

Evaluation & summative assessment – University of Leicester's GCRF Strategy





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Executive summary

Purpose of study

The University of Leicester has commissioned an evaluation of the implementation of the University's Global Challenges Research Fund (GCRF) Strategy (2018-2021) to help shape future development research strategy at the University and support reporting to Research England. It assesses how QR GCRF funding has been used and interventions taken against key performance indicators (KPIs) defined in the strategy.

Development research at the University of Leicester

At the start of the strategy, development research activities at the Universities only made a small proportion of under 2% of the externally funded grant portfolio. The **GCRF strategy** intended to change this and increase the visibility and range of such activities.

The University had submitted a strong GCRF strategy in 2018 that was approved and commended by Research England for its clear focus on beneficiary countries, well-defined priority areas and the intention to develop a Theory of Change.

The strategy focuses on seven **strategic objectives** with a strong emphasis on enhancing the sustainable development impact of the University's research through investing in **people**, **partnerships** and an enabling **research ecosystem**. As recognised by Research England, the strategy demonstrated strong focus by clearly prioritising a set of research themes and regions for their investment.

Implementation of the GCRF strategy

The University established a dedicated governance structure with the **GCRF Delivery Group** overseeing implementation and reporting into the Research and Enterprise Committee which ensures that this activity is well-embedded at a strategic level. The Committee has representatives from all Colleges at varying career levels. A designated team of two staff members of the Research and Enterprise Division is responsible for the operational implementation of the strategy. This provides an agile but also handson approach.

In collaboration with overseas partners, a **Theory of Change** was developed that guided development and implementation of interventions. These included the launch of an internal **International Research Development Fund**: ODA (IRDF:ODA) which over three years allocated nearly £1million to pump-prime activities. This has led to several externally funded projects. QR GCRF funding was also invested in two strategic workshops, hosted in 2018 and 2019 that led to a significant number of follow-on projects. To support the local environment several training events and a seminar series have been established. Funding was also used to balance the full economic costing (FEC) of ODA-compliant projects and thereby ensuring the sustainability of these activities.

At the core of the University's strategy was the development of strategic, lasting partnerships. The **Nairobi Alliance**, a collaboration between the University of Leicester and the Universities of Malawi, Nairobi, Rwanda and The Witwatersrand, stands out as an initiative that has proven particularly

valuable during the Covid crisis where several partner-led urgent interventions could be implemented at short notice.

Overview of finding and recommendations

The evaluation could establish strong evidence of a significantly grown development research portfolio at the University, now accounting for more than 4% of externally funded research activities. Activities are well chosen and would benefit from ongoing support to realise their impact potential over the coming years. It is visible that the University has put **equality of partnerships at the core of its interventions** rather than aiming for short-term gains.

A focus has been placed on **supporting the early stages of the research lifecycle**, meaning that some benefits will only show in years to come. The activities around workshops, many small collaborative project activities, seminar series as well as pairing and mentoring of colleagues have created a growing **community of practice** around development research which is starting to change research culture and research ecosystem. This group of in-house researchers has built an impressive global network with many projects and publications either on the way or in development. This provides a strong foundation for future growth in this area.

Maintaining this momentum during a period of reduced funding might be challenging but will likely deliver a strong return on the investment. This cannot be achieved without some in-house resource and strategic oversight within the institution. The University's approach to implementing its GCRF strategy also provides an excellent model that could be translated to all collaborative research activities to create a productive and conducive research ecosystem.

Development research has featured in 14 (of 69) of the University's REF2021 impact case studies and contributed to 17 of 21 Unit of Assessment (UoA) environment statements. Partner benefits and benefits to the University and the UK can clearly be demonstrated with the latter reaching beyond contribution to academic knowledge and global challenges to innovative approaches to research and teaching.

Key performance indicators (KPIs) chosen have shown some limitations, partly owed to lack of in-house systems. They also do not consider the cyclic nature of research, thereby making it difficult to attribute outcomes to interventions. These should be reviewed to establish a better mix of both qualitative and quantitative measures with base-line evidence, more clearly connected to activities that provide meaningful indicators placed alongside the research lifecycle. The well-developed Theory of Change should act as a foundation for this work. There is a clear need to invest in systems, improve data quality and simplify reporting.

The implementation of the University's GCRF strategy, has undoubtedly been impacted by the Covid crisis. However, one of the objectives of the University's strategy was the ability to react quickly to 'unexpected global events'. A Covid urgency call launched through the IRDF:ODA and outcomes of this work clearly demonstrate the success of an agile governance structure and implementation team.

The study has some limitations, the main one being the comparably short evaluation period for activities that often extend this timeframe. Other limitations include data availability and quality and a small sample size of interviewees.

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1. Introduction

1.1. Background and context

This report, commissioned by the University of Leicester, evaluates and assesses the implementation of the University's **Global Challenges Research Fund (GCRF) Strategy** (2018-2021) to understand key achievements and in how far **targets** and key performance indicators (**KPIs**) have been reached. It also seeks to demonstrate how the GCRF Strategy and subsequently developed **Theory of Change** have aided achievements and where and how improvements are possible to inform future strategy.

The University's GCRF strategy (2018-2021) focuses on seven strategic objectives. These are based on a commitment to equitable and sustainable partnerships and the concept of co-creation to jointly deliver outstanding research that addresses challenges faced by developing countries and the world.

1.2. Setting the scene

In its 2015 Aid Strategy, the UK government announced the establishment of a £1.5 billion Global Challenges Research Fund¹ (GCRF) over the following five years. This fund was financed through the UK's Official Development Aid (ODA) commitment and administered by several delivery partners

 $^{^1\,}https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/623825/global-challenges-research-fund-gcrf-strategy.pdf$

including UK Research and Innovation² (UKRI), the UK funding bodies, the four national academies, and the UK Space Agency.

In addition, Research England allocated **QR GCRF funding**³ to UK higher education institutions that were in receipt of quality-related (QR) funding. This allocation was part of the QR block grant that UK higher education institutions (HEI) received. As with all ODA funding, any use of these funds must directly and primarily benefit developing countries defined on the so-called DAC-list⁴ which is held and regularly updated by the Organisation for Economic Co-operation and Development (OECD).

To ensure compliance with these requirements Research England mandated UK HEIs to submit a three-year **QR GCRF strategy** starting from the academic year 2018/19. Allocation of QR GCRF funding was dependent on approval of this strategy and subsequent submission of annual monitoring reports.

In the last 3 years, UKRI has spent more than one billion pounds on GCRF and Newton funding with budgets increasing year on year⁵ (table 1). The decrease in Newton funding is due to the scheme coming to an end in 2021.

FY	18/19	19/20	20/21
GCRF spend £m	224.4	280.2	336.6
Variance on projected spend in %	-2.7	-8.0	-8.4
Newton spend £m	77.5	67.3	51.0
Variance on projected spend in %	-5.4	-21.0	-8.3
Sum £m	301.9	347.5	387.6

Table 1- Annual expenditure for GCRF and Newton funding - UKRI

Following the **reduction of the ODA allocation** to UKRI announced by the Department for Business, Energy and Industrial Strategy (BEIS) in March 2021, UKRI's ODA budget in 20/21 stands at only £125 million leaving a £120 million gap between allocations and commitments to grant holders and the sector in concerns over how to maintain activities and partnerships built over the last few years.

² https://www.ukri.org/our-work/collaborating-internationally/global-challenges-research-fund/

³ https://re.ukri.org/documents/2019/qr-gcrf-tcs-pdf/

⁴ https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC-List-ODA-Recipients-for-reporting-2021-flows.pdf

⁵ https://www.ukri.org/wp-content/uploads/2021/07/UKRI-200721-AnnualReport2020-2021.pdf

1.3. Conceptual approach

1.3.1. Framework for evaluation

Both QR GCRF and GCRF funding are part of the UK's ODA commitment with its main aim 'to ensure the UK takes the lead in addressing the problems faced by developing countries, whilst developing our ability to deliver cutting-edge research'⁶. QR GCRF funding delivered through Research England complements the project-based GCRF grants allocated by UKRI and other delivery partners, by offering non-earmarked funds that can be used for strategic activities or research that would not be funded through other GCRF grants.

The challenge in evaluating the success of such strategies and the interventions outlined in them, lies in the cyclic nature of research with different phases in the research lifecycle often spreading over several years, frequently exceeding the period of the review (figure 1). For example, articles published in 2018/19 are likely related to research that has been initiated prior to the launch of the University's GCRF Strategy, in the same way that research funding secured in 2019/20 might not have led to publications or socio-economic impact yet.



Figure 1 – Research lifecycle

6.1

 $^{^6\,}https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/623825/global-challenges-research-fund-gcrf-strategy.pdf$

The evaluation and summative assessment have therefore sought to complement the traditional quantitative analysis against KPIs with a qualitative lens on changes to **research culture** and the University's **research ecosystem** reflecting also on the principles of the University's Theory of Change.

1.3.2. Methodology

The methodology has drawn on both quantitative and qualitative analysis supplementing the assessment against chosen KPIs with a mix of qualitative methods to reflect the longitudinal aspect of outcomes reviewed.

