Universities UK International

UK research and development funding in higher education THE IMPACT OF OFFICIAL DEVELOPMENT ASSISTANCE (ODA) FUNDING

Date

29 July 2021

Audience

- UK government departments such as The Department for Business, Energy and Industrial Strategy (BEIS), The Foreign, Commonwealth & Development Office (FCDO), Treasury, Department for Education (DfE)
- > UK funders such as UK Research and Innovation (UKRI), the Academies
- Senior international and research office staff at UK higher education institutions (HEIs)
- Other organisations with interest in Official Development Assistance (ODA) Research and Development (R&D).

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About Universities UK International

Universities UK International (UUKi) represents UK higher education institutions (HEIs) globally and helps them flourish internationally. To do this we actively promote UK HEIs abroad, provide trusted information for and about them, and create new opportunities through our unique ability to act at sector level. We draw on UK university expertise to influence policy in the UK and overseas, delivering information, advice and guidance to facilitate mutually beneficial collaboration between UK HEIs and a broad range of international partners.

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INTRODUCTION

In 2020 UUKi conducted a survey of UK higher education institutions (UK HEIs). We wanted to understand and clarify the secondary benefits of Official Development Assistance (ODA) funding to UK universities. The survey results were consolidated in the report: 'ODA funding and its impact on the UK higher education sector' and included five key findings.

One year on, significant reductions have been made to the UK's ODA budget. We asked UK HEIs for further insight into the value of ODA Research and Development (R&D) funding from an institutional perspective. The findings, as described in this report, are intended to inform readers about the value of ODA R&D generally as well as the upcoming Comprehensive Spending Review, expected in autumn 2021.

The **purpose** of the UUKi/BEIS ODA survey 2021 was to gather information from UK HEIs about the benefit of ODA R&D funding to address global challenges, including the UN Sustainable Development Goals (SGDs), and to advance the UK's strategic priorities.

Specifically, the report aims to understand:

- The impact of ODA R&D funding on UK universities and their partners
- How the UK can continue to use ODA R&D with developing countries in support of the UN SDGs and UK strategic priorities.

Two most prominent examples of ODA R&D funding are the: <u>Newton Fund and Global Challenges</u> <u>Research Fund (GCRF)</u>, which are managed by the Department for Business, Energy and Industrial Strategy (BEIS). They are delivered by a range of UK and international partners, including UK Research and Innovation (UKRI). The Newton Fund and GCRF are implemented through schemes including GCRF QR/institutional/block grants, targeted calls implemented through standard grants, networking grants, fellowships and similar schemes. Some answers given by UK HEIs reference these specifically.

METHODOLOGY

The evidence presented in this report has been gathered via a survey of UK HEIs. UK HEIs were asked to provide feedback in relation to ODA R&D funding in the following areas:

- Institutional strategies
- Purpose
- Partnerships

The survey was open between 28 May 2021 and 26 June 2021. UUKi shared the survey via two key UUKi networks:

- International Research Development Network (IRDN) comprising over 950 Head of Research and Senior International Research Funding Managers, and
- Pro-Vice-Chancellor International (PVCI) network comprising Pro-Vice-Chancellors International/Research from UUKi member HEIs.

The total number of HEI respondents was 59 (out of 140 UUKi members), with 58 UK HEIs and one consortium representing one additional UK HEI responded to the survey. There was a very good geographical/regional representation with 46 (47) responses from English HEIs, two from Northern Ireland, seven from Scotland and three from Wales.

This report outlines six key findings from the survey and makes four recommendations related to ODA R&D funding.

