergency, on the release of a new report by the Intergovernmental Panel on Climate Change, and the SSRP director representing the global science community at the SDG Summit in the UN General Assembly. <p><u>g.2 Academic reputation</u></p> <p>SSRP’s research strategy has two main pillars, one top-down and one bottom-up: First, it promotes “Science for the SDGs” with particular accent on “SDG synergies and trade-offs” as a flexible top-down framework for all of SSRP’s work. Second, to encourage the formation of bottom-up “research clusters” which reflects the interests of researchers. After a run-time of two+ years, this strategy is paying off as important SSRP research themes have begun to crystalize. These include: <i>a) SDG interactions in food and climate; b) Critical transition zones for SDGs; c) Planetary health and the SDGs; d) Impacts of economic globalization on the SDGs.</i> SSRP researchers have already published around 70 articles in peer-reviewed journals, SSRP work is presented in conferences worldwide, and a special issue of the journal <i>Sustainability Science</i> featuring SSRP research will be published in early 2020.</p> <p><u>g.3. International and national reputation</u></p> <p>International recognition of the SSRP and the University has been rapidly increasing due to many successful engagement and publication activities, including the International Wilton Park Roundtable in 2018, the distribution of the Statement on SDG Interactions from the Roundtable and our engagement at the High Level Political Forum on Sustainable Development (HLPF) at the UN in 2018, speaking engagements of the SSRP Director at the national Labour and Conservative conferences, and the participation of the SSRP Director in the SDG Summit of Heads of State (the UN General Assembly in 2019) as one of three official representatives of the worldwide scientific community. SSRP researchers Dr. Emily Lydgate presented testimony at Parliamentary Committee meetings, and Dr. Izabela Delabre presented a briefing at the UN Convention on Biodiversity in July 2019.</p> <p>SSRP researchers have delivered many keynotes and papers at various prominent conferences and events during the year (see appendix 3 for full list).</p>

During the last reporting period, SSRP researchers were co-authors of two papers that received particular international attention:

- In August 2019, SSRP researcher Prof. Martin Todd was a co-author of a ground-breaking study published in *Nature* on groundwater in Africa. The study presents new evidence of the role that groundwater stocks can play in providing access to safe, clean water, and their potential resilience to climate change. The findings could provide a sustainable way to provide enough water for a growing population, and help tackle several of the Sustainable Development Goals in the process including Goal 2 (zero hunger), Goal 6 (clean water), and Goal 13 (climate action). The paper received considerable media coverage, for example in *The Telegraph*, *The Conversation and Nature - New and Views*.
- Also in August, 2019, Dr. Mary Menton was co-author of a paper published in *Nature Sustainability* on the human costs of protecting natural resources. The paper linked killings of environmental defenders to increasing global demand for natural resources, with mining and agribusiness implicated in the highest proportion of deaths. The paper revealed that, between 2002 to 2017, recorded deaths of environmental defenders increased from two to four a week across 50 countries. Yet, only 10% of murders results in a conviction and killers operate with impunity: they know they are unlikely to be brought to justice. The paper was covered by *The Guardian*, *Newsweek*, *The Conversation*, and other media.

g.4 External collaborations

SSRP is very outward-facing and nearly all of its projects involve external collaborations (Table 1). These collaborations are also a major contributor to our national and international reputation. These partnerships not only raise the profile of the programme and Sussex, but also help the SSRP to carry out excellent research with impact, and to have good partners for new funding bids.