- Quantitative data analysis of secondary data collated by the University related to outputs and
 outcomes linked to the KPIs of the GCRF strategy, relevant application and funding data as well
 as publications, internal survey data and the annual submissions to Research England's
 monitoring exercise.
- Evidence gathering:
 - o **Key informant interviews** with 12 stakeholders at the University as well as overseas partners representing senior management, administration and award holders
 - o **Survey of publications** of internal award holders
 - Analysis of REF2021 impact case studies and contribution to REF2021 Unit of Assessment (UoA) environment statements
 - Qualitative longitudinal analysis
- Systems level analysis integrating findings from quantitative and qualitative work packages to identify key achievements and challenges
- Development of recommendations based on synthesis of findings

1.3.3. Limitations

The evaluation sought to integrate a large number of quantitative and qualitative data sources and was completed within a short timeframe (June – July 2021). It is therefore subject to a number of limitations, as outlined below:

- Research lifecycle KPIs studied in this assessment relate to actions and outputs at different phases of the research process often spreading over several years. The period of the review of only three years limits the possibility to establish causalities between interventions and results, i.e. whether impact can be attributed to interventions.
- Sample size (interviews) While effort has been made to select a representative sample of interviewees, the scope of the study only allowed a very limited number of stakeholder interviews dependent on their availability and willingness to participate. Especially a wider representation of collaborators from partner countries would have been desirable.
- Data quality The University of Leicester captures all application, award and publication data. However, limitations to and incompatibility of systems make it difficult to capture additional ODA related data, which largely rely on self-entries by researchers. No automated reporting exists. This has limited data quality and in case of publication data the availability of data.

• Covid – The Covid pandemic created a major disruption about half-way through the cycle of the strategy. It required major adjustment to interventions, as face-to-face networking and fellowship programmes were no longer feasible. This has hampered particularly the relationship building aspect. The crisis also required a redirection of funding towards urgency projects. At the same time, research projects have been affected, impacting on grant spending and related outputs and consequently also on KPIs.

1.4. Acknowledgements

The author would like to thank the commissioning group members at the University of Leicester. Particular thanks go to Sue Lewin, Dr Maggy Heintz and Prof Richard Thomas for their expert guidance throughout this project, their help in obtaining and understanding data sources and invaluable discussions.

Appreciation also goes to the individuals listed in the Annex (5.2) who kindly contributed their time and insights to this evaluation, IRDF:ODA award holders responding to a publication survey and David Downton in the Research and Enterprise Division for his work on the University's research data.



2. The University of Leicester's activities in and with ODA receiving countries

2.1. The QR GCRF strategy

The University's QR GCRF strategy 7 is embedded in its wider institutional strategy published in 2015.

It focusses on 7 priorities:

- 1. Delivering an enhanced portfolio of demand- and challenge-led world-class development research. Our focus is on a number of strategic, challenge-led research areas for development-related research that reflect our strengths.
- 2. Enhancing the sustainable development impact of our research, assisting the institution and our researchers to adopt approaches that enhance the impact of our research, ensuring that it meets the needs of target beneficiaries and is both sustainable and at scale.

 $^{^7\,}https://le.ac.uk/^\sim/media/uol/docs/publications/strategic-plan-sign-off-print.pdf$

- **3.** *Investing in people* to enhance the capacity of our staff and their partners to deliver world-class development research and impact.
- 4. **Investing in strategic partnerships,** building equitable and effective strategic relationships that target key global challenges and build on the strengths of every partner.
- 5. Supporting the development and implementation of effective projects, though ensuring that our institution can meet the full economic costs of existing projects.
- **6. Responding to emerging issues and challenges,** including enabling our academics to respond rapidly to unexpected global events across all areas of our research activities.
- 7. Enhancing the enabling environment for effective development-relevant research, through: providing an enhanced digital research environment shared with our developing country partners; developing an integrated approach to the management, monitoring, evaluation and learning across the portfolio of our development-related research; and supporting and informing international development practice and development research more broadly.

The University also identified **priority themes** and **regions**.

Priority themes:

- Resilience and sustainability
- Health systems: processes and infrastructure
- Communicable and non-communicable diseases Including: TB, respiratory health, cancer, cardiovascular sciences, diabetes, mental health and antimicrobial resistance
- Food safety and security
- Environment and natural resources for development
- Earth observation and space applications for development
- Conflict and security
- Cultural heritage
- Cultural industries and cultural rights
- Media and communication for development
- Emerging cross-cutting areas: Environment and health; Resilient, inclusive and sustainable cities

Priority regions:

Ethiopia, Kenya, Malawi, Rwanda, South Africa, Bangladesh, China, India, Indonesia, Brazil, Colombia.

Potential additional countries where the University of Leicester has emerging partnerships:

Cape Verde, Ghana, Iraq.

The **Key Performance Indicators** (KPIs) set out in the strategy are as follows:

- i. At least a 150% increase in research income from ODA compliant funding streams between Financial Year 2017-18 and FY2020-21.
- ii. A 100% increase in ODA-relevant research publications over the same period.
- iii. Citation rates for ODA-relevant publications at least as high as the institutional norm.
- iv. A significant increase in the proportion of our academic staff who demonstrate engagement with development research, measured through the number of researchers listed as Co-I or PI on ODA compliant funding streams.
- v. At least 75% of our development research funding applications (led by a Leicester PI) will have developing country partners included as either Co-I or co-PI.
- vi. Developing country co-authorship on at least 95% of our relevant publications and developing country thought leadership and participation in over 95% of our external development-related research applications and projects.
- vii. A significant increase in the number of development-related REF impact case studies in progress, as compared to a baseline of REF 2014, that demonstrate significant benefits to developing countries.
- viii. Direct benefits to developing countries identified in our annual reporting and through ResearchFish.

The University of Leicester's QR GCRF strategy was among 10 of 107 strategies that were commended by Research England⁸:

"The strategy correctly and clearly places the developing countries specified as prime beneficiaries with appropriate emphasis on administration. It also refers to Leicester's own Theory of Change in delivering and evaluating impact. The strategy clearly states that Leicester will deprioritise FEC funding if less funding is available in future, showing good risk mitigation."

⁸ https://re.ukri.org/funding/our-funds-overview/global-challenges-research-fund/

2.2. Oversight and governance

2.2.1. GCRF Delivery Group

The University created a **dedicated institutional structure** as delivery mechanism for the QR GCRF funding. This includes input from the Head of Research Development and 1.4FTE Development Managers located in the Research & Enterprise Division (RED). Implementation of the University's GCRF strategy is overseen by a designated committee, the **GCRF Delivery Group**, which reports into the Research & Enterprise Committee. This group was originally chaired by the Deputy Pro-Vice Chancellor for International and Development Research, a role that no longer exists, and subsequently by the Dean of Research for the College of Social Sciences, Arts and Humanities.

Membership of the GCRF Delivery Group includes representatives from each of the three Colleges, the Doctoral College, the Leicester Institute for Advanced Studies (LIAS), as well as members from the Research & Enterprise Division, impact and marketing representatives and a partner country representative. The group is governed by annually updated terms of reference. The group meets monthly with additional ad hoc meetings between the chair, one of the three College Deans of Research, and RED team members.

The group submits annual delivery plans to the **Research & Enterprise Committee** for approval. The annual delivery plan, in addition to proposing activities for the coming academic year, gives a brief review of the background to the activity strand and the related activities undertaken in the previous year. In addition, the annual monitoring report submitted to Research England is shared with internal stakeholders. No further formalised reporting on activities takes place.

The GCRF Delivery Group also manages the University's internal **International Research Development Fund (IRDF:ODA)**, a fund designed to pump-prime activities falling in the scope of ODA funding.

"QR GCRF has enabled us to develop an increased emphasis on interdisciplinary approaches."

Professor Richard Thomas, Professor of Archaeology, Dean of Research, College of Social Sciences, Arts and Humanities, Chair GCRF Delivery Group

2.3. Theory of Change

To support implementation of the QR GCRF strategy, the University has developed a **Theory of Change** (figure 2). This has been informed by several workshops with overseas partners. The Theory of Change puts an emphasis on partnership formation and establishing a trust-based foundation for successful research collaborations. This recognition of the importance of investment into early stages of the research lifecycle puts the **research ecosystem** at the heart of the University's approach to collaborative research creating a **win-win** scenario for all partners.

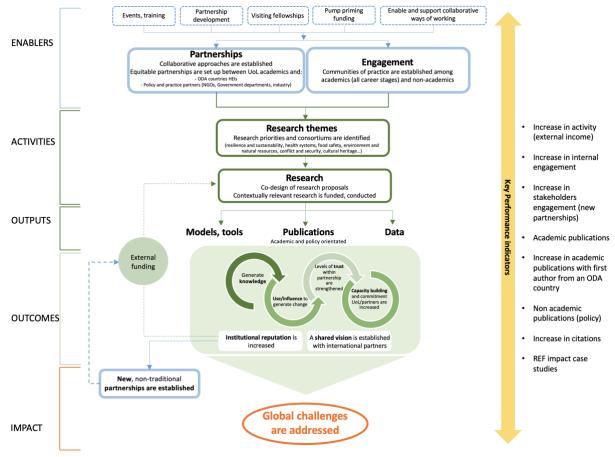


Figure 2 – Theory of Change – University of Leicester

The University's approach to **co-creation** and **equitable partnerships** is visible throughout the whole research process. The Theory of Change, more clearly than the strategy itself, recognises the different stages of the research lifecycle and positions key performance indicators (KPIs) along this timeline. The Theory of Change also shows a recognition of non-traditional outputs and impact like policy changes as well as the importance of non-academic stakeholder involvement and partnerships throughout the process.

