Department for Science, Innovation & Technology

Value for Money Assessment

Global Challenges Research Fund

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This report was produced in 2024. The Global Challenges Research Fund has now closed. Since then, the government has taken the difficult decision to temporarily reduce Official Development Assistance (ODA) to the equivalent of 0.3% of GNI by 2027 to fund an increase in defence spending. The government remains committed to international development and to returning ODA to 0.7% of GNI when fiscal conditions allow.

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Executive summary

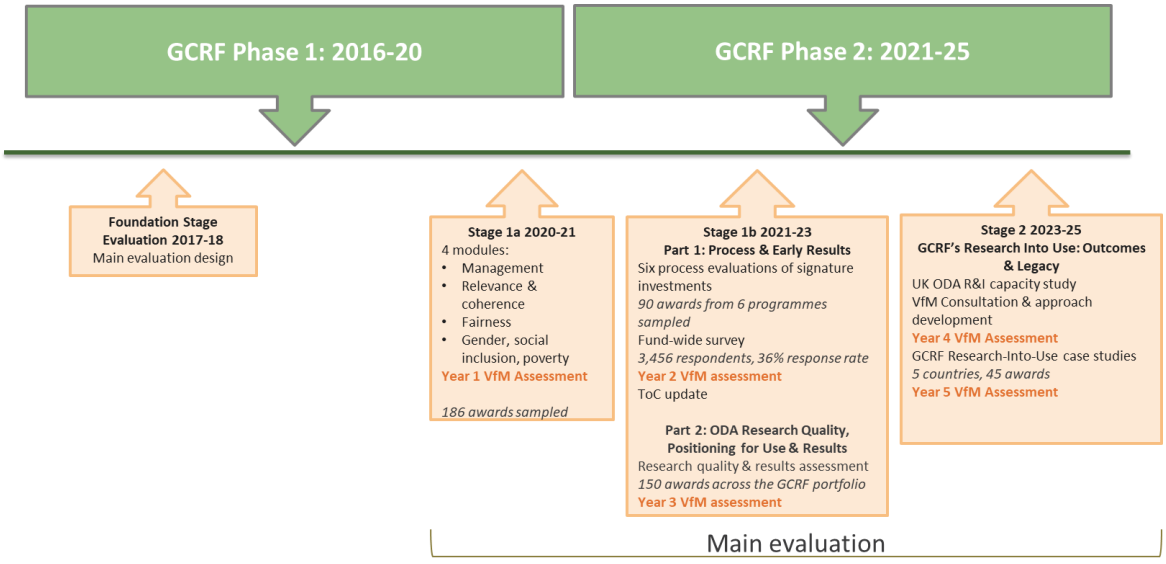
The Global Challenges Research Fund (GCRF) is a United Kingdom (UK) government fund, managed by the Department for Science, Innovation and Technology (DSIT) and set up to address the United Nations Sustainable Development Goals (SDGs).[1] GCRF was designed to build on UK strengths, boosting research excellence, international partnerships (especially in developing countries) and research with impact, supported by transparent and rigorous decision-making processes for funding and spending.[2] In doing so, it would "strengthen capacity for research, innovation and knowledge exchange in the UK and developing countries through partnerships with excellent UK research and researchers."[3]

The evaluation of GCRF seeks to assess the extent to which the Fund has contributed to its objectives and impact, and consists of a multi-year evaluation (2020–25).The present study, Year 4 VfM assessment, seeks to assess value for money (VfM) in GCRF. This study builds on previous phases of VfM assessment as part of the GCRF evaluation and precedes the final VfM assessment in Year 5. Consequently, the findings from this report do not represent a final judgement on VfM for the Fund but rather provide an indication of the performance of the Fund at the time of reporting. A final assessment will be made in the 2025 VfM report. An overview of the GCRF evaluation is presented in

Figure 1.

[1] HM Treasury. 2019. 'UK aid: tackling global challenges in the national interest'. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/uk-aid-tackling-global-challenges-in-the-national-interest
[2] BEIS. 2017a. 'UK Strategy for the Global Challenges Research Fund (GCRF)'. GOV.UK. As of 31 May 2024: https://assets.publishing.service.gov.uk/media/5a822337e5274a2e87dc156d/global-challenges-research-fund-gcrf-strategy.pdf
[3] Ibid. p.3.

Figure 1: Overview of GCRF evaluation



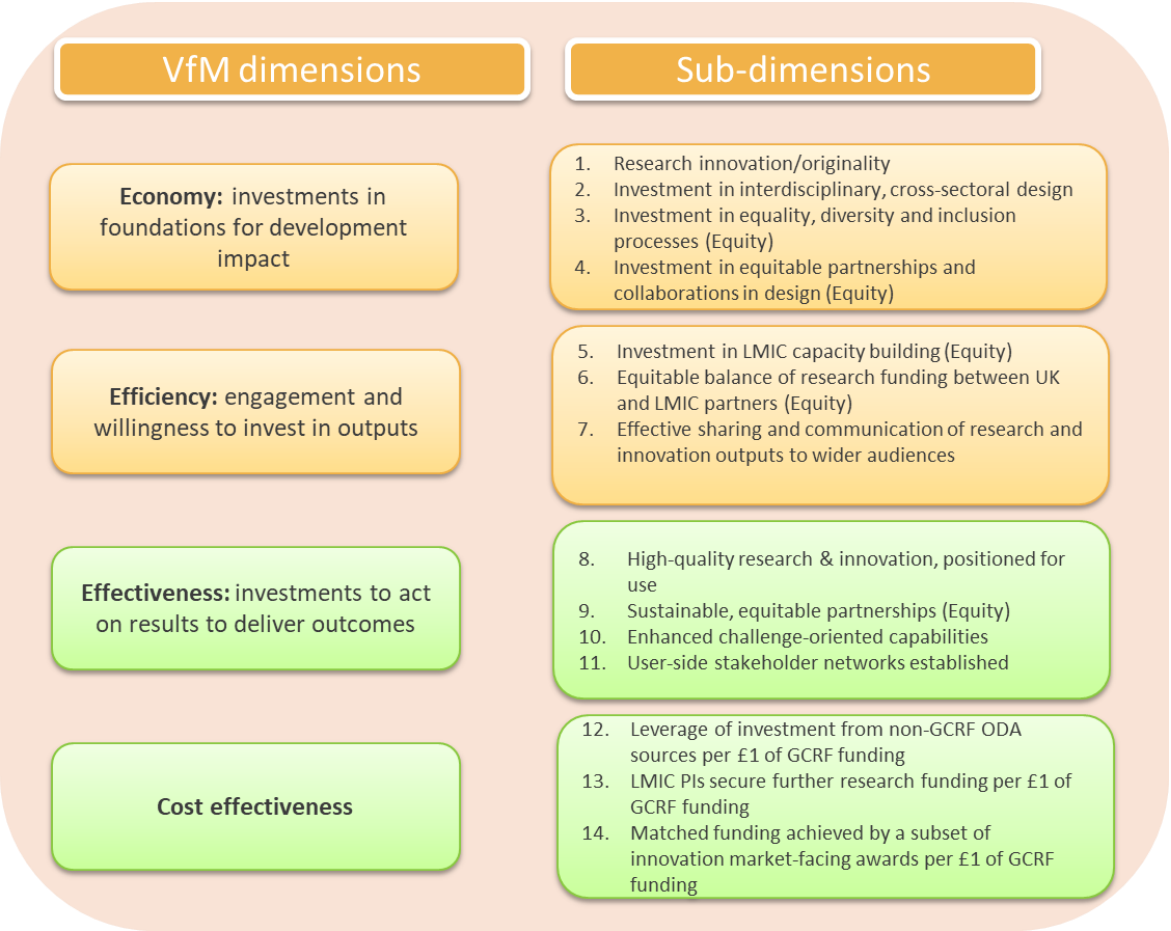
In order to assess VfM, it is important first to articulate the value proposition of GCRF. Broadly, in line with the GCRF strategy, this is that the use and adoption of GCRF-supported research-based solutions and technological innovations in specific countries, locations and/or sectors enables stakeholders in low and middle-income countries (LMICs) to make progress in their settings towards addressing complex development challenges. It is also intended that these efforts will contribute to the achievement of the SDGs, enhancing people's well-being, improving equality for people of all genders, and promoting social inclusion, economic development and environmental sustainability in developing countries. These improvements are intended to be sustained into the future by enduring equitable research and innovation (R&I) partnerships between the UK and LMICs in specific countries, contexts and sectors, supporting enhanced capabilities for challenge-oriented R&I in all regions.

Assessing Value for Money in GCRF

Given the nature of this intended value proposition, a highly quantitative approach to VfM assessment is not appropriate in this context as many of the intended outcomes are intangible, non-monetizable and cannot be readily quantified. Instead, we used an innovative rubric-based approach to assess VfM. This approach is informed by common VfM assessment practice at the Foreign, Commonwealth & Development office (FCDO), and incorporates learnings from prior GCRF VfM assessments undertaken earlier in the evaluation.

This approach assesses award performance against a set of four dimensions: Economy, Efficiency, Effectiveness and Cost-effectiveness. These dimensions include a set of 14 underlying subdimensions, against which each award was rated as unacceptable (0), poor (1), acceptable (2), good (3), excellent (4), ‘not applicable’, or ‘insufficient evidence’. The subdimensions included in the rubric were developed based on documented evidence on the characteristics that contribute to delivering value in research for development investments. Rubric subdimensions were further tested and refined through a process of consultation with all partner organisations (POs) to develop the finalised approach used here. The dimensions and subdimensions are summarised in Figure 2.

