



Remote Sensing for Biodiversity and Ecosystem Services Inventory Grand Challenges

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Newton Fund/British Council/FAPESP

Researcher Links Workshop

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What are 'Grand Challenges'?

- Societal need
 - Biodiversity and sustainability
 - Human health and welfare
 - Climate change
 - ...
- UK National science agenda
 - Newton Fund
 - Global Challenge Research Fund
 - Industrial Strategy Research Fund
 - ??? Challenge Research Fund



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Learn about the Newton Fund

The Newton Fund uses science and innovation partnerships to promote economic development and social welfare of partner countries. It does this through collaboration with partner countries and working with 15 UK delivery partners. The Newton Fund is also part of the UK's official development assistance (ODA).

The Newton Fund was launched in 2014 and now has a total UK investment of £735 million to 2021, with partner countries providing matched resources within the fund.

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What is ODA?

The Newton Fund's aim is to develop science and innovation partnerships that promote the economic development and welfare of collaborating countries.

Applicants need to consider if their proposed

Featured Funding Opportunity

@newtonfund tweets

“ RT @AgriTechinChina: OI Workshop in Shandong, China (9-13 July 2018). Funding for proof-of-concept research on the application of space sci...

“ RT @_RichBaker: Our climate is changing, and we are becoming more vulnerable to

Science and research funding allocation: 2016 to 2020

<https://www.gov.uk/government/publications/science-and-research-funding-allocation-2016-to-2020>

Global Challenges Research Fund

GCRF (£m)	(£m) Resource					
	16/17	17/18	18/19*	19/20*	20/21*	SR Total
National Academies	11	11	11	11	11	45
AHRC	5	7	7	7	7	25
BBSRC	10	20	20	20	20	70
EPSRC	10	15	15	15	15	55
ESRC	5	10	10	10	10	35
HEFCE	20	37	37	37	37	130
MRC	14	34	34	34	34	115
NERC	5	10	10	10	10	35
STFC	0	4	4	4	4	11
International Partnership Programme	32	30	30	30	30	122
Unallocated GCRF	0	38	122	216	315	377
Totals	112	215	299	393	492	1,019

Resource (£m)					
	16/17	17/18	18/19*	19/20*	SR15 Total
HEFCE	1,695	1,716	1,730	1,745	6,886
AHRC	101	101	99	98	398
BBSRC	353	356	350	347	1,406
EPSRC	807	796	790	783	3,176
ESRC	155	157	154	153	618
MRC	581	594	597	594	2,367
NERC <i>Of which the Antarctic Logistics and Infrastructure Partition</i>	291 30	294 30	290 30	288 30	1,163 <i>118</i>
STFC	388	396	406	414	1,603
UKSA	225	221	217	213	876
National Academies	98	98	98	98	393
International Activities, Science & Society and GO Science	23	22	22	21	89
Unallocated GCRF**	-	38	122	216	377
Subtotal	4,718	4,791	4,875	4,969	19,353
<i>of which GCRF</i>	112	215	299	393	1,019
Newton Fund	90	105	115	125	435
Totals	4,808	4,896	4,990	5,094	19,788

Who are we?

International

- UK
- Brazil
- Argentina
- Chile
- Colombia
- Mexico
- Peru

Interdisciplinary

- Plant biodiversity
- Invertebrate biodiversity
- Paleoecology
- Archaeology
- Remote sensing
- Physics
- Social anthropology

Why are we here?

- Identify scientific challenges related to biodiversity and ecosystem services inventory that can be addressed by emerging technologies (e.g. remote sensing, omics)
- Identify potential synergism across different disciplines to address those challenges
- Outline potential research agendas for moving forward
- Develop networks and make new friends!

Break-Out Sessions

- Identify within your group: facilitator, recorder, rapporteur
 - Facilitator – ensures group addresses all questions
 - Recorder – captures the discussion in writing
 - Rapporteur – presents brief highlights to the whole workshop

Question 1 – Identify at least 3 Challenges/Research Questions relating to the theme.

Question 2 – For each, identify ways in which at least 3 (or more) disciplines could contribute.

Question 3 – What stakeholders or research users would you like to a) involve; b) benefit; or c) both?

Observers

- USP – Raul Machado <raul.machado@usp.br>, Provost for International Cooperation
- British Council – Olivia Panhoca Olivia.Panhoca@britishcouncil.org, Newton Fund Project Manager
- FAPESP – Luiz Nunes de Oliveira <LNunes@fapesp.br>, Special Advisor to the Scientific Director