FINDINGS

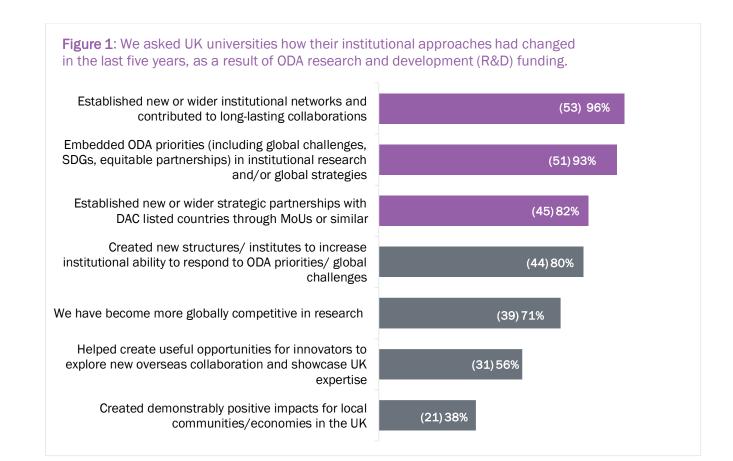
Section 1: Institutional strategies

In this section of the survey, we were interested in finding out how ODA R&D funding has enabled UK HEIs to operate beyond the UK - to become more global. Which ODA R&D funding streams have been most important? What are their most valuable characteristics? Which regions and/or countries in the world were of most interest to UK HEIs?

Key finding 1:

ODA R&D funding has led to a strategic shift in the way UK universities approach international research collaboration.

- 93% of respondents reported that their institutional approaches have changed in the last five years as a result of ODA R&D funding, of which (see Figure 1):
 - 96% of respondents have established new or wider institutional networks and contributed to long-lasting collaborations
 - 94% of respondents have embedded ODA priorities (including global challenges, UN SDGs, equitable partnerships) in institutional research and/or global strategies
 - 82% of respondents have established new or wider strategic partnerships with Development Assistance Committee (DAC) listed countries through Memorandums of Understanding (MoUs) or other similar agreements.



Key finding 2:

ODA R&D funding has helped to establish UK HEIs as world leading in global challenges R&D, including the UN Sustainable Development Goals.

• 71% of respondents reported that they have become more globally competitive in research.

University of Exeter	reported that 'SDGs are increasingly embedded across our research strategies and interdisciplinary institutes (e.g. University of Exeter's Global Systems Institute)'. And 'ODA funds have supported us in achieving the ambitions to address pressing global challenges through interdisciplinary research and equitable partnerships by allowing us to focus resources and expertise on areas of global significance.' The University of Exeter has also established an India office.
University of East Anglia	established a Global Talent Research Fellowship scheme strengthening ties with 13 academic institutions from 10 DAC nations. These include Jadavpur University (India), Tsinghua and Tianjin Universities (China) and the University of Cape Town (South Africa).
Anglia Ruskin University	has recently launched a new Sustainability Strategy 2020-2026. This includes a new research goal which includes an overall aim to 'increase our research output related to sustainability, both in quality and volume, to ensure we are recognised for our world- leading innovation and impact as part of a new university wide Sustainable Futures Research.'
University of Glasgow	has signed an MoU with the African Research Universities Alliance (ARUA). They told us 'ODA funding has been an important factor in enabling the acceleration of our strategic ambitions to be a truly world-leading and world-changing institution'. It has selected International Development as one of five themes to be housed in their Advanced Research Centre, a new £113 million investment into a world-leading research that will open in 2022.
University of Leicester	has established a research partnership – The Nairobi Alliance – with the Universities of Malawi, Nairobi (Kenya), Rwanda and Witwatersrand (South Africa). They are revolutionising the way tuberculosis (TB) is diagnosed with the invention of a 3D printed insert for a simple face mask. They have worked together to increase health literacy throughout the Covid-19 pandemic, and have developed smart phone compatible videos to disseminate culturally targeted information to vulnerable populations in Pretoria via mobile phone networks.

Key finding 3:

Stable multi-year ODA R&D funding is a key part of the UK international R&D funding ecosystem built on excellence, impact and trust.