Figure 2: Dimensions and subdimensions of the VfM rubric



This study involved assessment of a sample of 50 GCRF awards using the VfM rubric. The awards funded under GCRF are diverse, belonging to different award types. Most relevant to this study are thematic research grants, strategic investments, applied innovation programmes, network awards and early and mid-career awards.

Box 1 provides a brief introduction to the key features of these programmes.

Box 1. Overview of relevant GCRF award types[4]

Thematic research grant programme-funded projects were led by a UK-based principal investigator (PI) in response to a specific, thematic call.

Strategic investments were similarly funded particular projects or activities, but these were one-off awards. All such awards within this sample focused on secondary data analysis (i.e. they were desk-based work focusing on analysis of existing data sets).

[4] Academy of Medical Sciences. 2024. 'Springboard'. As of 31 May 2024: https://acmedsci.ac.uk/grants-and-schemes/grant-schemes/springboard; The Royal Society. 2024. 'FLAIR Fellowships'. As of 31 May 2024: https://royalsociety.org/grants/flair/

Applied innovation grants were more applied in nature, involving collaborations with industrial partners to work on later stages of a research.

Network awards provided funding to build sustained engagement and collaboration on emerging or challenging research areas. Often, these awards also included activities such as workshops, events and communications to establish new relationships.

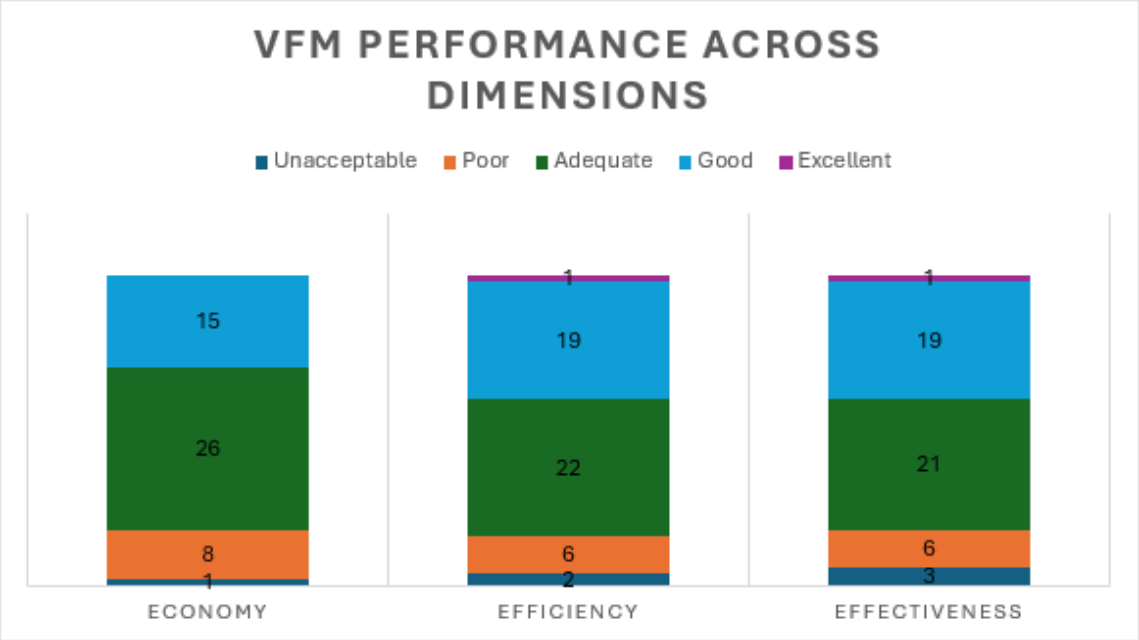
Early and mid-career awards were research grants directed to researchers in early stages of their careers. Our sample included early career awards from two very distinct programmes that should be considered separately:

- Springboard awards provided funding to support early-career biomedical scientists based in eligible higher education institutes within the UK.
- The Future Leaders – African Independent Research (FLAIR) programme provided postdoctoral fellowships for African ECRs at sub-Saharan African institutions. It is distinct from other GCRF programmes in awarding funding directly to African fellows and their host institutions, and so was among very few GCRF investments that were led by Global South countries.

Findings on overall VfM in GCRF

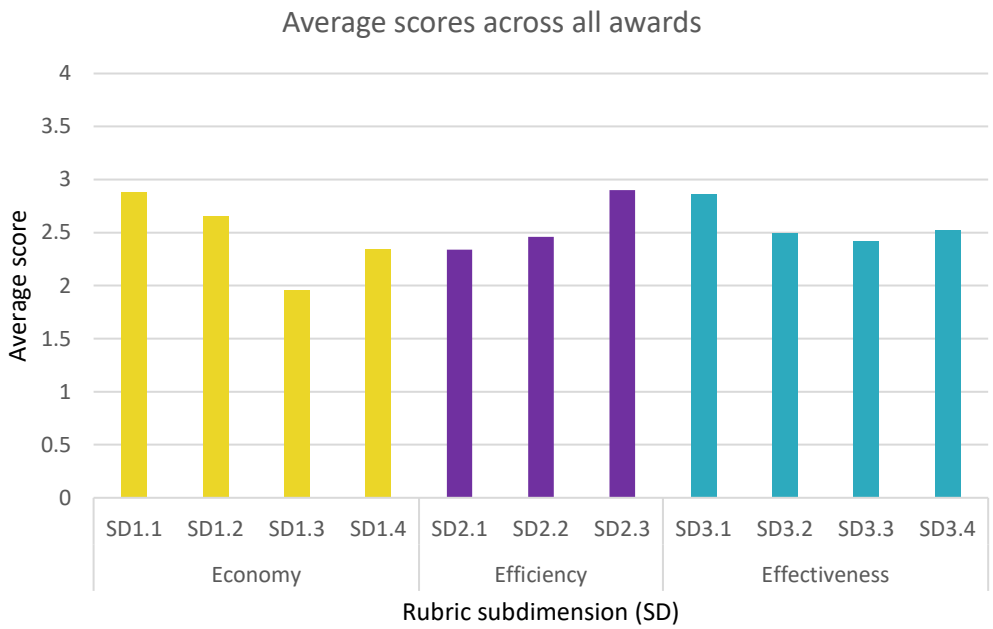
Evidence from this sample suggests that **GCRF offers good VfM, with 86% of awards rated as having adequate, good or excellent performance across** Economy, Efficiency and Effectiveness. Performance for each dimension is shown in Figure 3. Overall, the evidence provided offers assurance that the awards we have assessed largely offer good VfM, reinforced by wider investments into the work GCRF has funded.

Figure 3: Number of awards performing at an unacceptable, poor, adequate, good and excellent level within the sample of 50 across the first three dimensions of Economy, Efficiency and Effectiveness



Looking at the subdimension level, average performance across all awards is adequate (2) or higher for all subdimensions except for subdimension 1.3 (investment in equality, diversity and inclusion (EDI) processes), where the average value across all awards is poor (1.96 out of 4.00). Performance for each subdimension is shown in Figure 4. Again, this provides some confidence that on average this portfolio of awards is providing VfM, although we note that there is significant underlying variation at the award level and, potentially, scope for improvement in some subdimensions

Figure 4: Average scores of all awards across rubric subdimensions. Subdimension are described in Figure 2.



Cost-effectiveness is not assessed in this set of awards due to limitations in the availability of evidence. Across the three subdimensions assessed for the 50 awards, we determined that the subdimension was not applicable in 21% of cases (31/150) and that we had no evidence or a low level of evidence for assessment in 35% of cases (52/150). However, we were able to identify some evidence about additional funding – whether this was follow-on funding subsequent to the award or co-funding from other sources – for 34 of the 50 awards. This additional funding from other sources can be considered as an indication of cost-effectiveness, providing evidence on the extent to which other external sources place value on the work conducted through GCRF funding and are willing to invest further to support the ongoing development of those ideas, findings and outcomes. The additional funding we were able to identify amounted to over £75 million, compared to an initial investment from GCRF of around £30 million. However, it should be noted that over half of that £75 million was associated with just five of the 50 awards, and only 11 of the awards in the set received additional ongoing funding that exceeded the value of the initial GCRF investment. Therefore, care should be taken in generalising this finding to a wider set of awards, or indeed to the GCRF portfolio as a whole, as there may be substantial sampling effects.

Wider observations with regard to VfM in GCRF

Beyond this core analysis, we also explored the VfM scores and the underlying evidence in more detail, looking at how different awards sizes and types performed

on different subdimensions. Some key observations – which are explored in more detail in the main body of the report - include:

- **Awards have different strengths and weaknesses** and have had to **focus their resources on specific aspects of performance:** Although the overall performance across the sample is good, there is significant variation at the subdimension level. Only 19 of the 50 awards (38%) are rated as having adequate performance on all subdimensions across Economy, Efficiency and Effectiveness. These strengths and weaknesses may reflect variance in funding calls which emphasised different drivers of impact and value for money. The strengths and weaknesses of award types within this sample are presented in Table 1.
- **Award size seems to be particularly important in terms of partnership and network development** (outside of specific networking awards). Smaller awards were more likely to perform poorly in terms of developing sustainable equitable partnerships. This suggests that building equitable partnerships typically requires a higher level of resources.
- **Performance is strongest in research quality and positioning for use** However, **award duration seems to be important for translation and dissemination.** Awards funded for longer than two years in our sample performed significantly stronger in terms of investment in strategies to position research for use). Longer grant periods may enable better engagements with non-academic stakeholders, with more opportunities for building trust and establishing new relationships that foster communication over time.
- **Performance is poorer on dimensions related to EDI overall.** However, network awards seem to have performed better than average in this area. This may be because of networks' emphasis on inclusivity and diversity of perspectives and equitable representation from interdisciplinary and cross-sectoral stakeholders. Also, **projects led by LMIC-based principal investigators (PIs) perform better in terms of equitable balance of research funding**.