Table 1. SSRP collaborators – The global SSRP network

<p>UK local stakeholders</p> <ul style="list-style-type: none"> • Brighton and Hove Food Partnership • Brighton and Hove Man and Biosphere • South Downs National Park • Falcon Coffees • Freegle • Girls Who Grind Coffee • Grown in Britain • Pro Baristas • Small Batch Coffee Roasters • Sussex Wildlife Trust • Brighton & Hove Allotments Federation 	<p>UK Government</p> <ul style="list-style-type: none"> • UK Environment Agency (EA) • Department for Environment, Food and Rural Affairs (DEFRA) • Department for International Development (DFID) • Office for National Statistics (ONS) • APPG on SDGs • UK Met Office
<p>International – Country level</p> <ul style="list-style-type: none"> • Embassy of the Federal Democratic Republic of Ethiopia • Embassy of the Republic of Indonesia • Bangladesh High Commission • Ghana High Commission • University of Ghana • Centro de Conservación, Investigación y Manejo de Areas Naturales (CIMA), Peru • Instituto Centro de Vida (ICV), Brazil • Centre for Climate Change Studies/Institute of Resource Assessment-University of Dar es Salaam • Rwanda Ministry of Agriculture • Future Agriculture Consortium and Technical University of Mombasa, Kenya • Ocean State Forecast Services, India 	<ul style="list-style-type: none"> • American University in Cairo, Egypt • Africa Health Research Institute, South Africa • Papua New Guinea Institute of Medical Research • New Guinea Binatang Research Centre • Beijing Normal University, China • Centre for Pollination Studies Calcutta, India • University of Economics and Law, Wuhan, China, • Jawarhalal Nehru University, India • Banaras Hindu University, India • Toxicslink NGO, India • University of Cape Town, South Africa • Sokoine University of Agriculture, Tanzania • JP Grant School of Public Health (Bangladesh) • African Population Health Research Centre (Kenya)

<ul style="list-style-type: none"> • Indian National Centre for Ocean Information Services (INCOIS) • State Disaster Management Authority, India • State Emergency Operations Centre, Thiruvananthapuram, India. • Peoples Science Institute, India 	<ul style="list-style-type: none"> • Indian Institute of Human Settlements (India) • Kenya Meteorological Department • National Cancer Institute, Egypt, • Cairo University, Egypt • National Drought Management Authority (NDMA), Kenya
<p>International – Global</p> <ul style="list-style-type: none"> • UN Environment (UNEP) • Convention on International Trade in Endangered Species (CITES) • Convention on Biological Diversity • International Water Management Institute • Scaling Up Nutrition Civil Society Network 	<p>Others</p> <ul style="list-style-type: none"> • Wilton Park • Environmental Funders Network • WWF UK • Vision 2030 • Voluntary Services Overseas (VSO) • Overseas Development Institute • London School of Hygiene and Tropical Medicine • National Trust • UK National Farmers Union • Save the Children UK

- h. **Impact:** detail
- Work in progress towards potential REF impact case studies and other kinds of non-academic impact that has been fostered by the Programme
 - Non-academic engagement in the Programme’s research

Comments:

REF case studies

SSRP-projects are providing input to **seven new REF case studies** (Table 2).

Table 2. REF case studies based on SSRP Projects

School	Title of REF case study	Author(s)	Status
Life Sciences	“The Conservation of Tropical Rainforests in Papua New Guinea and Ecuador”	Dr Mika Peck Dr Alan Stewart	Drafted
Global Studies	“Forecasting with fishers: Co-producing weather knowledge for safe and sustainable artisanal fishing in south India”	Prof Filippo Osella Dr. Max Martin	Drafted
Global Studies	“Improved climate information for risk management”	Prof Martin Todd	Forthcoming
LPS	Informing post-Brexit UK trade policy	Dr Emily Lydgate Dr Kamala Dawar Dr Erika Szyszcak	Drafted
Life Sciences	“Conserving Bumblebees [and their consequences on biodiversity]”	Prof Dave Goulson	Forthcoming
Life Sciences	“Assessing trade-offs and synergies in SDG targets from global commodity chains associated with environmental justice”	Dr Alan Stewart Dr Mary Menton	Forthcoming
Life Sciences	“Mapping indigenous rights violations”	Dr Mary Menton	Forthcoming

The SSRP Impact Strategy

The SSRP is generating new findings about sustainability and is beginning to influence sustainability policies. Its leadership in providing “Science for the SDGs” is resonating in both the science and policy communities, nationally and internationally. It has become a major champion of the idea of “implementing the SDGs efficiently” through the strategy of building on synergies among the goals. Its research based in low- and middle-income countries (LMICs) is contributing to the important aim that the SDGs “leave no one behind”.

The SSRP has a coordinated strategy for delivering impact on the local, national and global levels. Through a “pathways to impact” exercise we identified key stakeholders to work with to achieve impact.

One group of key stakeholders are local non-academic communities in low and medium income countries, and most of our projects have to do with these communities. In these projects we achieve impact by working with local stakeholders and researchers (see Box 2 for examples).