- Broad challenge-based calls was reported to be the most important characteristic of ODA R&D funding (90%). This was followed by broad **funding stability** (88%) and partnerships with Low-Middle Income Countries (LMICs) (86%), see Figure 3.
- Given a single choice, funding stability was the most important characteristic of ODA R&D funding (scored by 49% of the respondents, see Figure 2).

The respondents strongly agreed that a multi-year allocation is important. This helps them to plan and prepare for individual calls. It also helps to develop meaningful long-term strategies.

Only when this in in place can they build long term and equitable partnerships across the world to help address the most pressing global challenges. Many respondents reported that this has been compromised by the recent ODA reductions, will take considerable time to remedy, and that any existing grant funding commitments should be honoured.

- ODA R&D funding has become an integral part of the UK international R&D funding ecosystem. 95% of respondents agreed that there are advantages to ODA R&D funding streams compared with non-ODA R&D funding sources but have also noted a few caveats:
 - ODA R&D funding streams were said to have a clear focus and sense of purpose but suffered from not being joined-up
 - ODA R&D funding streams were said to have a clear pathway to contribute to tackling the global challenges and UN SDGs, deliver projects and global impacts that would not otherwise happen but suffered from short timescales.
 - ODA R&D funding streams were said to have led to changes in R&D ODA funding levels in the wake of the COVID-19 crisis and effects on the economy have negatively impacted UK HEIs and their partner institutions, with some UK HEIs unable to adapt to the changes.

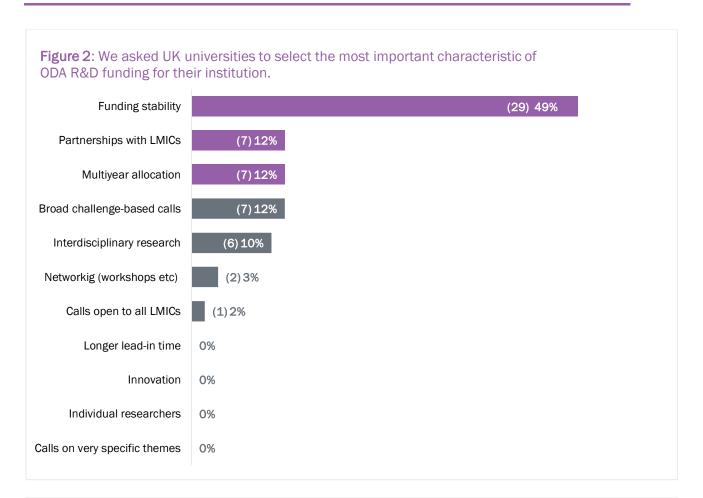
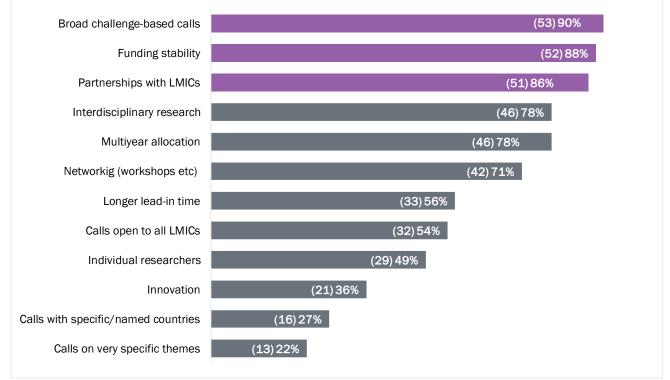