Table 1: Strengths and weaknesses in VfM performance by award type

Award type	Strengths and weaknesses
Network awards	**Network awards tend to be smaller awards and perform strongly on dimensions related to collaboration, networking and interdisciplinarity.** Many network awards had an explicit interdisciplinary and cross-sectoral approach and creating networks with broad reach and engagement was a critical focus of many awards. Network awards also perform disproportionately well across the whole Effectiveness dimension and appear to offer particularly good VfM for awards at lower funding levels. This indicates that networks, particularly when comprised of local stakeholders, may enable research translation and delivery of outcomes. **Network awards performed better than average on dimensions related to EDI**, where performance was poorer across the full sample. This may be because of networks' emphasis on inclusivity and diversity of perspectives and equitable representation from interdisciplinary and cross-sectoral stakeholders.
Innovation awards	**Innovation awards performed strongly on aspects linked to cross-sectoral working** involving highly interdisciplinary and cross-sectoral teams, often including as partners or team members individuals or groups from government, civil society organisations or the private sector.
Early career researcher (ECR) awards	**Early career researcher (ECR) awards perform very strongly on aspects such as capacity building** since these were typically fellowships to ECRs in LMICs. **ECR awards perform less well on networking and interdisciplinarity,** reflecting the fact that largely these are award to individuals, and they do not have a substantial collaborative focus.

Conclusions and recommendations

Overall, the evidence provided here offers assurance that on the whole, the awards we have assessed offer good VfM; this is reinforced by evidence that there have been substantial wider investments into the work GCRF has funded through our cost-effectiveness analysis. However, we can identify some recommendations for future ODA funds, including the International Science Partnership Fund (ISPF).

1. Future investments should tailor award type to intended purposes – for example, LMIC fellowship awards for capacity building or network awards for collaboration and network development – and ensure a mixed portfolio to address all the requirements of effective research for development. Relatively few awards were able to perform well on all subdimensions, suggesting that there was a need to focus effort and resources relative to the key priorities for that award or award type. Alternatively, investments could be designed to perform well on all subdimensions of VfM, though this would likely require greater funding levels and may contribute to less targeted awards.

2. Allocate additional resources recognising the time needed for effective networking and partnership development with LMIC partners – either within other awards or as additional networking awards. Other than specific networking awards (which are often smaller in size), larger awards performed much better on networking and partnership development activities. This reflects the time and effort involved in these relationship development processes which can be difficult to accommodate alongside original research or other activities in smaller awards. In future funds, networking resources should be set out – either as separate small awards, or as ringfenced additional funding beyond that allocated for research – to ensure these activities are adequately resourced.

3. Network awards should be included as part of the portfolio of future investments to complement other award types. These awards typically seem to offer good VfM, performing particularly well on aspects related to collaboration, networking and interdisciplinarity.

4. Most awards should be at least two years in length in future investments to support dissemination and uptake of research findings. We found a distinct difference in performance, on average, between awards that were longer than two years and those that were shorter than two years in terms of positioning for use and dissemination of findings.

5. Future funds should set expectations and provide support to award holders to take a wider lens when considering EDI, looking beyond just consideration of gender. Generally, EDI was the weakest area of performance across the VfM

rubric for this set of awards, and poor consideration of wider aspects of diversity beyond gender was a common issue, as has also been identified in previous stages of the GCRF evaluation.

6. Future investments should aim to award funds directly to LMIC PIs where possible to improve equity. Awards were significantly more likely to have an equitable distribution of funding where they had an LMIC-based PI. For fellowships in particular, there was a significant differential in VfM performance for those awards that were awarded directly to LMIC fellows compared to other (UK-based) fellowship awards.

7. Future funds should consider collecting information on follow-on and co-funding in a systematic manner and in a way that also captures information on LMIC funding. At present data on follow-on and co-funding are patchy. The main source of evidence available is Gateway to Research which was the source of the vast majority of evidence for the analysis conducted in this study. However, this data sources has some limitations. Firstly, it only covers UKRI awards, and secondly it typically only provides information on further funding to PIs, most of whom are UK-based, so information on funding to LMIC partners is more limited. Future funds could systematically capture information of follow-on and co-funding to all partners as a part of end of grant reporting processes.

8. Scores on effectiveness may be subject to time lags in realisation of outcomes and the availability of evidence to support non-traditional outcomes that are common to research for development. Assessment of VfM should consider time lags in realisation of outcomes and the availability of evidence to support non-traditional outcomes that are common to research for development.

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Abbreviations

AMS	Academy of Medical Sciences
BEIS	Department for Business, Energy & Industrial Strategy
Co-I	Co-Investigator
DFID	Department for International Development
DSIT	Department for Science, Innovation and Technology
ECR	Early Career Researcher
EDI	Equality, Diversity and Inclusion
EQ	Evaluation Question
FCDO	Foreign, Commonwealth & Development Office
FCR	Field Citation Ratio
FLAIR	Future Leaders – African Independent Research
FoR	Fields of Research
GCRF	Global Challenges Research Fund
GESI	Gender Equality and Social Inclusion
HE	Higher Education
ISPF	International Science Partnership Fund
LMIC	Low and Middle-Income Country
MoU	Memorandum of Understanding
NGO	Non-Governmental Organisation
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PI	Principal Investigator
PO	Partner Organisation

R&I	Research and Innovation
RQ++	Research Quality Plus Plus
SD	Subdimension
SDG	Sustainable Development Goal
ToC	Theory of Change
UK	United Kingdom
UKRI	UK Research and Innovation
UKSA	UK Space Agency
UN	United Nations
VfM	Value for Money

1. Introduction

This report presents the findings from the value for money (VfM) assessment of the Global Challenges Research Fund (GCRF).

This section states the purpose and structure of this report before summarising GCRF and its objectives. The various elements of GCRF are briefly described, and evaluation questions (EQs) and methods are summarised.

This report is structured as follows:

- Section 1 introduces the report and presents a brief description of GCRF and our VfM approach
- Section 2 outlines the methods adopted in this study and its strengths and limitations
- Section 3 delves into the main findings from each dimension and subdimension of our VfM assessment rubric
- Section 4 consolidates our key takeaways at the Fund level and details our suggestions for future funding programmes and analysis.

1.1. Policy context for the study

Official Development Assistance (ODA) has emerged as a key mechanism of providing aid and support to developing countries in recent decades and facilitating activities for sustainable development. The United Kingdom (UK) is an important source of ODA to low and middle-income countries (LMICs), and research programmes such as GCRF and the Newton Fund are major components of the same. GCRF was designed to fund research relevant to the progress and sustainable development of Global South countries, promoting engagements and partnerships between the UK and LMICs, and providing scope for capacity development and knowledge exchange.

The UK's ODA funding has been in decline in recent years, reducing from 0.7% to 0.5% of the UK's gross national income (GNI) in 2021[5], in turn affecting the scope, sustainability and potential for impact of GCRF. Since this report was produced in 2024, the UK government has announced the decision to temporarily reduce Official Development Assistance (ODA) to the equivalent of 0.3% of GNI by 2027 to fund an increase in defence spending. The government has announced it remains committed

[5] Wozniak, P. 2023. 'Three years of UK aid cuts: where has ODA been hit hardest?' Development Initiatives. As of 31 May 2024: https://devinit.org/resources/three-years-of-uk-aid-cuts-where-has-oda-been-hit-hardest/

to international development and to returning ODA to 0.7% of GNI when fiscal conditions allow.

Shifts in UK aid policies have important implications for the equitable working of international partnerships funded via GCRF and the new International Science Partnership Fund (ISPF).[6] Evaluation of past and ongoing ODA funds, including GCRF, is critical for assessing the value of these investments and whether they achieve their intended impacts, providing important accountability and learning functions. As part of the wider GCRF evaluation approach, the present study assesses whether and how GCRF delivers VfM through examining how well Fund resources are used and whether they are being used well enough.[7]

1.2. Global Challenges Research Fund overview

GCRF is a UK government programme administering £1.5 billion of ODA to address pressing challenges of developing countries through SRTI, collaborations and impact-driven funding.[8] It also attempts to facilitate partnerships of researchers and organisations between the UK and other countries, thereby positioning the UK as a leader in addressing global challenges through research and innovation (R&I).

The three main objectives of GCRF are to:[9]

- promote challenge-led disciplinary and interdisciplinary research, including the participation of researchers who may not previously have considered the applicability of their work to development issues

[6] DSIT. 2023. 'International Science Partnership Fund'. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/international-science-partnerships-fund-ispf/international-science-partnerships-fund-ispf

[7] King, J. and OPM. 2018. 'The OPM approach to assessing value for money: A guide'. Oxford Policy Management Ltd. As of 31 May 2024: https://www.opml.co.uk/sites/default/files/migrated_bolt_files/opm-approach-assessing-value-for-money.pdf

[8] BEIS. 2017b. 'Global Challenges Research Fund (GCRF): How the Fund Works'. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/global-challenges-research-fund/global-challenges-research-fund-gcrf-how-the-fund-works#:~:text=GCRF%20forms%20part%20of%20the,the%20poorest%20people%20and%20countries

[9] BEIS. 2017b. 'Global Challenges Research Fund (GCRF): How the Fund Works'. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/global-challenges-research-fund/global-challenges-research-fund-gcrf-how-the-fund-works#:~:text=GCRF%20forms%20part%20of%20the,the%20poorest%20people%20and%20countries

- strengthen capacity for research, innovation and knowledge exchange in the UK and developing countries through partnership with excellent UK research and researchers
- provide an agile response to emergencies where there is an urgent research need.