"Developing our Theory of Change together with overseas partners has given us valuable perspectives."

Dr Maggy Heintz – Head of Research and Business Development

2.4. Use of QR GCRF & interventions

The University has received a total of £2,417,875 in QR GCRF funding in the years 18/19 to 20/21 (table 2) which is annually calculated by Research England as a percentage of the overall institutional allocation. It is not dependent on the amount of GCRF or Newton funding secured.

Financial year	QR GCRF in £
2018/19	739,399
2019/20	868, 051
2020/21	810,425

Table 2 - QR GCRF funding

As outlined in the QR GCRF strategy, the University has used up to 50% of the internal QR fund to offset the 20% full economic costing (FEC) shortfall and cover the costs of posts associated with the delivery of the funds.

"We desire a shift in research culture. GCRF has made people serious about working with partners and challenges they had not previously considered."

Professor Mark Purnell, Professor of Palaeobiology, Dean of Research, College of Science and Engineering

2.4.1. International Research Development Fund

Of the remainder, the largest part is allocated through open internal funding schemes under the umbrella of the International Research Development Fund: ODA (IRDF:ODA). These are administered by one individual within RED with oversight from the GCRF Delivery Group which reviews the applications. The IRDF:ODA has been running regular calls offering up to £50,000 to applicants. 92 awards have been made since the creation of the fund with an overall volume of £946,248.30 resulting in an average award amount of about £10,000. Of the University's three Colleges, the College of Social Sciences, Arts and Humanities (CSSAH) has received the largest amount of funding (table 3). All awards have been co-developed with international partners.

College	Number of awards	Amount awarded (£)
Social Sciences, Arts and Humanities (CSSAH)	42	403,255.80
Life Sciences (CLS)	28	310,430
Sciences and Engineering (CSE)	22	232,562.50
University	92	946,248.30

Table 3 - IRDF:ODA awards

"IRDF:ODA funding and our overseas partners opened up a whole new direction of research for me."

Dr Joshua Vande Hey, Lecturer in Environment & Health

57 of the awards involved at least one of the priority regions highlighted in the strategy with projects in Africa being the most funded. This is partly due to the **Nairobi Alliance**, a strategic partnership originating from a QR GCRF workshop in 2018 co-hosted with the University of Nairobi. Other partners are the Universities of Malawi, Rwanda and The Witwatersrand (South Africa).

"IRDF:ODA funding helped us secure a grant from the World Health Organisation by demonstrating institutional commitment."

Professor Mike Barer, Professor of Clinical Microbiology and Honorary Consultant Microbiology

About two thirds (67) of the awards have been made in the selected **priority areas** (table 4) with food security being the only area in which no awards were made. 31 of the awards fall into health-related topics. This is not surprising considering the impact of the Covid pandemic. A 'COVID-19 Urgency call' launched in March 2020, where applications were invited on a rolling basis until May 2020. Where projects had the potential of spend/activities falling into 20/21 applicants were invited to submit projects split into two phases, with phase two being dependent on receipt of funding from Research England.

Priority Area	Number of awards
Resilience and sustainability	3
Health systems: processes and infrastructure	13
Communicable and non-communicable diseases - Including: TB, respiratory health, cancer, cardiovascular sciences, diabetes, mental health and antimicrobial resistance	14
Food safety and security	0
Environment and natural resources for development	3
Earth observation and space applications for development	2
Conflict and security	4
Cultural heritage	6
Cultural industries and cultural rights	8
Media and communication for development	5

Emerging cross-cutting areas:	
Environment and health	4
Resilient, inclusive and sustainable cities	5
Sum	67

Table 4 - IRDF:ODA awards in priority areas

"IRDF:ODA funding has enabled us to work with local NGOs and helped to look at the longitudinal impact of this work."

Professor Caroline Upton, Professor of Human Geography

The IDRF:ODA calls have supported a variety of activities ranging from bid-development to pumppriming or impact activities falling into the development research remit as defined by ODA criteria. Led by the GCRF delivery team with approval from the Research and Enterprise Committee annual strategic priorities have been chosen, most recently encouraging early career researchers (ECR) and those that had not previously applied to submit an application.

2.4.2. Other interventions

As illustrated by the **Theory of Change**, two **enablers** have been identified for future impact. These are **partnerships** and **engagement**. To support partnership development, several networking activities have been initiated. Within this portfolio, two thematic **workshops** stand out that have proven to be the catalyst for many of the subsequent collaborative activities. The first one, *Resilient, Inclusive and Sustainable Cities*, one of the two identified cross-cutting priority themes in the University's QR GCRF strategy, took place in November 2018 hosting 55 participants from seven priority countries identified in the strategy as well as the University of Leicester. Participants came from both, academic institutions as well as from city councils. A significant number of IRDF:ODA as well as external research awards in the two following years have spun out of this initial workshop. Building on the success of this first workshop, a Thematic Working Group 'Health and Medicine' was held in July 2019, bringing together 22 members of the **Nairobi Alliance**. This was also one of the workshops that fed into the Theory of Change.

"From the 'Cities' workshop at Leicester we had the most amazing output from the smallest amount of money, truly remarkable compared to anything I've seen before."

Dr Josh Vande Hey, Lecturer in Environment & Health

To foster communities of practice and other forms of staff engagement, several training and capacity building activities have been taking place at the University. These events have a high uptake, some

being significantly oversubscribed. The GCRF Delivery group has also initiated an in-house seminar series featuring development research activities that is very popular. These engagement activities are supported by less visible activities in the background. These include dedicated support for partnership and consortium building including match-making activities, but also research management support for proposal development, agreement templates, due diligence checks and other necessary support during the course of any project. This required a substantial skill development for staff in RED to navigate the complex international research governance landscape.

"In the research office we have gained in-depth knowledge of global processes which is vital for our day-to-day operational work."

Sue Lewin, Research Development Officer

Incoming fellowships are funded through QR GCRF and hosted by Leicester Institute for Advanced Studies (LIAS) in their role as delivery partner. 12 fellows have been hosted between 2018 and 2020. In order to sustain fellowships during the pandemic, LIAS piloted a Virtual Fellowship scheme throughout 2020-2021 to a cohort of GCRF-awarded Fellows. One of the 18/19 fellowships resulted in a successful £500,000 award from the Spencer Foundation on 'Ingenious approaches for sustainable entrepreneurship education in primary schools', a Uganda-UK collaboration. At least three further grant applications are under development.

"We are creating spaces to be creative in ways that are not EuroAmerican."

Dr Diane Levine, Deputy Director and Manager, Leicester Institute for Advanced Studies

LIAS was established in 2016 as an interdisciplinary centre of excellence. As such, it contributes to the delivery of the QR GCRF strategy not only when hosting fellows but also by connecting colleagues for interdisciplinary research and being a supportive facilitator of the GCRF Delivery Group's activities. These synergies are important when working with limited resources and help the creation of a wider supportive research ecosystem.



3. Evaluation and assessment of outcomes

3.1. Research income

Three of the University's QR GCRF strategy's eight key performance indicators (KPIs) relate to research income:

- KPI 1: At least a 150% increase in research income from ODA compliant funding streams between Financial Year 17/18 and FY20/21.
- KPI 4: A significant increase in the proportion of our academic staff who demonstrate engagement with development research, measured through the number of researchers listed as Co-I or PI on ODA compliant funding streams.
- KPI 5: At least 75% of our development research funding applications (led by a Leicester PI) will have developing country partners included as either Co-I or co-PI.

Development research at the University of Leicester only makes a small percentage of the University's externally funded grant portfolio. This percentage, however, has grown from 1.8% in 16/17 to 4.2% in

19/20. In absolute figures it has risen by 250% since 16/17 and 147% since 17/18, nearly reaching its target of 150% (table 5). Figures in the last financial year have been slightly lower than in the previous year. This is likely because research has been impacted by the Covid crisis. Some research projects had to be put on hold or were progressing more slowly because of travel and access restrictions. The University also had to move to digital learning delivery (Ignite) at short notice, leading to a reduction in allocated research time from 40% to 20% for T&R staff, making it likely that the University would have exceeded its target otherwise. There is some indication that the list of ODA-compliant grants kept by RED might not be a complete record indicating that the actual percentage of development research might be slightly higher.

"ODA research is an important part of our portfolio."

Professor Philip Baker, Pro-Vice-Chancellor Research and Enterprise

Financial Year	Consolidated research income £'000	Development research income £'000	Percentage development research	Increase in research income (baseline 17/18)
16/17	52,222	960	1.84	
17/18	54,892	1,627	2.96	1.00
18/19	58,085	2,542	4.38	1.47
19/20	57,018	2,395	4.20	1.41

Table 5 – KPI1 – Annual research income and development research income

Looking at successful bids (table 6), shows that secured development research funding peaked in financial year 17/18. This correlates with a subsequent increase in research income in the two following years. It does though also indicate that the pipeline of development research income going forward might be declining.