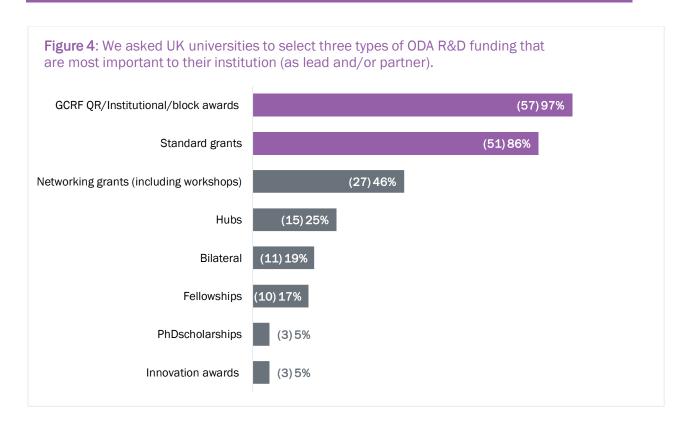
Figure 3: We asked UK universities to **select all** most important characteristics of ODA R&D funding for their institution.



- We asked institutions to tell us **which types of ODA R&D grants** were most important to them as part of the funding ecosystem. They were reported as (see Figure 4):
 - **GCRF QR/institutional/block awards (96%).** Respondents told us that GCRF QR had been a vital funding mechanism for universities. It is seen by the majority of respondents to underpin the R&D ecosystem through: pump-priming, networking, career development and attracting talent.

GCRF QR has helped small/ specialist and less research-intensive UK HEIs to become engaged in global research. Removing this funding will have direct negative impact on the UK universities ability to engage with global research. For example, GCRF QR allowed the **Open University** (OU) to lay the foundations for research with impact. OU used their funding to provide small grants to individual Principal Investigators (PIs) for capacity or capability building; mono-disciplinary, interdisciplinary and collaborative research; generating impact from research and pump-priming activity. OU reported that since 2018/19, GCRF QR has supported 50 distinct activities, benefitting 36 DAC nations, addressing 14 UN SDGs and has enabled PIs to leverage further external funding.

- Standard grants (87%). This competitive medium-large scale funding enables delivery of the best quality research with the greatest potential impact in global challenges and UN SDGs. The Royal Veterinary College used standard grants to investigate combating the spread of COVID-19 through food distribution systems in Peru and Bolivia, while the University of Glasgow developed new technologies (rapid diagnostics for malaria), new understandings of zoonotic disease transmission (brucellosis in Tanzania), and new tools for online learning (online Palestinian Arabic Course).
- **Networking grants (46%).** This competitive small-medium scale funding enables development of new and existing partnerships. For example, **Queen Margaret University** developed partnerships with institutions in four West African Francophone countries.



Section 2: Purpose

In this section of the survey, we were interested in finding out how ODA funding has changed the UK's R&D landscape and its institutions. We asked about the impact of the ODA-funded projects, the quantifiable and supplementary benefits for the institutions, and the influence on the UK's reputation and soft power globally.

Key finding 4:

ODA R&D funding has enabled UK universities to:

- expand and develop partnerships
- broaden their geographical reach
- fund projects that would otherwise not have happened
- create opportunities for career development and talent attraction.
- More than 80% of respondents selected five or more options regarding the primary benefits of ODA funding for institutions. Partnership development (96%) and expanding existing partnerships (96%) were the most common selected advantages.
- 88% of institutions regard ODA R&D funding as an opportunity to commit to projects that they would otherwise not have the impetus or resources to commit to.

- ODA R&D funds also contributed to **developing early-mid career researchers** according to 82% of respondents while 81% selected **broadening the geographical reach of the institution** as an important benefit of the funding.
- Almost half of participants (49%) perceive ODA R&D funding as valuable in attracting talent.
- A subsequent institutional benefit is the **discovery of additional funding opportunities** available to researchers through the skills acquired and/or through the new partnership networks developed within the ODA-funded projects.