In line with its objectives, GCRF aims to accelerate progress towards United Nations (UN) Sustainable Development Goals (SDGs) through unprecedented investment in challenge-led R&I, spanning disciplines, sectors and global North and South partners. These objectives are realised through use and adoption of GCRF-supported research-based solutions and technological innovations in specific countries, locations and/or sectors, and they enable stakeholders in LMICs to make progress in their settings towards addressing complex development challenges. These efforts will contribute to the achievement of the SDGs, enhancing people's well-being, improving equality for people of all genders, and promoting social inclusion, economic development and environmental sustainability in developing countries. These improvements will be sustained into the future by enduring equitable R&I partnerships between the UK and LMICs in specific countries, contexts and sectors, supporting enhanced capabilities for challenge-oriented R&I in all regions.

The Department for Science, Innovation and Technology (DSIT) (formerly the Department for Business, Energy & Industrial Strategy (BEIS)) is responsible for overseeing GCRF. The Fund is delivered through 17 partner organisations (POs),[10] who leverage existing mechanisms for disbursement, providing funding to universities, research organisations and directly to individual researchers using early and mid-career fellowships. Funds are also awarded through POs' collaborations in LMICs. Projects funded by GCRF were identified using certain criteria, including their alignment to the overall goals of GCRF (e.g. relevance for LMICs). Projects were shortlisted based on their ability to conduct innovative research, engage with stakeholders, build capacity of early career researchers (ECRs) or potential for impact in LMIC contexts. As a result, the awards funded under GCRF are diverse, belonging to different award types. Most relevant to this study are thematic research grants, strategic investments, applied innovation programmes, network awards and early and mid-career awards. Box 2 provides a brief introduction to the key features of these programmes.

[10] The umbrella organisation, UK Research and Innovation (UKRI); seven research councils and Innovate UK; the four National Academies (the Royal Society, the British Academy, the Academy of Medical Sciences (AMS) and the Royal Academy of Engineering); the UK Space Agency (UKSA); and the four devolved higher education (HE) funding councils.

Box 2: Overview of relevant GCRF award types[11]

Thematic research grant programme-funded projects were led by a UK-based principal investigator (PI) in response to a specific, thematic call.

Strategic investments were similarly funded particular projects or activities, but these were one-off awards. All such awards within this sample focused on secondary data analysis (i.e. they were desk-based work focusing on analysis of existing data sets).

Applied innovation grants were more applied in nature, involving collaborations with industrial partners to work on later stages of a research.

Network awards provided funding to build sustained engagement and collaboration on emerging or challenging research areas. Often, these awards also included activities such as workshops, events and communications to establish new relationships.

Early and mid-career awards were research grants directed to researchers in early stages of their careers. Our sample included early career awards from two very distinct programmes that should be considered separately:

- Springboard awards provided funding to support early-career biomedical scientists based in eligible higher education institutes within the UK.
- The Future Leaders – African Independent Research (FLAIR) programme provided postdoctoral fellowships for African ECRs at sub-Saharan African institutions. It is distinct from other GCRF programmes in awarding funding directly to African fellows and their host institutions, and so was among very few GCRF investments that were led by Global South countries.

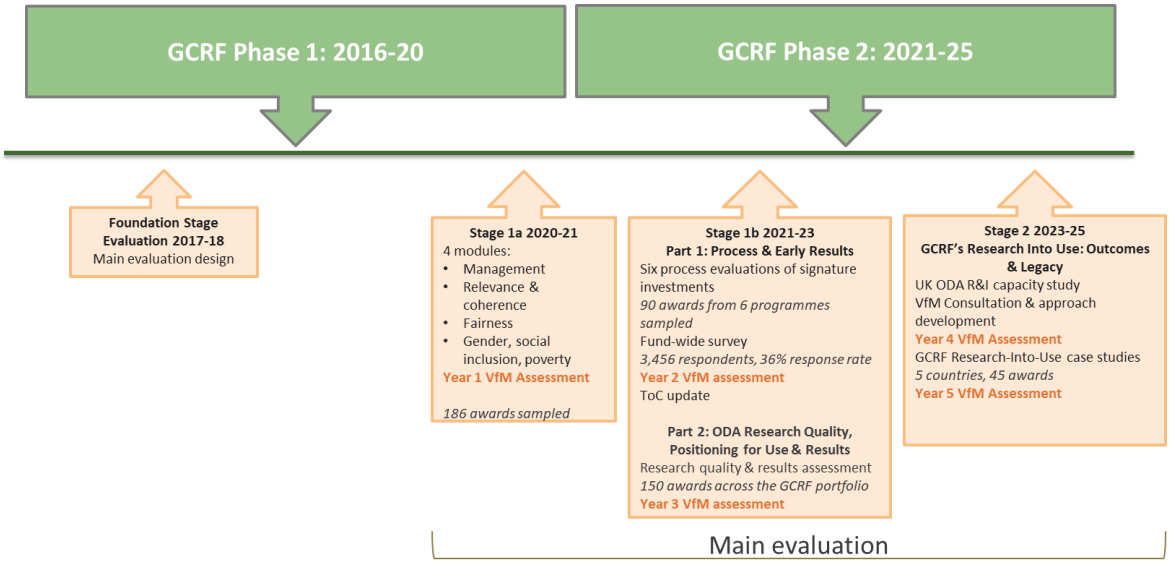
1.3. GCRF Value for Money study

This study is part of the five-year evaluation of GCRF. At the time of reporting, GCRF is in year 9 of its 10-year funding period. The aim of the five-year evaluation is to assess whether GCRF's realised outputs and achievements are in line with its expected outcomes. The overall GCRF evaluation follows a theory-based approach to assessing GCRF in line with its Theory of Change (ToC), which articulates the pathways through which GCRF enables impact (see Annex A). The overall

[11] Academy of Medical Sciences. 2024. 'Springboard'. As of 31 May 2024: https://acmedsci.ac.uk/grants-and-schemes/grant-schemes/springboard; The Royal Society. 2024. 'FLAIR Fellowships'. As of 31 May 2024: https://royalsociety.org/grants/flair/

evaluation is divided in two stages, as illustrated in Figure 5: Overview of the GCRF evaluation. Stages 1a and 1b evaluated the Fund's potential to contribute to impact via research for development investments and uptake of research outputs. The present stage, Stage 2, assesses GCRF's outcomes and legacy by examining how GCRF research translates into use. This includes a VfM assessment which builds on earlier GCRF VfM assessments conducted in Stages 1a and 1b. An overview of the GCRF evaluation is presented in Figure 5.

Figure 5: Overview of the GCRF evaluation



Assessing VfM is a key component of the overall evaluation of GCRF, and it serves two central purposes. First, it seeks to address whether and how the Fund delivers VfM, providing an important accountability function for the investment. For the purpose of this assessment, the study defines VfM as "an evaluative question about how well resources are used, and whether they are being used well enough".[12] Second, it aims to advance the development of a cross-fund framework that provides robust systems of analysing the Fund's VfM and impact, supporting learning throughout and beyond the duration of the evaluation. These learnings can be used not only to refine future VfM assessments of GCRF but also to inform broader developments in VfM of similar funding schemes.

As a complex and large-scale fund, GCRF requires a tailored approach to VfM which acknowledges and addresses the inherent complexities, limitations and challenges in assessing return on investment in the context of a research for development fund. These complexities and challenges arise from non-linear processes of R&I change and from varied and, occasionally, limited evidence of outcomes and impacts,

[12] King, J. and OPM. 2018. 'The OPM approach to assessing value for money: A guide'. Oxford Policy Management Ltd. As of 31 May 2024: https://www.opml.co.uk/sites/default/files/migrated_bolt_files/opm-approach-assessing-value-for-money.pdf

including those which are intangible and non-monetisable. In crafting this approach, the evaluation team has adopted an evolving approach to VfM assessment, iteratively incorporating learnings from previous assessments and adapting the approach to account for time lags in realisation of outcomes and impacts as the Fund matures.

This study assesses VfM in GCRF by analysing 50 awards against our rubric-based instrument. This assessment builds on two previous GCRF VfM assessments. In total, 45 awards were examined in year 1 (Stage 1a) of the VfM assessment, and a further 32 awards from six programmes were assessed in year 2 (Stage 1b). Years 1 and 2 of the VfM assessment focused on refining our approach and progressing a rubric for analysis.

Section 2 outlines some key methodological decisions in the development of a rubric and its application for our analysis.

2. Methodology

This study adopts a theory-based approach to evaluating GCRF's VfM in line with its ToC. It builds on existing VfM methodologies proposed by the Foreign, Commonwealth & Development Office (FCDO) (formerly the Department for International Development (DFID)) and King and OPM (2018) [13] and aligns them with the processes and expectations of GCRF.

This study used a novel **rubric-based instrument** (see Annex B) that defines specific VfM dimensions and subdimensions and establishes performance standards for each of these. The instrument encompasses three components: (i) a typology to define characteristics of the award; (ii) dimensions and subdimensions; (iii) performance standards, rated on a five-point scale.

This section outlines the steps undertaken to develop the VfM approach.

2.1. Approach development

This subsection presents a high-level summary of the approach development.