Although these projects are local, they provide many lessons that are scalable and provide important input to achieving the SDGs in other communities and countries. Therefore another part of our strategy is to distill out transferable lessons from our local projects and convey them to another important stakeholder group -- national UK policymakers and international policymakers. For example, we have conveyed lessons from our local projects in a written submission to the International Development Select Committee of the House of Commons. ([Link to SSRP contribution](#) to Committee)

In addition, a subset of SSRP projects are national/global in scale (impact of international debt on capacity to achieve the SDGs, role of global supply chains in SDG implementation) and this research also provides important new knowledge for national/global policymakers. For example, SSRP researcher Dr. E. Lydgate has briefed MPs on the results of her project on trade and the environment. Hence, another part of our impact strategy is to convey SDG-relevant lessons that are transboundary in nature to the appropriate national or international officials.

Local Impact

After 2+ years of running time, the SSRP projects are now beginning to bear fruit and findings are having an impact at local level in 15 low- and middle-income countries in Africa (Ghana, Kenya, Tanzania, Ethiopia, Rwanda, South Africa, Egypt, Zambia, Zimbabwe), Asia (India, China, Sri Lanka), Latin America (Brazil, Ecuador), Oceania (Papua New Guinea), and in the UK. Since most projects have only run for a short time, impacts are only beginning to be achieved. Nevertheless, they are significant enough in some cases to already contribute to REF Case Studies (Table 2). Furthermore, the strong engagement of most projects with local stakeholders is expected to lead eventually to significant positive impacts. Some examples are given in Box 2.

National Impact

We continuously engage with the Parliament and convey results from SSRP research, e.g. on combining conservation and public health policies, and on minimising trade-offs among the SDGs. We have given briefings to several Members of Parliament and Parliamentary committees.

- SSRP was quoted verbatim in an important report of the International Development Select Committee of the House of Commons on the SDGs. [Link to SSRP in Parliament Report](#)
- SSRP researcher Dr. Emily Lydgate testified at the House of Lords EU Committee, Subcommittee on Energy and Environment, on sustainability assessments of trade agreements and was heavily cited in the subsequent [Select Committee report](#).
- The SSRP Director spoke on sustainability issues at two UK Party conferences.
- In an earlier reporting period, SSRP co-organised a Parliamentary Reception at which SSRP researchers met with several MPs to discuss the results of their research and the importance of an integrative approach to the SDGs.

International Impact

The SSRP has a growing impact and presence in international arenas as a champion of ‘Science for the SDGs’:

- The SSRP Director represented the worldwide Science and Technology Community at the Heads-of-State SDG Summit at the UN General Assembly in NY, September, 2019.
- The University of Ghana and SSRP organised an Expert Workshop in Accra, Ghana on “Science for Implementing the Sustainable Development Goals” in June, 2019.. The workshop included a dialogue between experts and some top policymakers involved in SDG implementation in Ghana.
- SSRP researcher Jody Harris’ contributed to a Commentary published in the *Lancet* in June, 2019 calling on the WHO and UN agencies to bring rights more squarely into food and nutrition discourse.
- Dr. Izabela Delabre presented a briefing at the Conference of the UN Convention on Biodiversity in July 2019.
- SSRP co-sponsored a key Side Event on SDG Interactions with the government of Ghana at the July, 2018 High Level Political Forum on Sustainable Development at the UN in NY
- SSRP organised a Wilton Park International Roundtable on the SDGs in March, 2018.
- SSRP has produced Policy Briefs on:
 - Interactions among the Sustainable Development Goals ... and why they are important
 - Forecasting with fishers to save lives at sea
 - Assessing the sustainability impact of trade agreements

Next Steps in Impact Strategy

Although SSRP is making progress in achieving impact, we view this as only the first step in a coordinated impact campaign with the ultimate aim that SSRP and Sussex contribute markedly to the achievement of the SDGs worldwide. Next steps include:

- Ongoing work with local stakeholders (examples given in Box 2),
- Briefings of key UK government officials; submitting further written and verbal testimony to Parliamentary Committees,
- Organise major meetings together with the International Science Council, UN, and other major actors to accelerate the use of research results in the SDG process.
- Preparing several more Policy Briefs coupled with media events featuring findings from SSRP projects.
- Accelerating impact with small grants from an SSRP **Impact Fund**. This fund was launched in July, 2019 to provide short-turnaround funds for SSRP researchers to generate additional impact from their research. The Fund is financed by contribution income on successful SSRP grants, and is an example of SSRP policy to quickly recycle income to its researchers.