University of Glasgow's	ODA funding has supported early career researchers to establish independent career trajectories, with an impact on the advancement of science and technology globally. For example, one of the institution's early career researchers is becoming established as a leader in the field deployment of genetic sequencing capacity to better understand rabies transmission technology. Furthermore, the technology is produced by a UK company (Oxford Nanopore). Initiatives such as this not only establish UK researchers as leaders in their field, but they also establish UK businesses and technology as leaders in technological development.
University of Sheffield's	 programme FemmepowermentAfrique demonstrates the importance of the funds for local capacity-building and empowerment. Working with radio studios in Burkina Faso, Niger, Mali, and the Democratic Republic of Congo, the project has funded a range of radio programmes focusing on themes in aid of female empowerment in these countries.
	The key partner is Fondation Hirondelle (FH), a Swiss-based NGO working with 110 radio stations. Their work has reached 218,000 people through FH's Facebook and Twitter subscribers, as well as 66.5m people who receive FH content annually.
	Their work with Studio Kalangou (SK) in Niger and Studio Tamani (ST) in Mali has led to several recommendations, all of which have been implemented.
	The first is to establish a female-only journalism team to give a greater voice to women.
	The second is to schedule a weekly 'Woman's hour' broadcast and the third is to monitor content to ensure gender equality.
	Their work on global challenges has highlighted some of the institution's fundamental research to a broader audience and widened inclusion within their work.

	For instance, their research on using old mattresses within the Zaatari refugee camp to grow food has been picked up by media. The university also has a philanthropic campaign to raise money for the Desert Garden appeal.
At Queen Margaret	ODA funds have enabled the Institute of Global Health and
University	Development to grow from a group of 10 staff to a team of 30.
	Their ODA funds have supported mobilisation of funds from other sources – the National Institutes for Health in the US, and the GIZ (German Corporation for International Cooperation GmbH) in the EU.
Queen's University Belfast	has received over 100 ODA awards which have brought about numerous benefits, including both long and short-term jobs related to the research activities. Post-doctoral Research Assistants and Associates (PDRAs), technical staff and field assistants and other contractors and casual staff have been engaged both locally by Queen's and internationally by the partner organisations. Additionally, many projects have involved healthcare organisations, industry and/or other private sector partners and have utilised local suppliers to provide support for project activities.
At the University of Sheffield	the ARUA/UKRI GCRF Partnership Programme has contributed to a successful collaboration with African Centres of Excellence, providing access to critical indigenous knowledge and excellent science, local facilities and novel funding schemes, previously unavailable to them. ODA has enabled capacity-building in partner countries. This leaves a legacy of strengthened systems, better able to conduct world-leading research.

Key finding 5:

ODA R&D funding delivers clear secondary benefits to the UK. It supports research excellence and impact, contributes to 'soft power' and the UK's reputation for scientific leadership on the UN Sustainable Development Goals.

- 97% of respondents agreed that ODA R&D funding helps maintain the UK's competitive edge in science, research, and technology.
- 91% of respondents agreed that ODA R&D funding helps enhance UK soft power around the world.

University of Surrey	in collaboration with King Edward Memorial Hospital and Research Centre, Pune, India, has unique access to a longitudinal study to address major gaps in nutritional anaemia and aims to generate five key research papers for high impact journals.
Durham University's	expertise from the 'Transport Africa' project (in collaboration with Sudan, Tanzania, South Africa, Malaysia, Turkey) is being used by the UK Environment Agency to investigate climate impacts on flood embankments.
University of Birmingham	noted that 'education is one of the UK's most potent exports with £23.3bn generated in 2018 (DfE, 2020). For many HEIs researchers and educators are one and the same, meaning ODA R&D spend serves to support wider HMG targets to grow education exports to £35b by 2030. By having a large number of trusted representatives of globally renowned universities, working collaboratively with LMICs and facilitating direct investment in their R&D infrastructure, the UK is making a tangible contribution to key overseas partners that also serve as the markets of the future.'
Loughborough University	noted that 'ODA R&D funding helps to enhance UK visibility within other governments and bodies of influence through the individual projects and programmes. The UK being seen to care about global issues and challenges can help open up future agreements or partnerships, particularly where these challenges are part of the way forward.'
University of Sheffield	noted that ODA research funding has the capacity to enhance UK soft power around the world, by positioning the UK as a reliable research partner eager to engage in tackling global challenges through equitable co-production.