The approach to VfM in this assessment, and in GCRF VfM assessments in previous stages, utilises a rubric-based instrument to evaluate GCRF award performance. Rubric-based approaches are useful in holistically assessing award performance against criteria, standards and indicators informed by the Fund ToC[14]. As part of a wider theory-based evaluation, this approach supports alignment of assessment criteria with the values embedded in the programme theory, supporting the validity and coherence of the resulting assessment[15]. Furthermore, rubrics provide a robust, standardised and repeatable means of assessing award performance where quantitative return on investment measurements is not available and where outcomes are intangible or non-monetisable[16]. A rubric-based approach is therefore useful and relevant to GCRF, where such outcomes are common, are frequently

[13] DFID. 2011. 'DFID's approach to Value for Money (VfM)'. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/dfids-approach-to-value-for-money-vfm; King, J. and OPM. 2018. 'The OPM approach to assessing value for money: A guide'. Oxford Policy Management Ltd. As of 31 May 2024: https://www.opml.co.uk/sites/default/files/migrated_bolt_files/opm-approach-assessing-value-for-money.pdf

[14] Gargani, J., & King, J. (2024). Principles and methods to advance value for money. Evaluation, 30(1), 50-68. https://doi.org/10.1177/13563890231221526

[15] King, J., McKegg, K., Oakden, J. and Wehipeihana, N. (2013) 'Rubrics: A method for surfacing values and improving the credibility of evaluation'. Journal of MultiDisciplinary Evaluation, Vol. 9 No. 21: 11–20.

[16] King, J. (2017) 'Using Economic Methods Evaluatively'. American Journal of Evaluation, Vol 38, Issue 1, March 2017.

reported qualitatively and where cost-benefit ratio assessment may be unfeasible and risk incomplete capture of relevant outcomes.

The approach also aligns with existing practice[17] [18]. A rubric-based approach has been developed and used in the evaluation of the Newton Fund. We built upon this approach, developing a tailored rubric for GCRF based on both existing evaluation evidence and a consensus process in which input and review from DSIT and POs were sought. The approach is centred around one of the most commonly used approaches to VfM assessment: the 4Es framework by FCDO,[19] which relies on three pillars (Economy, Efficiency and Effectiveness) combined with two factors (Equity and Cost-effectiveness). These are used to map the inputs into a programme with its outputs and outcomes. The 4Es framework proposes the following definitions for these pillars:

- "**Economy[:]** Are we or our agents buying inputs of the appropriate quality at the right price? (Inputs are things such as staff, consultants, raw materials and capital that are used to produce outputs)
- **Efficiency:** How well do we or our agents convert inputs into outputs? (Outputs are results delivered by us or our agents to an external party. […])
- **Effectiveness:** How well are the outputs from an intervention achieving the desired outcome […]? (Note that in contrast to outputs, we or our agents do not exercise direct control over outcomes)
- **Cost-effectiveness:** How much impact […] does an intervention achieve relative to the inputs that we or our agents invest in it?"[20]

[17] DFID (2011a) DFID's Approach to Value for Money (VfM). Department for International Development, United Kingdom; ICAI (2011) ICAI's Approach to Effectiveness and Value for Money. November 2011; ITAD (2012) Better Assessing VFM in DFID Nigeria Governance and Conflict Programming.October 2012.; Jackson, P. (2012) Value for Money and International Development: Deconstructing myths to promote a more constructive discussion. OECD Development Co-operation Directorate.; King, J., McKegg, K., Oakden, J. and Wehipeihana, N. (2013) 'Rubrics: A method for surfacing values and improving the credibility of evaluation'. Journal of MultiDisciplinary Evaluation, Vol. 9 No. 21: 11–20.
[18] HM Treasury. 2022. The Green Book. GOV.UK. As of 4 October 2024: https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government/the-green-book-2020
[19] King, J. and OPM. 2018. 'The OPM approach to assessing value for money: A guide'. Oxford Policy Management Ltd. As of 31 May 2024: https://www.opml.co.uk/sites/default/files/migrated_bolt_files/opm-approach-assessing-value-for-money.pdf
[20] DFID. 2011. 'DFID's approach to Value for Money (VfM)'. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/dfids-approach-to-value-for-money-vfm

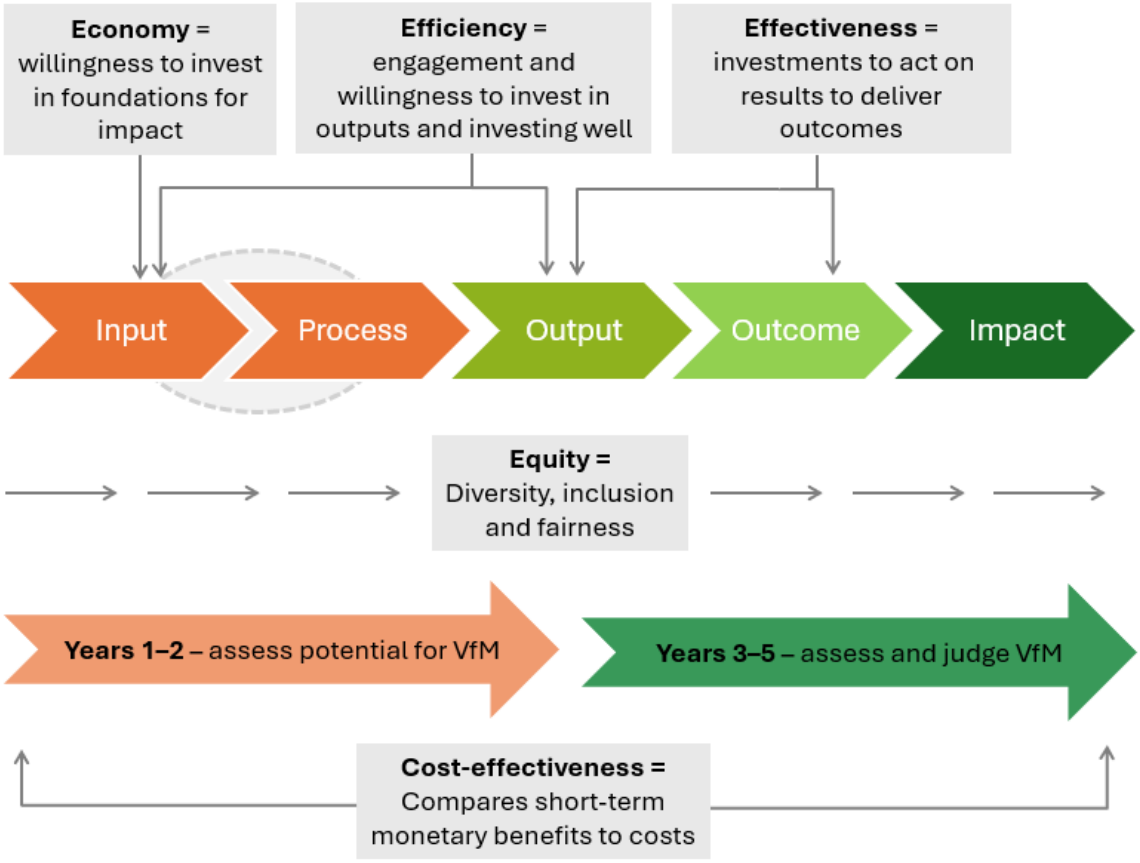
For this study, we revised the definitions provided by the 4Es framework based on the GCRF ToC. These revisions incorporate learnings and evidence generated from the preceding GCRF VfM assessments (Stages 1a and 1b) utilising the same framework. The revisions account for GCRF specificities and establish programme-specific criteria to assess whether the programme generates more value as compared to the resources invested in it. We defined the following four dimensions that made up the rubric-based instrument defined in Section 2.1.1:

- **Economy:** willingness to invest in foundations for impact.
- **Efficiency:** engagement and willingness to invest in outputs.
- **Effectiveness:** investments to act on outputs to deliver outcomes.
- **Cost-effectiveness:** compares short-term monetary benefits to costs in a break-even approach.

A fifth E, Equity, is integrated within the four dimensions, representing diversity, inclusion and fair distribution of programme outcomes.

Figure 6 illustrates how these categories correspond to different stages of the programme value chain. Economy and Efficiency focus more on investments made into the foundations to contribute to a project's potential for VfM. Effectiveness and Cost-effectiveness are later-stage dimensions assessing outputs/outcomes for the realised benefits. The present assessment was conducted in year 3 of the evaluation and year 9 of the 10-year fund. In the GCRF ToC this corresponds to the 'shorter-term outcomes' and 'replication and amplification processes' stages. This assessment is, therefore, positioned to surface evidence of outcomes and scaling, facilitating assessment across the 4Es.