Financial Year	Total applied for £'000	Total awarded £'000	Success rate	ODA applied for £'000	ODA awarded £'000	ODA success rate
16/17	227,223	62,815	0.28	20,817	1,614	0.08
17/18	225,998	68,463	0.30	11,428	5,252	0.46
18/19	286,354	72,162	0.25	7,083	612	0.09
19/20	238,193	50,832	0.21	5,332	1,405	0.26

Table 6 – Successful applications – all vs ODA compliant research

Considering the time lag between application submission and awards made it seems unlikely that award figures in 19/20 have been significantly impacted by the Covid crisis. It must be noted, however, that

award dates can move quite easily into the next financial years. Therefore, award figures might include applications from previous financial years. The impact of the Covid crisis might lead to reduced award figures in 20/21 and sub-sequent years. It is also worth noting, that figures are based on small numbers, meaning that securing or losing out on even just one large grant has a substantial impact on overall values.

"IRDF funding had a snowball effect and has led to future funding."

Professor Mike Barer, Professor of Clinical Microbiology and Honorary Consultant Microbiology

Monitoring research income is an obvious parameter when evaluating externally funded research activity. What makes this problematic in this context, is the overall quite small portfolio of ODAcompliant research at the University of Leicester. This means that individual large grants have a disproportionate impact on these figures. Focussing on research income also means that an interpretation of success is skewed towards life sciences and other more cost-intensive activities, thereby devaluing activities in the social sciences, arts and humanities. It is important therefore to complement this KPI with other qualitative focussed indicators.

'Partners have been instrumental with some of the key ideas of our research project."

Dr Alice Tilche, Lecturer in Anthropology, Museum and Heritage

Capturing applications awarded is a useful parameter to monitor the pipeline of future activities, again with above caveat of not over-rating the monetary value of individual activities and projects, and bearing in mind award cycles of funders which sometimes shifts activities from one financial year into the next. Also worth considering here is that in some of the thematic areas of the newly created GCRF grants, application numbers have been very high, leaving some excellent rated applications unfunded. Overall success rates for GCRF awards were at 27% in 2018 according to an evaluation of the GCRF foundation stage, putting it in line with average success rates for the larger UKRI grant portfolio at that time. Success rates for the UKRI grant portfolio has not significantly changed since then, being recorded at 28% in 19/20¹⁰. The University's success rate for UKRI's grant portfolio has fluctuated slightly (figure 3) but with 28% in 19/20 is very much line with the sector average. No UKRI-wide data is available on GCRF success rates in subsequent years. While the average figures might be similar, it is likely that numbers between individual schemes vary quite significantly.

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810137/GCRF_Evaluation_Foundation$ _Stage_Final_Report.pdf

¹⁰ https://public.tableau.com/app/profile/uk.research.and.innovation.ukri./viz/CompetitiveFundingDecisions2015-16to2019-20/UKRICompetitiveFunding

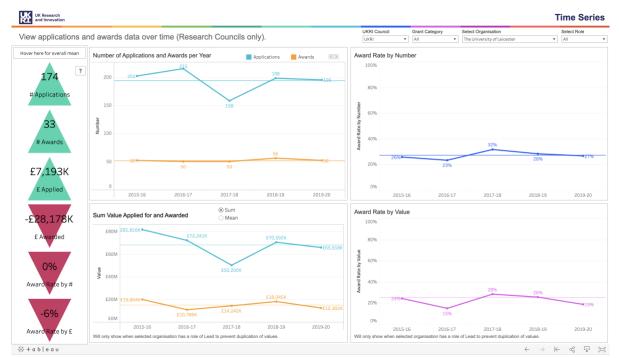


Figure 3 - University of Leicester - UKRI award data 15/16 - 19/20

Neither Co-I nor Co-PI data is captured in the current in-house grants system making it impossible to assess KPI 4 and KPI 5. IRDF:ODA awards have undoubtedly engaged more researchers, notably some early career researchers, in development research. It is too early to say in how far this will translate into a subsequent increase in external funding secured.

"We have to get away from the focus on consolidating larger grants with individual PIs and move toward more distributed and collaborative activities where teams are empowered and truly credited for their achievements."

Dr Josh Vande Hey, Lecturer in Environment & Health

A separate spreadsheet kept by RED lists overseas partners in 68 of the 81 projects, although the role of the partners is not captured. Following OECD rules ODA-compliant funding is 'government aid that promotes and specifically targets the economic development and welfare of developing countries' 11. Consequently, most GCRF grants require collaboration with partners from developing countries. Participation per se is not a suitable indicator to demonstrate 'working in equitable and respectful partnership' as the University's strategy endeavours. Rather, aspects like joint proposal development, access to sufficient budget elements and joint on-going project management seem important prerequisites to successful and sustainable partnerships.

 $^{^{11}\,}https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/official-development-assistance.htm$

3.2. Publications

Three of the University's eight QR GCRF strategy's KPIs relate to publications:

- KPI 2: A 100% increase in ODA-relevant research publications between Financial Year 17/18 and FY20/21.
- KPI 3: Citation rates for ODA-relevant publications at least as high as the institutional norm.
- KPI 6: Developing country co-authorship on at least 95% of our relevant publications and developing country thought leadership and participation in over 95% of our external development-related research applications and projects.

The University stores records of all research publications in their internal database (IRIS) managed by the library. The database includes journal articles, conference proceedings, books or book chapters. Whether a publication results from research that has been funded through GCRF or other ODA funds is reliant on self-entry by the academic. This likely impacts on the data quality.

Based on these data, a steady increase of publications can be shown (table 7) which is significantly short of the targeted 100 percent increase in ODA publications envisaged in the strategy.

Publication year	Number of publications from ODA-compliant research	Increase by factor (baseline 17/18)
17/18	465	1
18/19	487	1.05
19/20	534	1.14

Table 7 – Number of publications from ODA-complaint research per year

An analysis of Scopus¹² data acknowledging either GCRF or Newton funding using the DevPubMetric¹³ shows a much lower number of publications with a strong increase over the period of the strategy (table 8). The significantly lower number of publications is not surprising considering the limited reach of Scopus, particularly in the arts and humanities, often excluding smaller, local journals, as well as the focus on GCRF or Newton funding only. The latter will inevitably show an increase over the period from 2017 to 2020, considering the fund only launched in 2016 and the significant time lag in publications.

Publication year	Number of publications funded through GCRF	Number of publications funded through Newton funding	Combined publications	Increase by factor (baseline 2017)
2017	7	9	16	1
2018	17	11	28	1.75
2019	28	21	49	3.06
2020	31	29	60	3.75

Table 8 – Number of publications from GCRF or Newton funded research per year in Scopus

12

¹² https://www.scopus.com

¹³ https://www.pvgglobal.uk/activity/devpubmetric/

To gather further information on publication data as part of this evaluation, a survey was sent out to 50 internal IRDF:ODA award holders asking for a list of publications or any other outputs resulting from QR GCRF or GCRF funding. The survey yielded 26 responses. While this does not give a comprehensive picture of all outputs, the survey does show three things:

- On many occasions research is still on-going. In some instances, Covid has led to, sometimes significant, delays in conducting research and subsequent publishing.
- A number of publications are in development or under review.
- Several research projects have led to non-traditional outputs like podcasts, videos, blogs or comics that are not captured in any of the above figures.

"We had some unconventional outputs including videos the University created for us that made it into the media and gave our research a lot of visibility."

Professor Mike Barer, Professor of Clinical Microbiology and Honorary Consultant Microbiology

As these statistics show, there is no clearly defined way in the University to establish an accurate number of ODA-related publications, and neither is it possible to establish their citation rates. No data are available to assess co-authorship numbers on publication, as the internal publication system does not capture co-authors by affiliation. All interviewees though highlighted their focus on joint publications. A small sample of publications obtained from the IRDF: ODA publication survey showed an even distribution of first authors from Leicester and overseas institutions and a large number of co-authored publications.

"I have found the University of Leicester to be incredibly supportive. All outputs are done iointly."

Dr Mellissa Ifill, Deputy Vice Chancellor, Institutional Advancement, University of Guyana'

KPI 2 relating to a desired increase in ODA-relevant publications also needs to consider the time lag between the interventions stipulated in the strategy and the actual publication date. UKRI data for the University uploaded through ResearchFish indicate that most publications occur at least 12 months after the award start date (figure 4) meaning that supporting interventions to secure an award predate the publication date even further.

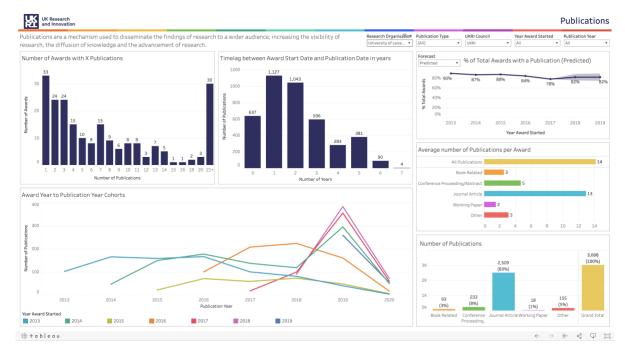


Fig 4 – University of Leicester publications resulting from UKRI awards 13/14 – 19/20, last updated 16th July 2020

Therefore, while monitoring publication data is a useful long-term indicator observing outcomes of research, it requires not only suitable in-house systems to capture the necessary data, but also a recognition that activities like supporting a large grant application or a networking workshop to build and foster partnerships likely will not lead to a large number publications within the assessment period of the strategy. At the same time, publications captured in 18/19 or 19/20 will often relate to research activities predating the period of evaluation.