The recent ODA cuts have undoubtedly had the opposite effect, inflicting reputational damage on the UK and leading to a lack of trust in our dependability amongst overseas partners.

The university reported 'This was recently exemplified by discussions with research support colleagues based at one of our African partners who reported that since the cuts in UK ODA funding (leading to huge disruption on various projects that they are involved in), they are increasingly regarding China as their country of choice for research partnerships now'.

Section 3: Partnerships

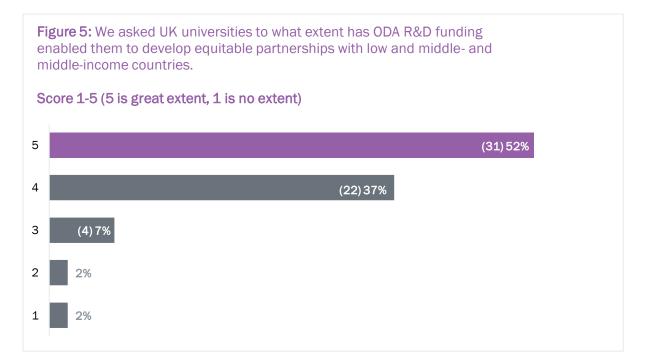
In this section of the survey, we were interested in finding out how ODA R&D funding has enabled equitable partnerships with LMICs on an individual research grant level, and why this link was important or effective.

We were also interested in understanding whether ODA R&D funding enabled UK HEIs to do something that would not be feasible or as impactful without the dedicated funding.

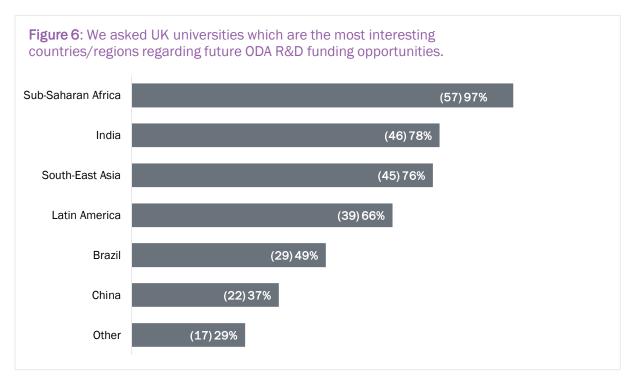
Key finding 6:

ODA R&D funding has enabled UK universities to develop equitable partnerships with over 100 nations across the world, but power imbalances remain.

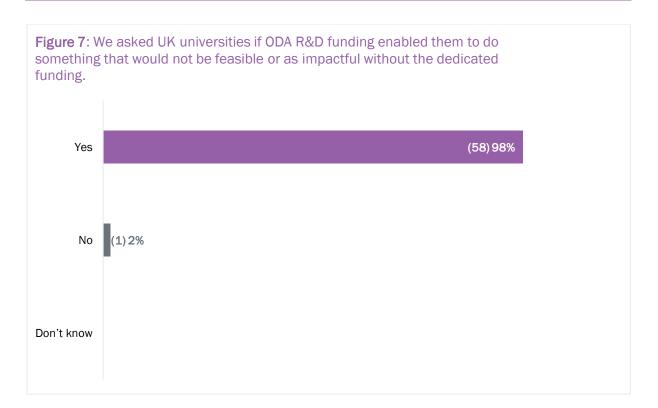
 90% of respondents reported that ODA R&D funding has enabled UK HEIs to develop equitable partnerships with low and middle- and middle-income countries to great or some extent (Figure 5).



- Sub-Saharan Africa and South-East Asia are the top two regions of interest among responding institutions.
- Other specific regions/countries that have been reported of interest include: MENA, Europe/Eastern Europe, Central America, Central Asia and South Pacific/ Oceania (Figure 6).