Figure 6: Overview of our approach to GCRF VfM Assessment



2.1.1. VfM assessment rubric

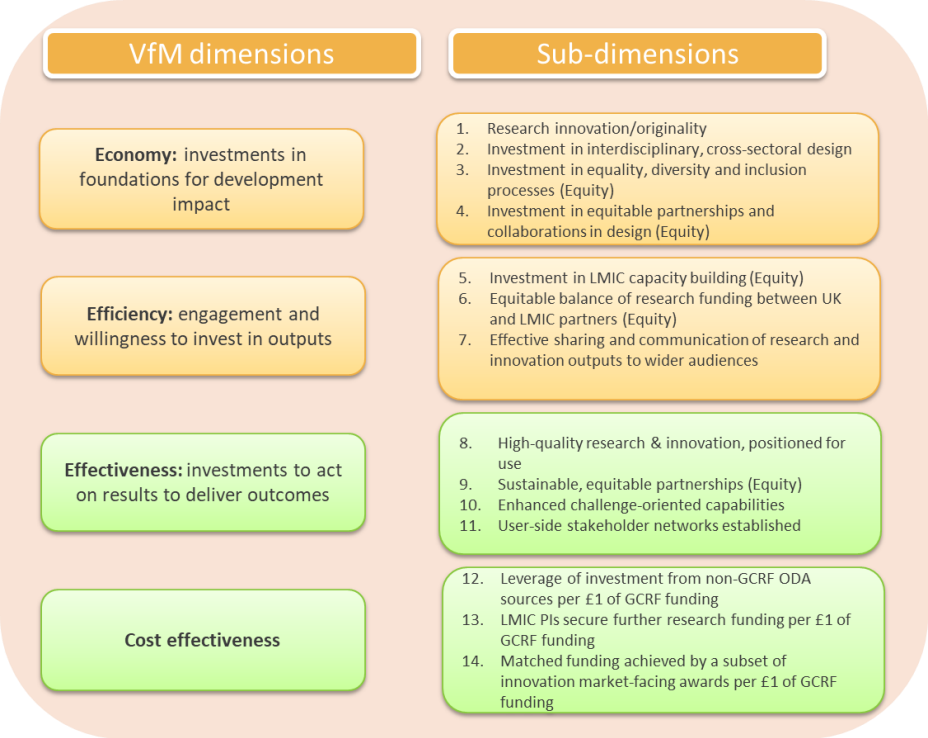
This rubric was developed and refined through a consultative process involving all GCRF POs. Workshops were organised with officials from POs and DSIT in November 2023 to discuss important criteria considered under each dimension. The rubric was finalised following two rounds of review and comments.

The instrument encompasses three components: (i) characteristics of the award; (ii) dimensions and subdimensions; (iii) performance standards, rated on a five-point scale. Because GCRF encompasses many diverse types of awards, with different budgets, durations and objectives, analysis of the award characteristics is a significant component of this assessment.

The rubric contains four dimensions: Economy, Efficiency, Effectiveness and Cost-effectiveness. These dimensions offer flexibility to the rubric, enabling us to account for different types of R&I projects within GCRF.

There are 14 subdimensions across the four dimensions, which reflect the evidence gathered over three years of the evaluation and a general understanding of the factors that contribute to delivering value in a 'research for development' investment. Each subdimension was defined and had a set of prescribed performance standards against which we assess the evidence. Figure 7 provides an overview of these 14 subdimensions.

Figure 7: Dimensions and subdimensions of the VfM rubric



A five-point scale was used to provide a numerical score on each subdimension: unacceptable (0), poor (1), adequate (2), good (3), excellent (4), 'not applicable', or 'insufficient evidence'. In subdimension 1.3 on EDI, the scale also corresponded to the following categories: EDI unaware (0), EDI aware (1), EDI sensitive (2), ED responsive (3) and EDI transformative (4). 'Not applicable' was used when a subdimension was assessed to not be relevant for a certain award. For example, subdimension 4.3 on matched funding was deemed not relevant for most awards in our sample because of an absence of market-oriented outcomes in these projects.

A pilot study was conducted using this rubric to assess the VfM of a GCRF award. This was followed by two moderation meetings as well as weekly harmonisation meetings to ensure robustness of our assessment and to establish consistent rules for interpretation of different scenarios (e.g. in cases where awards' dissemination activities were impacted by COVID-19).

2.2. Sampling and analysis

After finalising the instrument of analysis, we selected a set of 50 awards for this study. The 50 awards were sampled from an existing pool of 150 awards assessed in the Research Quality Plus Plus (RQ++)[21] Synthesis Report conducted in Stage 1b of the GCRF evaluation.[22] These 50 were identified through a mix of purposive and random sampling at different levels. Purposive sampling was used across award types to ensure a representative sample covering different award characteristics and sizes. We looked to select a mix of award types, to allow us to make comparisons between these, and a mix of award sizes for types where feasible, to allow us to look at differences in 'value' for different amounts of 'money'. Because of the nature of the sample population, for many of the award type/size categories we selected all available awards. For some categories (particularly for the thematic research grants category) we had a larger number of awards. In these cases, we adopted a random sampling approach in selecting awards to include for assessment. Figure 8 shows the distribution of award characteristics and sizes within the final sample of 50. It was not possible to conduct a VfM assessment for all 150 awards in the sample because of the resource-intensive nature of the assessment process.

[21] Add reference for main RQ++ report

[22] For further information on the sampling strategy used for RQ++, see 'Annex 5: Sampling Strategy' in BEIS. 2023. 'Annexes to GCRF Evaluation Research Quality Plus Plus Synthesis Report'. As of 12 June 2024: https://assets.publishing.service.gov.uk/media/65c4f1d714b83c000ca71574/evaluation_of_the_gcrf__assessment_of_research_quality__positioning_for_use_and_result_annex.pdf

Figure 8: Final sample of 50 awards Figure 4.

		Award type					Total
		Research grant (thematic)	Networks	Strategic investments	Applied/ Innovation	Early-mid career awards	
Award Quintile	*Highest 80%-100%*	7	0	0	5	0	12
	High 60%-80%	8	0	0	0	2	10
	Middle 40%-60%	5	3	3	0	8	19
	Lower 20%-40%	0	6	0	0	3	9
Total		20	9	3	5	13	50

For the assessment of these awards, we reviewed a mix of primary and secondary data collected over three years of this evaluation. Primary data used in these assessments were collected in prior GCRF evaluation activities. There was no primary data collection in this VfM module. The primary and secondary evidence reviewed for the present study included:

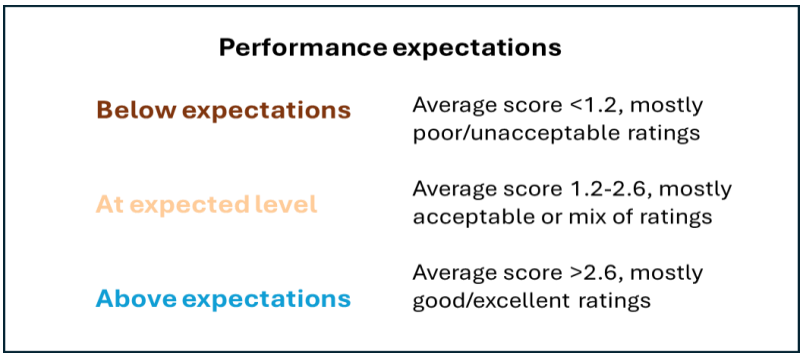
- previous qualitative analyses of each award (RQ++ assessments)
- survey data from PIs and/or partners, matched to grant ID
- bibliometric evidence from data science
- proposal and project documentation, including application documents, progress updates and monitoring and evaluation (M&E) reports
- key informant interviews with PIs/partners where available.

This evidence was used to assess VfM of the 50 awards and provide a rating with qualitative justification. The scores were analysed at three levels: Fund-wide performances, dimension-specific observations, and trends in each subdimension.

VfM was assessed at the Fund level by comparing differences in average scores across different input versus output dimensions, as well as highlighting recurring themes/findings with respect to different award categories.

At the dimension level, awards were assessed as performing below expectations if the average score for that dimension was less than 1.2 (which suggests most or all ratings for the subdimensions were 0 or 1), acceptable if the average for the dimension was between 1.2 and 2.6 (suggesting that most ratings for the subdimensions were 2, or that there was a mix of ratings), and above expectations if the average for the dimensions was above 2.6 (suggesting that most or all ratings for the subdimensions were 3 or 4). Performance expectations are summarised in Figure 9 below.

Figure 9: Award performance expectations



In each subdimension, awards were disaggregated based on several characteristics, such as grant size, type of award, and nationality of the PI (UK or LMIC, based on proposal documentation and/or funding scheme). Qualitative evidence was further used to identify/validate patterns and correlations observed from quantitative scorings.

2.3. Strengths and limitations of the study

2.3.1. Strengths

The strength of this study lies in the robustness of the rubric and VfM evidence. First, the assessment rubric has been developed in consultation with POs and grant officials, which contributes to its credibility and improves the relevance of its subdimensions to diverse GCRF awards. It was also developed and refined based on evidence from the earlier phases of the GCRF evaluation. Second, the award-

level evidence used in assessing VfM was triangulated from different sources and desk research to confirm key outputs and outcomes of most projects. Third, each award analysis was cross-checked and ratings were reviewed to maintain consistency and robustness of our scoring. This was achieved through regular harmonisation meetings during award assessment and moderation meetings after each phase. Finally, the process is transparent, with scoring against clear criteria and full reporting of the methodology used.

The rubric offers valuable insights on the value generated from GCRF. It also contributes to methodological advancements in and learnings for future VfM analysis of GCRF and ISPF.

2.3.2. Limitations

One limitation of this study is that it only analyses VfM for 50 awards. While the sampling process aimed to include a diversity of award types and sizes, most awards included in this analysis were thematic research grants, limiting the diversity of the sample. As such, this sample cannot be considered as representative of the larger portfolio of awards funded under GCRF. The assessment was also based on evaluative reasoning building on evidence collected through primary and secondary sources.

The analysis was affected by lack of post-award documentation for most awards. For example, data on cost-effectiveness were not readily available for many awards, as these require regular follow-up after project closure. Gateway to Research was the main source of evidence for follow-on funding. However, this only covers UKRI awards and only provides information (typically) on follow-on funding to the PIs which are mostly UK based. Therefore, we had very little information on further funding to LMIC partners.