The KPIs relating to publications need to be seen in this light and currently give only limited information about the success of interventions to date.

3.3. Impact, research ecosystem and in-country benefits

3.3.1. Case studies: impact and in-country benefits

Only two of the eight KPIs relate to other parameters than research income or publications:

- KPI 7: A significant increase in the number of development-related REF impact case studies in progress, as compared to a baseline of REF 2014, that demonstrate significant benefits to developing countries.
- KPI 8: Direct benefits to developing countries identified in our annual reporting and through ResearchFish.

In REF 2014 only 6 **development-related impact case studies** were submitted out of 86. In the most recent REF 2021, 19 externally-funded ODA projects and 14 internally funded projects have fed into 14 out of 69 case studies. This constitutes a substantial increase from 7% to 20%. The 14 impact case studies are distributed between 11 units of assessment (UoA) showing a wide spread of disciplinary

activities and impact in an ODA-compliant context. It is noteworthy that 14 comparably small IRDF:ODA awards of a combined value of only £165,960 contributed to seven of the REF-submitted impact case studies demonstrating that impact is not necessarily dependent on the amount of funding but more so on other enablers. Considering that development research constitutes less than 5% of the University's external research funding, this demonstrates a remarkable impact achieved in a short amount of time with a comparably small amount of money.

"Value for money is just exponential for the IRDF funding. It can't be praised enough for impact."

Professor Teela Sanders, Professor in Criminology

Further case studies highlighting global challenges addressed, pathways to impact and benefits to DAC countries have been submitted as part of the University's annual reports to Research England. Those give excellent examples of how significant and lasting change can be achieved with comparably small amounts of money by focussing on bottom-up driven activities that focus on long-term gains rather than immediate returns on investment.

"Our project went through a real research lifecycle from academia to socio-economic impact back to academic learning and innovation."

Dr Mellissa Ifill, Deputy Vice Chancellor, Institutional Advancement, University of Guyana'

Case study: Dr Joshua Vande Hey

Dr Joshua Vande Hey, Lecturer in Environment & Health at the University of Leicester, is a physical scientist by training with a research background in optics, atmospheric sensor engineering and air quality. He was one of 55 participants of the 'Resilient, Inclusive and Sustainable Cities' event hosted by the University in November 2018, where he met Professor Polina Golovatina-Mora, researcher at the School of Social Sciences, Universidad Pontificia Bolivariana, Colombia. They found synergies in their research, and subsequently applied for and secured £7,644 of IRDF:ODA pump priming funding out to undertake a small project 'Tell me a story for a greener, cleaner future today: A diagnostic study on data and methods for generating narratives for clean air action'. Out of this work, three publications are in preparation; one is close to submission.

Subsequently, follow up funds were received from LIAS to repeat the study in the context of Covid-19. Prof Golovatina is currently (January – July 2021) undertaking a virtual fellowship¹⁴ at the University and has also brought in PhD and Master student researchers who have contributed to the interdisciplinary research on air quality and policy in Medellin. This collaboration has been instrumental in opening up Dr Vande Hey's work to the humanities – philosophy, arts, communication and education.

A second research strand evolved out of the 'Resilient, Inclusive and Sustainable Cities' event in collaboration with and led by Dr Richard Gornall, Senior Lecturer in Biology at the University and Professor Golovatina-Mora, 'Making a case for urban greenspace' which led to a publication on 'Using demand mapping to assess the benefits of urban green and blue space in cities from our continents' 15.

¹⁴ https://le.ac.uk/research/areas/institutes/institute-advanced-studies/fellows/dr-polina-golovatina

¹⁵ https://www.sciencedirect.com/science/article/pii/S0048969721023093

Professor Martin Tobin, Professor of Genetic Epidemiology and Public Health, Dr Chiara Batini, a Research Fellow in the Department of Health Sciences and Dr Josh Vande Hey collaborated on a study 'Building capacity for understanding the causes and consequence of respiratory disease across four African nations', led by Professor Michelle Ramsay, Director and Research Chair and Dr Stuart Ramsay at the University of the Witwatersrand, South Africa. To support the study, GCRF-QR funding was used to purchase five Vitalograph Spirometers for use in Africa (£10,000). This partnership developed further and was successful in securing external funding:

- Professor Lisa Micklesfield (University of the Witwatersrand) and Professor Martin Tobin (University of Leicester). AWI-Gen-XHALE: Establishing a network to explore respiratory disease in the context of multi-morbidity in four African countries Academy of Medical Sciences GCRF Networking Grant £24,477
- Dr Joshua Vande Hey¹, Professor Martin Tobin¹, Lisa Micklesfield², Michelle Ramsay², Caradee Wright³ (¹University of Leicester, ²University of Witwatersrand, ³South Africa Medical Research Council).
 Environmental health in sub-Saharan Africa Leveraging local and global air pollution data for epidemiological research Royal Academy of Engineering (UK) £299,954
- A Wellcome Trust 4-year PhD programme in Science providing for up to 2 LMIC students per year to
 enrol at the University of Leicester for 4-year PhDs for 5 annual intakes from 2020 and for hosting of
 UK students in LMICs

The work also secured 19/20 QR GCRF (COVID 19 Urgency Fund): £40,000 for 'A remote study on COVID-19 lockdown, vulnerability risk factors and air pollution among South Africans'. A manuscript for this study has been submitted for publication. Dr Vande Hey has been invited to present this work at the Annual Conference of the International Society for Environmental Epidemiology (August 2021). In addition, Dr Vande Hey's work contributed to a REF2021 impact case study.

These short case studies are excellent examples showing how strategic use of small amounts of funding can be the catalyst for a wide range of research activities that unfold over a number of years. It demonstrates an impact reaching far beyond obtaining external grant funding. It contributes to career development and building interdisciplinary networks within the institution and globally, ultimately contributing to academic advancement and addressing global challenges.

Incoming research fellowships have been seen as a particular success of the QR GCRF investments. In the first year of its running just under £36,000 enabled eight researchers from seven DAC countries to spend between 2 to 12 weeks with research colleagues in Leicester. A case study about the fellowship programme funded through QR GCRF and submitted to Research England in the 18/19 reporting cycle summarises its benefits as follows:

"Being awarded the GCRF Fellowship funding has enabled research projects to come to fruition in a faster, more dynamic and meaningful way. The time spent within the UK has given access to resources and collaborators which have catalysed new research directions, built wider, more equitable and mutually respectful collaborations, and given the Fellows opportunities to show their research to an international audience."

Benefits, however, have reached beyond those individuals and partner countries. Incoming fellowships as well the large thematic workshops attended by overseas partners have been commended by more than half of the interviewees of this report as having significantly contributed or even been fundamental to either existing research projects or have led to new collaborations.

Key to the success of these interventions seems to be the non-bureaucratic, agile approach to supporting ODA-focussed activities that puts trust over complex processes.

"The internal flexibility and the trust given was so important to the success of our research. The research team and Dean of Research have been instrumental."

Professor Teela Sanders, Professor in Criminology

A project on 'Inclusion of Migrants in Sustainable Cities' shows the pathway from the *Resilient, Inclusive* and Sustainable Cities workshop, which had a budget under £10k, to a completed report nine months later. Several of the academics interviewed have mentioned this workshop having led to further, sometimes unrelated research based on encounters and discussions with colleagues from DAC countries.

In the financial year 19/20 the **Covid-crisis** caused delays in many on-going research projects and it also called for some urgent responses. Using £13,400 of QR GCRF funding, the Universities of Leicester and Malawi developed two prototypes for a battery-operated resuscitator or bag valve mask (BVM) and a Continuous Positive Airways Pressure (CPAP) machine in response to urgent needs following the Covid crisis in Malawi¹⁶. The collaboration was made possible through networks built through the Nairobi Alliance which allowed short turnaround times and enabled partners to respond to immediate needs. In the meantime, the machines have been certified by Malawi Ministry of Health and Population for compatibility with local specifications. This demonstrates an excellent example of a needs driven, Southern-led collaboration.

"We are learning from each other with regards to research methodologies in different disciplines. This has helped building a strong project team."

Dr Mellissa Ifill, Deputy Vice Chancellor, Institutional Advancement, University of Guyana'

In another Covid-related project, a UoL academic documented the impact of Covid on indigenous groups in India through arts-based methodologies. Working with local NGOs, film-makers and communities enabled a dialog that provides local communities with a voice but also strengthened communication and knowledge about Covid. This project is on-going, as the original internal IDRF award has subsequently led to external AHRC funding. The research is also informing policy work.

"Our research has created fascinating work that can speak to students and made a massive impact on my teaching."