• 98% of respondents agreed that ODA R&D funding enabled their institution to do something that would not be feasible or as impactful without dedicated funding (Figure 7).



The University of Manchester	reported numerous GCRF projects which bring together academic and non-academic partnerships in the areas such as:	
	 water-food-energy systems in the Volta Basin The South Asia Self Harm research capability building initiative Remediation of Groundwater Arsenic in the Ganga River Basin Disaster management and resilience in electric power systems. 	
	Examples of partnerships include:	
	 Volta Basin Authority, Yangon University of Economics, Council for Scientific and Industrial Research – Ghana; Rajasthan Police Academy, Institute of Public Health Bengaluru, Sawai ManSingh Medical College and Hospital Chhahari Nepal for Mental Health; Indian Institute of Technology Kharagpur, Central Ground Water Board, National Institute of Hydrology, Roorkee, and the Indian 	

	Institute of Technology Kharagpur; Chilean Energy Commission, Solar Energy Research Centre SERC Chile.
Queen's University Belfast	noted that they have successfully accessed GCRF funds to support a key partnership with Bangladesh Agricultural University in soil health which is strategically important and core to Queen's Institute for Global Food Security global research activity.
Heriot-Watt University	noted that 'Although we strive for our research partnerships to be equitable, there are inherent imbalances in power relations based on eligibility to apply for funding.
	For a UK institution to be the required leader of a project, the other partners must inevitably comply with our requirements. While there is a level of equality among researchers, administrative processes prevent truly equitable institutional relationships.'
Aston University	noted that 'The GCRF QR Funds have been transformative. The inherent flexibility has enabled a tailored approach. The funds have enabled collaborations to be built, early career researchers to establish their networks and cement relationships and new ideas to be explored. The annual allocation of funds has enabled seeded projects to grow and develop and new projects to be nurtured; with a long-term perspective.'
The Blue Communities Grow programme	has enabled four academic institutes in ODA countries to become direct partners of the University of Plymouth who previously were not collaborators on such research projects.
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	 become direct partners of the University of Plymouth who previously were not collaborators on such research projects. These include Hanoi National University of Education, Vietnam; Universitas Nasional, Indonesia; University of Malaya, Malaysia; and Western Philippines University, Palawan, Philippines. The partnership has developed strong, trusting and diverse working relationships across inter-disciplinary areas of research in both natural and social sciences at all stages of

RECOMMENDATIONS

Based on the above findings we make the following recommendations:

1.	There must continue to be significant public funding available for research on global challenges as defined by the UN SDG framework in partnership with LMIC partners, whether as part of the ODA budget or the R&D budget	ODA-funded R&D schemes such as GCRF and Newton have helped UK HEIs to engage with global challenges and create partnerships with researchers and institutions in LMICs. Universities and their partners want to continue working to address global challenges. The source of funding is less important than the activity which it
2.	Funding for research programmes, once confirmed by a UK funder, must be guaranteed for the life of the project to ensure that legal commitments are met.	Supports. Policy and funding stability are critical to developing long-term, sustainable and impactful research partnerships. The impact of mid-project grant terminations or cuts on LMIC partners is acute. The UK's reputation as a trusted partner is severely undermined by such actions.
3.	Future global challenges funding should include dedicated support for universities to build LMIC partnerships through mobility and other career development opportunities, laying the foundations for successful projects further down the line.	Universities have benefitted from a flexible funding mechanism (GCRF QR/institutional/block awards) which has allowed them to build fruitful partnerships through pump-priming and career development activity. These types of activities are a key part of research and development but are now at risk. Funders should consider how these activities will be supported in future allocations.
4.	Equitable partnerships should remain a core principle of any future funding for global challenges.	LMIC partners should not be over- burdened by administrative requirements.

ACKNOWLEDGEMENTS

- UUK member HEIs who responded to the survey and provided case studies.
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