Box 2. Examples of local SSRP impact on three continents

Example 1. Saving lives and improving livelihoods of fishers in South India. Project of Prof. F. Osella, Dr. M. Martin and local partners



In uncertain weather, fishing along the southwestern coast of India is risky or restricted, with impacts on local livelihoods (SDG 1 No Poverty) and food security (SDG 2: End Hunger). As fish stock is depleted in the coastal waters (SDG 14: Ocean Conservation), fishers take multiple risks anyway by going offshore in bad weather. The project has found that accurate, local and timely forecasts over multiple channels (such as mobile phones, the Internet, and VHF/FM radio), backed by better weather observation networks and systems (SDG 13: Climate Action) helps fishers make informed decisions. In this project SSRP is facilitating an exchange of knowledge between forecasters and fishers. Such “co-production of weather knowledge” is contributing to better forecasts and promoting safer and more sustainable fishing (SDG 8: Decent Work and Economic Growth). The local project team is working closely with Indian forecasters, Kerala disaster management officials and Cochin University of Science and Technology to help implement recommendations from the project.

Example 2. Boosting resilience to drought in farming communities of Kenya. Project of Prof. M. Todd, Dr. P. Rowhani, et al. and local partners



Managing drought is central to Kenya’s challenges in meeting multiple SDGs focusing on poverty (SDG1), hunger (SDG2) and climate action (SDG13). But despite advances in climate prediction, drought risk management remains reactive rather than proactive. But SSRP is now working with stakeholders and climate experts in Kenya to make risk management more proactive. They plan to do so by embedding meteorological forecasts into the existing drought warning system in Kenya, and by linking warnings with recommendations for practical actions that can lessen damage to crops under drought conditions. To do so SSRP is working with local stakeholders in Kitui County (photo) as well as national stakeholders such as the Kenya Meteorological Department (KMD), National Drought Management Authority (NDMA).

Example 3. Understanding how conflict over environmental justice affects the achievement of the SDGs in Ecuador. Project of Dr. M. Menton, Dr. M. Peck and local partners



The globalised expansion of capitalism and industrial economy is resulting in an increase and expansion of extractive activities, production of waste, and their related social and environmental impacts that have generated conflict with, and resistance from, communities, indigenous groups and activists. The project set out to understand how environmental justice (EJ) conflicts linked to global commodity chains impact Ecuador’s ability to achieve the SDGs. The team’s review of the SDGs in light of EJ conflicts and EJ frameworks identified a predominant focus on legal justice and rule-of-law that lacked attention to key dimensions of EJ (distribution, procedure and recognition). The SSRP team is now working with local and national stakeholders to co-produce locally relevant indicators of the SDGs that take into account environmental justice and do not require costly monitoring requirements.

3 How does the programme contribute to the aims of Sussex 2025 and the 16 University KPIs?

We believe that the SSRP has become one of the main institutions on campus contributing to the core aims of *Sussex 2025*. We are a model “academic activist” organisation having both academic impact and simultaneous engagement in communities throughout the Global South and the UK, and in the international arena.

With regards to various University KPIs:

Research impact – We are pushing the frontiers of multi- and interdisciplinary work and also carrying out “deep interdisciplinary” research, i.e. combining natural and social sciences. We have forged new successful research partnerships across Schools and IDS, and other UK institutions. We are challenging conventional thinking with ideas about integrated implementation of the SDGs, critical transition zones for the SDGs, sustainable global supply chains, and others.

Engagement for change – After an effective run time of only two+ years we are already having an impact locally, nationally, and internationally. At the local/community level we are “co-delivering projects on the ground” in communities in New Guinea, Ecuador, Kenya and 12 other LMICs. Nationally, we are engaging continuously with Parliament; we have testified before their committees and been cited verbatim in their reports. Internationally we have represented the scientific community at high level UN events and work with key international organisations. We are now also engaging with the private sector, particularly digital firms, to involve them in our projects and the implementation of the SDGs.