At times this limitation also extended to proposal documentation, because of a lack of uniformity in information required at the application stage. For example, allocation of funds within the proposed budget was not provided by all awards, affecting our ability to derive financial information in these cases. This led to varying levels of evidence between different award types.

We mitigated some of these challenges by incorporating levels of confidence in the evidence while making assessments and by expanding our sources of evidence to also include project websites/LMIC news reports.

3. Findings

The following subsections present findings across the four VfM dimensions – Economy, Efficiency, Effectiveness and Cost-effectiveness. Overall, the evidence provided here offers assurance that the awards we have assessed largely offer good VfM, reinforced by wider investments into the work GCRF has funded. Evidence from this sample suggests that GCRF offers good VfM, with 88% of awards performing at or above the expected level across Economy, Efficiency and Effectiveness. There is very limited evidence to support an assessment of Cost-effectiveness. However, the available data for this sample of awards showed that the value of follow-on or matched funding obtained exceeded the value of the initial GCRF investment, which is a proxy measure suggesting – at least for this sample – cost-effectiveness.

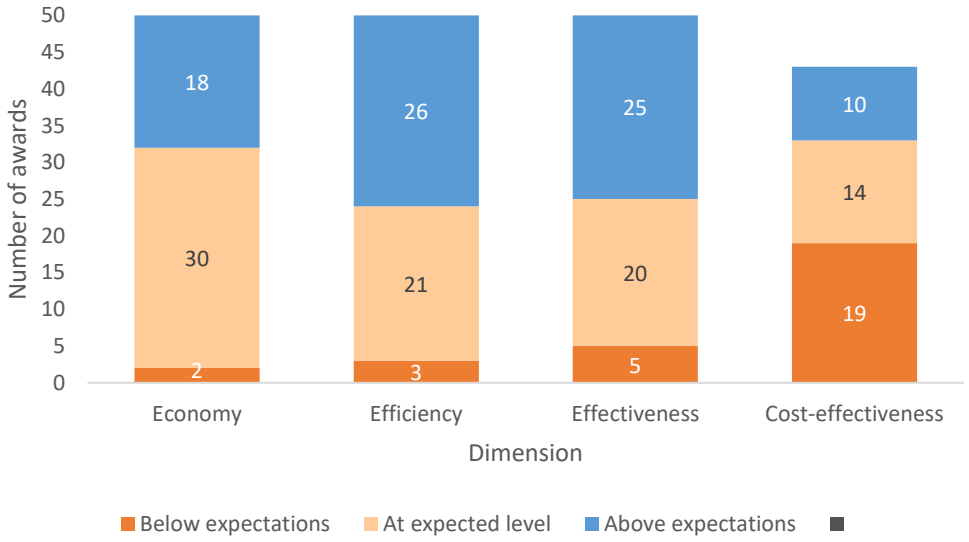
Although the overall performance across the sample is good, we see variation in performance at the subdimension level:

- Most awards (30 out of 50 awards, or 60%) performed at expected level or above expectations on all four dimensions. In total, 44 of 50 awards (88%) scored at expected level or above expectations on Economy, Efficiency and Effectiveness.
- Only 19 of the 50 awards (38%) scored a 2 (acceptable) on all subdimensions across Economy, Efficiency and Effectiveness. This implies that awards have different strengths and weaknesses and have had to focus their resources on specific aspects of performance.
- Across the sample, Economy was the dimension in which awards performed best, with only two awards scoring below expectations across the dimension. In particular, awards performed well on innovation and originality, with 38 of 50 rated as good or excellent in this subdimension.
- Across the sample, Cost-effectiveness was the dimension in which awards performed worst, with 19 awards performing below expectations. However, this may be more a reflection of limitations of the available data to make a proper assessment rather than of the awards themselves.
- Across the subdimensions, where there was sufficient evidence to make a proper assessment, EDI practice within awards (subdimension 1.3) was the worst-performing, with an average score of 1.9. Although 19 awards

considered EDI aspects in project design, rationale and methodology (including analysis), a further 21 awards only considered EDI at the design stage or not at all.

- We observe some differences in performance by award type, and across the set depending on different areas of focus (e.g. research quality, EDI, partnership and collaboration development): network awards were the best performing type of award across the subdimensions, performing above expectations on Economy, Efficiency and Effectiveness. In contrast, awards as part of the strategic investment categories performed poorest across Economy and Effectiveness, although still scoring at expectation.

Figure 10: Number of awards performing below, at or above expectations by VfM dimension



Detailed findings for each dimension are presented in the remainder of this chapter. Performance of awards across all subdimensions are available in Annex C. We provide examples of below, at and above expectations performance in Table 2 below.

Table 2: The number of awards performing below, at and above expectations across Economy, Efficiency and Effectiveness and descriptions of their performance characteristics.

Dimension	Performance assessment	Number of awards	Description
Economy: willingness to invest in foundations for impact	Below expectations	2	On average, awards performing “below expectations” were considered to marginally add to the existing evidence base on a topic, have minimal or no investment in interdisciplinary research, did not include EDI in its design or implementation, and did not utilise equitable research practices. Awards in this performance category scored “unacceptable” or “poor” in at least three subdimensions of the rubric. EDI and equitable partnerships were the subdimensions where awards performed lowest.
	At expected levels	30	On average, awards performing “at expected levels” were considered to add to the existing evidence base on a topic, be relevant to research users, have some investment in interdisciplinary research, consider EDI in its design, and include aspects of equitable research in design and conduct. Awards in this performance category scored mostly “acceptable” or a mixture of scores across all subdimensions.
	Above expectations	18	On average, awards performing “above expectations” were highly innovative (new approach or new area of research), showed good level of investment into processes to support interdisciplinarity, considered EDI in its design, and utilise project resources to encourage equitable partnerships. Awards in this performance category scored “good” in at least three subdimensions of the rubric or “excellent” and “good” in at least two

			subdimensions of the rubric. Investment in interdisciplinary design was the subdimension where most awards in this category performed well.
Efficiency: engagement and willingness to invest in outputs	Below expectations	3	On average, awards performing “below expectations” were considered to have minimal investment in LMIC capacity building, allocate less than 25% research funding to LMIC partners, and produce research outputs that were poorly aligned with national/regional priorities and not tailored for stakeholder audiences. Awards in this performance category scored “unacceptable” or “poor” in all three subdimensions of the rubric. All three awards in this category scored “unacceptable” in equitable balance of research funding and two out of three scored “poor” in LMIC capacity building.
	At expected levels	21	On average, awards performing “at expected levels” were considered to have invested an acceptable amount in LMIC capacity building, with some activities designed to improve individual and institutional skills, allocate between 25-50% research funding to LMIC partners, and produce research outputs that were partially aligned with national/regional priorities and tailored for stakeholder audiences. Awards in this performance category scored mostly “acceptable” or a mixture of scores across all subdimensions.
	Above expectations	26	On average, awards performing “above expectations” were considered to have significant investment in LMIC capacity building, with a broad range of activities for researchers at different career stages, allocate above 25%

			research funding to LMIC partners, and produce research outputs that were mostly aligned with national/regional priorities, tailored for stakeholder audiences and near investment/implementation ready. Awards in this performance category scored “good” in at least two subdimensions of the rubric or “excellent” in at least one subdimension of the rubric. Equitable balance of research funding was the subdimension where most awards in this category performed well.
Effectiveness: investments to act on outputs to deliver outcomes	Below expectations	5	On average, awards performing “below expectations” were considered to have minimal or no interdisciplinary/multidisciplinary approach to research, did not establish sustainable international interdisciplinary partnerships, led to minimal improvement in individual and institutional capabilities to address challenge-oriented problems, and had minimal stakeholder engagement with research outputs. Awards in this performance category scored “unacceptable” or “poor” in at least three subdimensions of the rubric. Equitable partnerships was the subdimension where most awards in this category scored low.
	At expected levels	20	On average, awards performing “at expected levels” were considered to have conducted research using an appropriate interdisciplinary/multidisciplinary approach, established international interdisciplinary partnerships with efforts to sustain these partnerships, led to enhanced capabilities to address challenge-oriented problems in a limited set of partners and had good stakeholder engagement with research

			outputs. Awards in this performance category scored mostly “acceptable” or a mixture of scores across all subdimensions.
	Above expectations	25	On average, awards performing “above expectations” were considered to have conducted research using a good or exceptional interdisciplinary/multidisciplinary approach, established sustainable international interdisciplinary partnership with broad engagement, led to enhanced capabilities to address challenge-oriented problems across partners and countries and had good stakeholder engagement with research outputs and developing next steps. Awards in this performance category scored “good” in at least three subdimensions of the rubric or “excellent” and “good” in at least two subdimensions of the rubric. High-quality research and innovation positioned for use was the subdimension where more awards in this category performed well.