Dr Alice Tilche, Lecturer in Anthropology, Museum and Heritage

¹⁶ https://le.ac.uk/news/2020/december/ventilator

These examples of case studies submitted to Research England provide excellent illustrations of the enabling effect QR GCRF funding had not only on targeted beneficiary countries but likewise to advancing academic research, a growing research portfolio at the University as well as career development of individual academics.

The University's website contains a dedicated section on its development research activities linked to GCRF¹⁷. These give further examples on impactful working happening in the space of development research. Their content has been developed and managed by RED-team members responsible for QR GCRF support. An external facing website for the Nairobi Alliance is currently in development.

3.3.2. The University's research ecosystem

The University of Leicester has put **interdisciplinary activities** and an approach to investing into **long-term strategic partnerships** at the core of its QR GCRF strategy, visible through the focus on workshops and pump-priming activities.

"We have been able to build the partnerships because we have been able to spend the time. Equitable and productive collaborations need time to develop."

Dr Josh Vande Hey, Lecturer in Environment & Health

By giving oversight of the implementation of the QR GCRF strategy and use of related funding to a dedicated delivery group, the University established an agile vehicle that ensured all Colleges were involved in the process, creating an interdisciplinary group of academics at varying stages of their career. Simultaneously, non-academic staff were involved in overseeing the funding as well as the activities and projects funded. Interviews highlighted the importance and appreciation of **cross-university working**.

"The IRDF funding has allowed me also to make new links within the institution."

Dr Alice Tilche, Lecturer in Anthropology, Museum and Heritage

The GCRF Delivery Group was also instrumental when the Covid crisis hit, and many projects could not go ahead as planned. Broad stakeholder representation within the group enabled an un-bureaucratic redirection of funds to respond to urgent needs caused by Covid. This was aided by the decision to reach out to overseas partners enabling **partner-led responses** where the crisis had hit particularly hard. As the example case studies demonstrate, this enabled some immediate and mutually beneficial impact.

¹⁷ https://le.ac.uk/research/gcrf

"The IRDF Covid urgency call made a huge difference over the last summer when our set-up in Pretoria was under threat."

Professor Mike Barer, Professor of Clinical Microbiology and Honorary Consultant Microbiology

The internal IRDF:ODA fund has been seen as instrumental by the majority of interviewees in pump-priming activities. Many interviewees valued that review of applications did not solely focus on the quality of what had been submitted but also considered the potential of ideas and research proposals outlined. Where necessary, the review committee went back to applicants with clarifying questions rather than simply rejecting applications.

"Sustainability is a key aspect in implementing the QR GCRF strategy. We did some pairing and mentoring in the delivery group to support future leaders."

Professor Richard Thomas, Professor of Archaeology, Dean of Research, College of Social Sciences, Arts and Humanities, Chair GCRF Delivery Group

A recurrent response in interviews was the appreciation of the University's approach to **building lasting relationships**, like the Nairobi Alliance, rather than focussing on short-term wins. An emphasis on interdisciplinarity and opportunity to connect and work together with colleagues from different Schools/departments stood out in the interviews.

"Informal GCRF peer-to-peer meetings and our seminar programme have helped building internal networks and share experiences."

Professor Teela Sanders, Professor in Criminology

Within the group of interviewees there has been a recognition of the **transaction cost** of ODA-related research and the administrative cost to delivering in-house funding schemes and other initiatives. There was large agreement though that the benefits outweighed the costs.

"There might be a high transaction cost to some of these endeavours but if real partnerships develop that enhance our capacity to address global problems and develop innovative solutions that would certainly be worth the effort."

Professor Mark Purnell, Professor of Palaeobiology, Dean of Research, College of Science and Engineering

While there was huge praise for the two team members of the Research and Enterprise Division that have provided the bulk of ODA-related research support, there was also concern about dependency on individuals and a need for institutional processes and knowledge to be better supported and embedded. This was visible also in difficulties obtaining some of the data used for this report.

"Sue Lewin absolutely made this possible. She solved complex problems expertly, proactively and with great enthusiasm. She should receive a gold medal."

Dr Josh Vande Hey, Lecturer in Environment & Health

It was also felt that, while a lot of effort had been made to increase visibility of development research and the support mechanisms available and uptake had significantly increased, that an even wider reach was desirable. Nearly all interviewees emphasised that sharing responsibilities of implementing activities under the QR GCRF strategy between the GCRF Delivery Group, the designated RED team members and LIAS was fundamental to both, day-to-day management as well as the long-term impact desired.

"Leicester has been very efficient in processing, whether it is ethics clearance, payment processing, speedy replies to questions, they were incredibly swift."

Dr Mellissa Ifill, Deputy Vice Chancellor, Institutional Advancement, University of Guyana'

Significant expertise has been built institutionally, which will be important to maintain during the hiatus in external funding. 17 of 22 REF2021 unit of assessment environment statements mentioned development research in their submissions. These provide the best evidence available how development research has found its way into the University's **research ecosystem**.

"GCRF has made people serious about working with partners and challenges they had not previously considered."

Professor Mark Purnell, Professor of Palaeobiology, Dean of Research, College of Science and Engineering

3.4. Key performance indicators

The KPIs chosen largely omit qualitative criteria which indicates a focus on tangible and measurable parameters to keep track of progress against the strategy. In reality, the University has struggled to capture the data required for these KPIs, largely owed to lack of suitable in-house systems.

Nonetheless, the research office holds a huge amount of data on ODA-related activities over the last three years in spreadsheets and other documents. It has proven the most valuable resource for this review. The absence of fit-for-purpose systems, however, makes not only annual reporting to Research England but also monitoring against KPIs or other indicators cumbersome and time consuming. It is

notable, that no baseline figures have been recorded for most of the KPIs making it difficult to measure progress. No annual reports exist that would provide an assessment against those indicators.

All this suggests that KPIs chosen demonstrate the ambitious goals of the QR GCRF strategy rather than being practical and measurable performance indicators. The subsequently developed **Theory of Change** already indicates a refocus towards less quantitative assessment criteria. It also recognises the different stages of the research lifecycle, appreciating the need for a **longitudinal lens** when establishing causal effects. Notably, it contains a reference to the importance of non-traditional outputs.

Table 9 gives an overview of performance against KPIs. Despite the observed limitations in data quality and availability as well as time dependencies of outcomes that need to be considered, quantitative KPIs do have their place in evaluations. In the absence of better systems and reporting dashboards, running annual reports at a defined cut-off date and archiving those reports would provide a means to create a library of comparable datasets.

KPIs	Performance	Comment
1. At least a 150% increase in research income from ODA compliant funding streams between Financial Year 17/18 and FY20/21.	Goal has been achieved in 18/19, income subsequently slightly went down again. Application data shows that increase in research income largely relates to grants secured before the lifetime of the strategy. A subsequent decrease in funding secured might impact on future ODA related research income.	The overall very small amount of ODA compliant research funding (4% of research income) with a starting point just about £1.6m has to be considered. Winning just one large grant consequently has a significant impact on the figures. GCRF funding has been highly competitive leaving many applications that scored excellently unfunded. The focus on the amount of funding also skews the balance towards more cost-intensive disciplines like the life sciences. There is some indication that the list of ODA-compliant grants kept by RED is not a complete record indicating that the actual percentage of ODA compliant research might be higher.
2. A 100% increase in ODA-relevant research publications over the same period.	Data varies significantly depending on methodology and datasets and cannot be verified.	No baseline data available. In-house system relies on voluntary self-entry for ODA funding. Low data quality. The KPI does not consider the significant time lag between many of the interventions stipulated in the strategy and potential resulting publications. The KPI also does not consider non-traditional outputs.

3. Citation rates for ODA-relevant publications at least as high as the institutional norm.	No baseline data. Number of relevant publications could not be established.	No baseline data available. In-house system relies on voluntary self-entry for ODA funding. Low data quality. The KPI does not consider the significant time lag between many of the interventions stipulated in the strategy and potential resulting publications.
4. A significant increase in the proportion of our academic staff who demonstrate engagement with development research, measured through the number of researchers listed as Co-I or PI on ODA compliant funding streams.	IRDF:ODA seems to have led to significant increase of researchers engaged in development research, particularly at the level of ECRs. Increased interdisciplinarity also appears to have occurred, though neither of these points can be evidenced through 'hard' data, as this is not currently captured.	No baseline data is available. Internal systems do not currently capture co-I or co-PI data including affiliation. Implementation of Worktribe is currently in progress which is hoped to address this going forward.
5. At least 75% of our development research funding applications (led by a Leicester PI) will have developing country partners included as either Co-I or PI.	A spreadsheet kept by RED shows at least one DAC-country partners on 68 of the 81 ODA-compliant grants recorded. It is not clear which status those partners had or have in the project.	No baseline data is available. Internal systems do not currently capture co-l or co-PI data including affiliation. Implementation of Worktribe currently in progress which is hoped to address this.
6. Developing country co-authorship on at least 95% of our relevant publications and developing country thought leadership and participation in over 95% of our external development-related research applications and projects.	Survey data and interviews indicated a strong desire for co-creation and equitable partnerships. Data available indicates high percentage of overseas co-authorship. It was not possible to establish an exact number.	Internal systems do not capture co- authors and their affiliation.
7. A significant increase in the number of development-related REF impact case studies in progress, as compared to a baseline of REF 2014, that demonstrate significant benefits to developing countries.	19 externally funded ODA projects and 14 internally funded projects have fed into 14/69 case studies submitted to REF 2021 spread between 11 UoAs. Only 6/86 case studies referenced ODA partners in REF2014. 14 IRDF: ODA awards fed into 7 of the submitted case studies. 17 of the 21 environment statements mentioned development research in their submissions.	REF 2021 data shows that development research is well embedded in a wide range of disciplinary activities throughout the University and has increased considerably since REF2014. This is noteworthy considering the relatively small amount of development research related external funding.
8. Direct benefits to developing countries identified in our annual reporting and through ResearchFish.	Annual submissions to Research England demonstrate provide excellent examples of qualitative benefits through case studies submitted demonstrating in-country and wider benefits.	ResearchFish data available via UKRI and Tableau gives an overview of publication data and other outputs. It cannot be filtered for GCRF awards nor does it capture benefits to developing countries in any way.