Building on strengths – The SSRP is a natural extension of the University’s excellence in development studies, strong contributions to environmental science, and progressive outlook. We provide continuous support to Sussex researchers through our support of bids, seed grant programmes, Fund for Visiting Fellows, Fund for Increased Impact, and many other mechanisms. We are not only engaged abroad but also encourage “pride of place”, with our concept of “Sustainability Observatory Sussex” and our off-campus public events.

4 Has the programme encountered issues/challenges in this reporting period? If so, what remedial action has been taken?

- Our founding Programme Manager, Caroline Grundy, worked very energetically. But regrettably she was absent from July to November, 2018 because of illness, and afterwards was partly absent until she departed in March, 2019. This inevitably disrupted the management of the programme, although this disruption was lessened by the admirable work of SSRP Staff Fiona Hurd and Louis Pilard, and the assistance of the Business School’s Research Manager, Richard Taylor. Since then, Laura Craggs has become the new Programme Manager and has quickly and efficiently filled the management gap.
- The University of Sussex policy for its Strategic Research Programmes required already-funded investigators to fund their own time. This led to time constraints across most project teams that were compensated for by the energetic contributions of post docs.
- The ambitious goals and KPI’s of the SSRP puts large demands on staff capacity. This capacity is only 3.5 FTE which is too small to carry out such a large programme of activities. In particular, working to maximize our local, national, and international impact and reputation is very valuable, but also very time-intensive. Under Option 2 of our long term planning (see attached Five Year Plan) we propose to expand the staff so that SSSRP can fulfil its potential as an institution of worldwide importance. In the meantime, we will continue to use some of our

contribution income budget to hire part-time help for important activities such as raising funds from charities or organising specific workshops or conferences.

- A difficult but necessary challenge is to develop a “deep interdisciplinary” approach to sustainability research that goes beyond collaborations among social scientists and combines expertise from the social sciences with engineering, the life sciences, and humanities. We are trying to accomplish this through various incentives – providing activities such as symposia, where potential collaborators can meet, supporting joint bids, providing seed grants for cooperation.
- Continuing with the previous point, some projects are finding it difficult to produce papers because of the high level of interdisciplinarity of the project, which often leads to problems in how to bridge conceptual and practical differences. Also, more support is needed for preparing publications, e.g. through writing workshops. On this last point, we aim to make SSRP researchers more aware of existing opportunities on campus for improving their writing skills.
- Financial and other reporting systems remain problematic for inter-school programmes like SSRP.

5 Detail the most significant future opportunities and risks to the success of the programme and mitigation plans

Opportunities

There is abundant evidence that sustainability issues are climbing higher on the international agenda. One recent example is that progress on the Sustainable Development Goals was deemed so important that it had to be addressed at the level of ‘Heads of State’ at the recent SDG Summit.

Not only is sustainability rapidly climbing on the international agenda, but support for sustainability research is also rapidly increasing and is likely to continue growing over the coming years. Of particular relevance to the University and SSRP is that the *type of sustainability research* being called for by donors in the UK, Europe, and internationally, is the type of research carried out by the SSRP – a global perspective, but largely place-based, interdisciplinary, transdisciplinary, and solution-oriented, with particular emphasis on impact on low and medium income countries.

A sign of these opportunities is that within its short operational lifetime the SSRP has been able to mobilise more than £5M in external research income, almost doubling the original SDF investment.

Risks

Despite SSRP’s competitive advantage, the funding landscape is very competitive and the SSRP must work very hard to maintain its edge. Carrying out SSRP’s large programme of activities already stretches staff capacity (see Section 4).

Also, it remains difficult to engage some researchers and research institutions on campus who are also working on sustainability issues. Some encouragement from the top might help bring researchers together so Sussex can compete more successfully for external funds.

SSRP formally began in 2015/16 so the investment period runs out in February, 2021. This means that the University will have to decide soon on the next Five Year Plan of the programme. However, SSRP has **only been staffed up since mid-2017** and most projects are only now beginning to yield results and impacts (although as shown in this report, research income, outputs and impacts are already substantial). The risk is that the University does not see the potential of SSRP becoming a world leader in sustainability research and science for the SDGs.

6 Detail key actions and planned outputs for the next reporting period (1 August 2019 – 31 July 2020) including key milestones and deliverables, this can cover planned research bids, outreach activities, publication plans etc.	
Milestone	Planned completion date
These milestones are organised according to the three objectives that guide SSRP's daily activities: (i) Building the sustainability research community in Sussex; (ii) Expanding the research pie; and (iii) maximising academic and societal impact.	
(i) Objective: Building the sustainability research community in Sussex	
Mini-symposium of research cluster "Food and Climate"	End October 2019
Mini-symposium of research cluster "Rights-based Approach to the SDGs"	Mid-November 2019
Disbursement of funds for Fellowship programme	November, 2019
Mini-symposium of research cluster "Impacts of economic globalization on the SDGs"	Early December 2019
Mini-symposium of research cluster "Planetary health and the SDGs"	Mid-December 2019
Mini-symposium of research cluster "Critical transition zones for SDGs"	Early January 2019
Convening a campus-wide meeting on developing a university sustainability teaching programme and curricula	February, 2020
(ii) Objective: Expanding the research pie	
Bid for British Academy Knowledge Frontiers call – Culture of early warnings	End Oct. 2019
Bid for UK-Innovate call -- Digital tech for water pollution in India	Mid-Nov. 2019
Prepare bids in connection with GCRF and non-GCRF calls from ESRC, NERC, British Academy, others	As opportunities arise. We expect that SSRP-researchers will submit 20-30 bids over the next reporting period.
Campaign for obtaining a charity multi-year block grant:	
- Recruit consultant to map donors and assist in preparing case for support.	November, 2019
- Begin contacts with potential donors	March, 2020
SSRP Seed Grant Fund #3	
-- Announcement	January, 2020
-- Disbursement of grants	March, 2020
(iii) Objective: Maximising academic and societal impact	
Launching SSRP's <i>Online Guide to Sustainability Research Methods</i>	Dec. 2019

Publish Policy Briefs on “Sustainable supply chains in forest communities” and “Financial crises, environmental sustainability and the SDGs” together with media events.	December 2019 – January 2020
Publish other Policy Briefs on nearly completed SSRP projects together with media events	tbd
Re-structuring and re-launch of Communications Strategy (We are reworking our communications strategy to disseminate findings more effectively and to a more varied audience. This includes streamlining and tailoring our key messages to specific audiences & using the most effective format and communication channel to reach people. One of the key priorities is to tell the stories of research in a more accessible way to garner more media interest and increase the reach of our work.)	January 2020
Co-sponsoring a Wilton Park an International Roundtable on “Proven Synergies Among the Sustainable Development Goals”	March, 2020 Contingent upon external financing
Publication of Special Issue of <i>Sustainability Science</i> journal featuring SSRP research	March 2020
Organising International Workshop on “Scaling up Findings from Local SDG Research”	July, 2020 Contingent upon external financing – May be postponed until 2021
Organising International Conference on “Climate and the Sustainable Development Goals” (In conjunction with Climate Change Conference of Parties in Edinburgh in November, 2020)	Nov. 2020 Contingent upon external financing

7 Financial sustainability provide details on discussions to date and agreements reached with regards to how the programme will be financially sustainable once the SDF investment expires

A Five Year Plan for SSRP (2021-2026), including a budget, is attached. Two options are offered for discussion. Option One is Business-as-usual and would maintain SSRP’s growing influence as an important institution in the UK and Europe. Option Two – Worldwide Leader – would establish the SSRP as a major go-to institution worldwide for science for the SDGs and sustainability research.

8 Detail any decisions required from the Planning and Review Board

Please attach the following:

- I. A list of publications by the core team plus programme-funded staff in this reporting period, indicating which will likely be REF submissions.
- II. A list of bids submitted & awards made in the reporting period.
- III. A list of all live awards.
- IV. A list of links to keynotes and conference papers.

Colleagues in the Research & Enterprise Information and Systems team can support you in gathering data for items II and III. Please contact resinfosystems@sussex.ac.uk

Please return report and attachments to Debbie Foy-Everett D.Foy-Everett@sussex.ac.uk by
Monday 14 October 2019