Table 9 – Overview of KPIs

"We have significantly increased visibility of our work with the Global South."

Professor Richard Thomas, Professor of Archaeology, Dean of Research, College of Social Sciences, Arts and Humanities, Chair GCRF Delivery Groups

3.5. Strategic objectives

Considering the limitations in the KPIs analysed, this section draws back to the strategic objectives highlighted in the strategy (see section 2.1).

The University has put **equitable partnerships** and **co-creation** at the heart of its strategy. All interviews as well as the data available on publications or collaborative research projects demonstrate that the commitment to these values is echoed by actions the University has taken to put theory into practice.

"People have learned to see the value of the partnership rather than the funding."

Dr Diane Levine, Deputy Director and Manager, Leicester Institute for Advanced Studies

It is obvious that workshops, incoming fellowships and the many small IRDF: ODA awards have diversified and enhanced the portfolio of development research at the University substantially. Particularly, the workshops demonstrate that the decision to focus on strategic thematic priorities as well as priority regions and partners has led to **strategic partnerships** that could be mobilised during the Covid crisis as well as in several other follow-on projects.

"When the Covid crisis started we could improve our sampling system here in the UK based on our research in South Africa."

Professor Mike Barer, Professor of Clinical Microbiology and Honorary Consultant Microbiology

The case studies submitted to Research England and contributions to the impact case studies in REF2021 give some excellent examples of the **impact achieved** in the area of development research and illustrate what can be accomplished with relatively small amounts of funding if those are embedded into a wider institutional concept realised through LIAS, RED and the GCRF Delivery Group. It also clearly demonstrates the wider benefits of investing in people whether at Leicester or partner universities and the **synergies** resulting from collaborations. **Significant learning** has taken place within the institution forming new, internal partnerships and building knowledge of global processes and perspectives.

"There is something in the University we could learn from our global partners in how to develop academic careers in a more creative way."

Dr Diane Levine, Deputy Director and Manager, Leicester Institute for Advanced Studies

The interviews conducted as well as the significant number of publications and other outputs arising from development work give further indication of contributions to academic knowledge and global challenges.

Our project made important contributions to the climate change debate."

The implementation led by the GCRF Delivery Group shows a strong commitment to ODA principles and a balanced approach that aims to embed development research into the wider research portfolio of the University creating win-win situations.

"People are now talking more about co-design."

Professor Mark Purnell, Professor of Palaeobiology, Dean of Research, College of Science and Engineering

There are obvious and understandable concerns about the sustainability of the impact achieved caused by the cuts to ODA funding. While the University has proven how well and promptly it was able to respond to challenges caused by the Covid crisis both at an academic level through enabling urgent research projects, as well as at an administrative level by redirecting and managing funding at short notice, mid- to longer-term cuts to aid funding raise questions how to continue to grow a 'portfolio of demand- and challenge-led world-class development research' 18.

We are very disappointed about the reductions in ODA funding and concerned about the damage it can do to partnerships it took a long time to build."

Professor Philip Baker, Pro-Vice-Chancellor Research and Enterprise

 $^{^{18}}$ p.1 https://le.ac.uk/~/media/uol/docs/publications/strategic-plan-sign-off-print.pdf



4. Conclusions & recommendations

4.1. Conclusions

This report set out to evaluate the implementation of the University's QR GCRF strategy, highlight key achievements, ascertain whether the KPIs set out within the strategy have been met and assess the effectiveness of the University's Theory of Change model. The evaluation identified strong evidence not only of a significantly grown ODA-compliant and focussed research portfolio but also a growing community of practice around development research which is starting to change research culture and research ecosystem at the institution. This is complemented by an increased network of partnerships abroad.

On governance:

- The GCRF Delivery Group seems well-positioned with representation of all main stakeholder groups within the University. Notably, it includes an overseas partner representative in its membership. Reporting into the Research and Enterprise Committee ensures that its actions feed into wider research and institutional strategies.
- o The group has proven to be agile at a strategic level as well as hands-on where required. Working in close collaboration RED has provided an important operational

arm that has led on realising activities. Valuable synergies have arisen from working with LIAS.

• On strategic objectives:

- o The strategic objectives align well with the purposes of ODA. The strategy was commended by Research England for its focus on partner benefits, responsiveness to sector changes and its envisaged Theory of Change supporting impact evaluation.
- In practice, actions taken by the University demonstrate a true commitment to enhancing the portfolio of challenge-led development research across the three Colleges.
- The available QR GCRF funding has been used strategically and considerately, tailoring programmes to address specific priorities, be it the development of people, thematic or regional priorities.
- Several academics have secured follow-on IRDF:ODA awards for their research. While it makes a lot of sense to continue supporting successful research endeavours so that they can eventually move onto the next stage, it can result in a small number of repeated award holders. The GCRF Delivery Group has sought to address this by encouraging ECRs and new applicants to submit applications through directed calls. The mentoring support provided has further strengthened the development of future leaders.
- o The evaluation clearly shows that **small amounts of funding can make a big difference**.
- o Interviews as well as data available also give strong indication that the University has put equality of partnerships at the core of its interventions rather than aiming for short-term gains. Investing larger amounts of funding into supporting large grant applications might have well led to a larger increase in research income. It would, however, ultimately have supported only one academic in a specific field of research and have done little to the wider research culture and ecosystem.
- o The evaluation has also established an **excellent mitigation of the impact of the Covid crisis**. The **GCRF Delivery Group** has demonstrated a high level of flexibility. Interviews and initial case studies indicate that significant impact was achieved with these awards in a very short timeframe with further outputs likely to come.
- o The supporting **Theory of Change** has been developed in a collaborative and iterative manner jointly with partners showing a commitment to **co-creation**. It results in a document that reaches further than the original strategy recognising the cyclic nature of research, time-dependency of interventions as well as the need and benefit of engaging non-academic stakeholders throughout the research lifecycle. It could act as a foundation to adjust indicators going forward.
- The **thematic and focussed workshops** have proven to be impactful and seemed the right strategy to kick-start a flurry of activities.
- o This evaluation had difficulties assessing the wider awareness of development research and the available QR GCRF funding throughout the university. The strongest indication here is that development research and activities funded through QR GCRF featured in

- a large number of **REF 2021 environment statements** as well as in several **REF impact case studies**. A seminar series presenting outputs was also well attended.
- o Many further benefits and impact will likely only show in the years to come considering the demonstrated time lag of such indicators.

On data and KPIs:

- Assessment against quantitative KPIs has proven difficult. This is partly due to limited data availability as well as partially poor data quality. In many cases data depend on user entries (e.g. publications). Analysis and reporting is cumbersome and depending on manual data manipulation. This gives some indication that strategy implementation took priority over considerations how to measure success of interventions.
- o The research office holds an excellent **archive of all activities and data**. However, these are not kept in an easily accessible way. Reporting from this data is time consuming.
- o There is **no evidence that annual reporting against KPIs** has taken place.
- o It is notable that **no baseline data** had been collected making comparison of the data that is available very difficult.
- o The quantitative KPIs are tangible and measurable in principle, however, they are annual performance indicators and do not take into account the significant timespan within the **research lifecycle** between a research idea, application, project delivery, outputs, impact etc. They do therefore only partially seem suitable to assess impact of interventions under the strategy.
- o The KPIs show a focus on classical outputs which represents quite a conservative approach. There is little recognition of the importance of community and stakeholder engagement through local policy work, podcasts, blogs and other media. This study has identified many laudable examples of such work despite the small sample of more detailed project studies.
- o There is a **large body of literature** available covering the context of impact evaluation and development research¹⁹. It is, however, questionable how far universities can be expected to develop such methodologies on their own. Rather, some sector guidance on suitable indicators would reduce transaction costs for individual institutions. Most importantly, institutions and funders need to realise the significant time lag between initiating partnerships, achieving tangible outputs and a positive change to research ecosystems and culture. Evaluation periods therefore need to be adjusted and be considerably longer to demonstrate sustainable change. Recent cuts to ODA-related funding will undoubtedly be detrimental to such endeavours.

• Stakeholder benefits:

o From all the evidence collected, **benefits have generally been mutual**. This report has outlined many examples of those.

• While **partner country benefits** stand in the foreground of ODA-related funding, there has been much evidence also of **benefits to the University and wider UK**. Those include:

¹⁹ E.g. https://www.adb.org/sites/default/files/publication/392376/impact-evaluation-development-interventions-guide.pdf, https://www.tandfonline.com/doi/full/10.1080/19439342.2015.1034156 or https://sfdora.org/wp-content/uploads/2020/11/IDL-56528.pdf

- Research informed teaching
- New research methodologies
- Innovative approaches to research
- Learning in interdisciplinary teams
- Contribution to academic knowledge and the sustainable development goals (SDGs).

This puts a win-win scenario at the core of the implementation supporting the local research ecosystem as much as global challenges and partner needs.

Sustainability:

- The evaluation has identified evidence of a notable change to the research ecosystem
 and culture. It has to be recognised that this change is in its early stages and has been
 significantly impacted by the Covid crisis and is now under threat through the cuts to
 ODA-funding.
- o There is a danger that the good work done is jeopardised by a lack of future funding to pump-prime activities and subsequent damages to partnerships. This should be mitigated as much as possible.
- o It will be important to keep engaging and further grow the **community of practice** that has emerged within the University.
- Some dependency on individuals, particularly within RED and LIAS, has been noticed.
 It will be important for their work to be recognised as an important pillar of the University's research portfolio and performance and for it to be integrated into wider processes.
- o There is a clear **need to invest into research systems** both, with regards to application and publication data. The on-going implementation of Worktribe, a research management system, will go some way to address the former.

4.2. Limitations of this analysis

As outlined in section 1.3, this evaluation and summative assessment has been limited by several factors, most notably:

- The limited availability of data and its quality
- The **small sample size of interviewees**, particularly with regards to overseas partners, owed to the **short turnaround time of this report**
- The **Covid crisis** which has hit about halfway through the review cycle and will have impacted significantly on many of the KPIs and other outputs.
- The comparably short evaluation period.

With the small number of interviews, it was also not possible to fully assess the visibility of development research and the related supporting mechanisms within the University. Furthermore, the recently announced cut to ODA-funding have caused significant concerns among stakeholders of the sustainability of current as well future activities in this field.

The following recommendations are written with these factors in mind.

4.3. Recommendations

Despite the flaws of some of the quantitative KPIs outlined above, it has to be noted that there is no easy and certainly no quick way to evaluate impact. Going forward it would seem sensible to combine a set of quantitative and qualitative measures to assess progress against objectives and create a library of annual data reports.

This could start with a review of the strategic objectives to define what exactly the desired impact of those objectives is and for whom. The well-developed **Theory of Change** could provide a **logical framework** for this. By linking chosen interventions to outcomes, a first sense of useful indicators can be gained. What would then need to be considered, is what is called the 'attribution problem' 20, meaning the causality between interventions and outcomes. This is where time-dependencies would need to be considered. The **research lifecycle** would provide a useful framework to develop a range of KPIs that would reach from early indicators including some 'quick wins' to long-term goals like changes in research culture.

It will be crucial to consider feasibility, that is, the availability of data and the time and effort it will cost to conduct both, qualitative and quantitative analysis. Once indicators have been agreed, a plan should be developed how to collect any relevant information on the way so that no time-consuming back engineering is necessary.

Evidence outlined above has clearly indicated the significant progress made increasing and integrating its portfolio of development research within the institution. Activities seem well chosen and would validate continuation to further and likely more substantial impact occurring over the coming years. Considering the announced, temporary cuts to ODA-related funding, damage limitation needs to take place ensuring not to jeopardise long-term partnerships or discourage researchers from engaging in development research that, seeing current global challenges, will likely only become more important and urgent. The University needs to find a balance in a difficult financial climate to focus on low-cost activities that promise to have high impacts.

In summary, the following recommendations are proposed for consideration:

On monitoring, evaluation and learning:

- o Improve data quality through better systems and tagging relevant data at source. Where user entry of data is chosen, data needs to be verified. Drop-down menus would help to standardise entries.
- o In the absence of better systems, **annual reports** should be run on a defined cut-off date to create a library of comparable data.
- o Based on strategic objectives and Theory of Change **KPIs should be revisited**. Each KPI should be clearly linked to one or more objectives. For each KPI a process of evaluating progress should be agreed. Be clear in how far outcomes can be attributed to interventions.
- o Choose KPIs that reflect **different stages of the research lifecycle** as well as the wider impact that is intended. Using the research lifecycle as a reference would provide a

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²⁰ p. ix https://www.oecd.org/development/evaluation/dcdndep/47466906.pdf

- selection of both **short-term and long-term indicators** allowing early adjustments to interventions while keeping the longer-term goals in mind.
- o Consider a better balance of qualitative and qualitative indicators.
- o Consider **annual surveys** of academic staff to gather feedback on interventions and activities provided and use these to increase visibility.

• On future strategy and interventions:

- o Activities like thematic workshops or pump-priming led to successful collaborative research activities and helped secure follow-on funding. Consider applying these positive changes in research culture to all collaborative research.
- Knowledge gained on facilitating and fostering development research at the University should be captured and integrated into research management processes.
- o With ODA-related research funding under threat, the University should seek ways to maintain the positive momentum it has gained in supporting development research. The evaluation has shown how small amounts of funding can have significant and lasting impact. Identifying a couple of interventions that have high visibility within the University like the already established seminar series, an internal award or other low-cost activities would send out a strong signal of continuous commitment to development research. This would put the University in a strong position when, hopefully, funding levels will increase again.
- Similarly, it seems vital to maintain strategic partnerships like the Nairobi Alliance as well as other partnerships that have developed out of workshops and pump-priming activities.
- o Further **thematic events** that have proven so impactful could be run as virtual events making them easily assessable for international partners and cost- as well as time effective. They might not offer the same benefits as an intense face-to-face two-day meeting with opportunity for spontaneous discussion on the side but could still act as catalyst for future activities and help maintain and expand strategic partnerships.
- o Considering the focus on global challenges worldwide and the respective emphasis that is placed on development research, it is worth exploring **non-UK development funding and grants** in collaboration with overseas partners as has already been done, for example, with South African partners and the World Health Organisation (WHO).
- o To **enhance visibility**, the current GCRF section on the University's website could be expanded to capture all development research activities and be updated with further outcomes from the projects initiated.
- o All these activities will require some **in-house delivery resource**. It would therefore seem prudent, to **continue the allocation of two RED members** to such activities.
- Similarly, maintaining the GCRF Delivery Group which could be renamed into Global Challenges Delivery Group or Development Research Delivery Group would seem important to ensure activities are coordinated at university-level and reported into the Research and Enterprise Committee.

5. Annexes

5.1. Glossary of terms

BEIS – Department of Business, Energy and Industrial Strategy (UK)

CLS – College of Life Sciences (UoL)

CSE – College of Science and Engineering (UoL)

CSSAH – College of Social Sciences, Arts and Humanities (UoL)

DAC – Development Assistance Committee

DAC-countries – Official Development Assistance eligible countries

ECR – Early career researcher

FEC – Full economic costing

FTE – Full-time equivalent

FY – Financial year

GCRF – Global Challenges Research Fund

HEI – Higher education institution

IRDF:ODA – International Research Development Fund: Official Development Assistance (UoL)

KPI – Key performance indicator

LIAS – Leicester Institute for Advanced Studies

LMIC – Low- and middle-income countries

ODA – Official Development Assistance

OECD – Organisation for Economic Co-operation and Development

QR - Quality-related research funding

RED – Research & Enterprise Directorate (UoL)

SDGs – Sustainable development goals

T&R staff – Teaching and research staff

UK – United Kingdom

UKRI – UK Research and Innovation

UoA – Unit of assessment

UoL – University of Leicester

WHO – World Health Organisation

5.2. List of interviewees

Professor Philip Baker – Pro Vice-Chancellor Research and Enterprise

Professor Mike Barer – Professor of Clinical Microbiology and Honorary Consultant Microbiologist

Dr Maggy Heintz – Head of Research and Business Development

Dr Mellissa Ifill – Deputy Vice Chancellor, Institutional Advancement, University of Guyana

Dr Diane Levine – Deputy Director and Manager, Leicester Institute for Advanced Studies

Sue Lewin – Research Development Officer

Professor Mark Purnell – Professor of Palaeobiology and Dean of Research, College of Science and Engineering

Professor Teela Sanders – Professor in Criminology

Professor Richard Thomas – Professor of Archaeology; Dean of Research, College of Social Sciences, Arts and Humanities and Chair GCRF Delivery Group

Dr Alice Tilche – Lecturer in Anthropology, Museums and Heritage

Professor Caroline Upton – Professor of Human Geography

Dr Joshua Vande Hey – Lecturer in Environment & Health

5.3. Photo credits

Cover page – Ankita Jain, 'Using the arts to mitigate the impact of Covid-19 on India's indigenous and nomadic communities'

Page 11 – 'Bar Hostesses Empowerment and Support Programme', Nairobi

Page 20 – 'Bar Hostesses Empowerment and Support Programme', Nairobi

Page 37 – Ankita Jain, 'Using the arts to mitigate the impact of Covid-19 on India's indigenous and nomadic communities'

Back cover – Ankita Jain, 'Using the arts to mitigate the impact of Covid-19 on India's indigenous and nomadic communities'



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