Dimension 1: Investment in foundations for development impact (Economy)

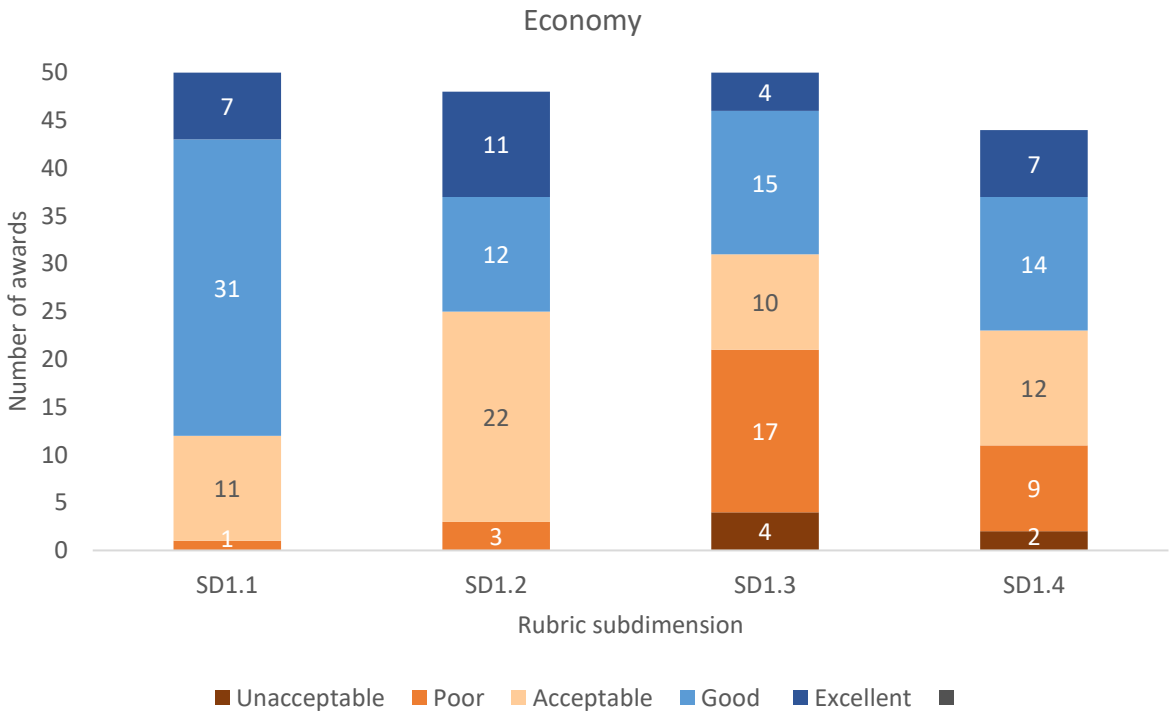
Dimension 1, Economy, assesses the extent to which awards invested in foundations for development impact. It investigates whether awards developed and invested in the right inputs, including staff, resources and processes, to drive impact in challenge-led, interdisciplinary and international research for development. This includes (1) research innovation and originality, (2) interdisciplinarity and cross-sectoral research designs, (3) EDI, and (4) equitable partnerships and collaboration. These four areas are taken from the initial R&I activities and activity to results assumptions articulated in the GCRF ToC. We therefore established these as measures of Economy in this VfM assessment. Box 3 provides a summary of the key findings for this dimension.

Box 3: Key findings on Dimension 1 – Economy

- Across the sample, awards performed at the expected level with regard to Economy, with an average rating of 2.4, suggesting appropriate use of investment in foundations for development impact across awards.
- Subdimension 1.3 (EDI) was the worst-scoring subdimension across award types, with most award types only performing at expectations on average.

A summary of award ratings across the subdimensions within Economy is presented in Figure 11. On average, the sample performed above expectations across the dimension, performing particularly well on subdimension 1.1, with most rated as good, with awards pursuing innovative research that considers and aims to address the needs and priorities of end users. Across all award types, awards were weakest on subdimension 1.3 (EDI), which was one of the weakest-performing subdimensions across the rubric; most award types performed at expectations on average, addressing some aspects of EDI throughout the award but not including EDI in the project's rationale, design or methodology.

Figure 11: Summary of award rating by subdimension within Economy



SD1.1	Research innovation / originality
SD1.2	Investment in interdisciplinary cross-sectoral research in design
SD1.3	Investment in equality, diversity and inclusion processes (Equity)
SD1.4	Investment in equitable partnerships and collaborations in design (Equity)

Two award types – networking and applied innovation awards – performed above expectations across the Economy dimension. The strong performance of network awards was supported by their above expectations performance on subdimension 1.3 (EDI), where all other award types performed at or below expectations. Performance of applied innovation awards was supported by consistent performance across the dimension, with particularly strong performance on subdimensions 1.1 (research innovation/originality) and 1.2 (interdisciplinarity).

Detailed findings for each of the subdimensions are provided in Annex D. A summary of these findings, along with a definition of the subdimensions, is provided

in Table 3. Box 4 provides anonymised examples of awards performing above and below expectations in Economy.

Box 4: Examples of above and below expectations performance on Economy

<table>
<tr><td colspan="4">Dimension: Economy

Award type: Network award

Funding level: Middle (£50,000–£151,789)

Overall score for Dimension 1: 3.5 (Above expectations)</td><td colspan="4">Dimension: Economy

Award type: Strategic investment

Funding level: Middle (£50,000–£151,789)

Overall score for Dimension 1: 1 (Below expectations)</td></tr>
<tr><td>SD1.1: 4</td><td>SD1.2: 4</td><td>SD1.3: 3</td><td>SD1.4: 3</td><td>SD1.1: 2</td><td>SD1.2: 1</td><td>SD1.3: 0</td><td>SD1.4: 1</td></tr>
<tr><td colspan="4">The award utilised its investment appropriately to support the development of a network that filled a gap in the relevant field of research related to cross-sectoral engagement that enabled the exploration of novel approaches to engagement, knowledge sharing and inclusive practices.

The network was considered original, filling a gap in the existing field with regard to stakeholder and community engagement, supporting community engagement as a means of aligning research to user needs. Activities included exploring new approaches such as participative engagement and citizen science methodologies, not yet used in the field of research of the award. The network was interdisciplinary, with partners from academia, industry, government, local</td><td colspan="4">The award was found lacking in utilising its investment to deliver on the objectives and aims of GCRF. The project was not considered innovative beyond creating a new dataset, it lacked an interdisciplinary approach and cross-sectoral engagement, and it fell short with regard to developing LMIC researchers, because of unequitable task distributions.

The approach was not groundbreaking but did address a relevant gap in understanding. Although the study explored gaps in scholarship and sought for form connections and synthesise data across varied contexts, it was not innovative per se.

The project was not interdisciplinary; it was carried out primarily by researchers from economic disciplines and related development studies. There was no evidence of processes to facilitate</td></tr>
</table>

authorities, non-governmental organisations (NGOs) and local communities, covering a variety of disciplines across the natural and social sciences, arts and education. The project also forms part of an **emerging set of initiatives** to support learning across national contexts in ways that have not been done previously. There was **a high level of awareness of EDI** issues and various forms of EDI monitoring across network activities, including monitoring contextual data on members (gender, discipline, sector, education level, and career stage of event participants) and minimum quotas for achieving gender, discipline/sector, and education/career stage balance in network-hosted events. Non-UK partners played the lead roles in the project, with **over 80% of the total budget allocated for an LMIC partner**. Project partners spoke of good working relations, underpinned by memoranda of understanding (MoUs), helping to support shared understanding of project aims, responsibilities and ways of working and co-design of the project.	**cross-sectoral or interdisciplinary ways of working** among the project team or collaborators. There is **no indication of EDI considerations** among the project team or with respect to project design, implementation or dissemination (including stakeholder engagement), although the award did focus on underserved populations. There was poor communication between LMIC and UK researchers, which extended to output production, and distribution of research tasks did not support capacity building and skills development of LMIC researchers, with examples of 'power imbalances' throughout. The assessment notes a lack of sufficient consideration of context and the needs of the affected population in project design, including lack of consultation of partners, as discussed above.

Table 3: Summary of findings on economy by subdimension

Subdimension	Description	Key findings
1.1. Research innovation/originality	This subdimension refers to the perceived importance and value of the knowledge and understanding generated by the research/innovation to key intended users. Importance is defined here in terms of (i) the perceived relevance of research processes and products to the needs and priorities of potential users and (ii) the contribution of the research to theory and/or practice. Investments to promote innovation might include scoping phases or inception phases to strengthen relevance and responsiveness to needs.	• The sample performed well on this subdimension, with most awards rated good or excellent. Well-performing awards spanned funding quintiles and types of awards. • Applied innovation awards performed particularly well, driven by their focus on innovation and therefore scoring highly on innovation/originality and interdisciplinarity. • ECR awards performed well, largely owing to leadership from LMIC PIs, which enabled a thorough understanding of local research gaps and needs, supporting relevance. • Network awards showed innovation, originality and relevance at lower levels of funding. • Thematic research grants performed above expectations on average, with middle quintile awards performing better than those in the high or highest quintiles
1.2. Investment in interdisciplinary cross-sectoral research in design	Interdisciplinary/cross-sectoral research is promoted because most development challenges are not monodisciplinary in nature and solution. Some exceptions may apply,	• The sample performed well on this subdimension, with most awards rated good or excellent. • Network awards performed well because of their focus on broad reach and engagement. Dedicated time and resources for communication and collaboration activities supported interdisciplinary and cross-sectoral approaches.

	but these should be clearly identified and justified.	• Applied innovation awards performed well, frequently including government, civil society organisations or the private sector as research partners or advisors and investing in communication and knowledge exchange activities. • Thematic research grants performed above expectations on average, with high quintile awards performing better than those in the middle and highest quintiles. • Longer-duration awards showed better interdisciplinarity, suggesting that longer grant periods may better enable stakeholder engagement, providing more opportunities for building relationships and trust.
1.3. Investment in EDI processes (Equity)	GCRF promotes research that supports diversity, equity and inclusion, facilitates empowerment of all relevant stakeholders, and builds the capacity of researchers to become leaders in diversity, equity and inclusion in research. EDI can be addressed through measures ranging from EDI aware to	• The sample performed poorly on EDI processes, with only 19 of 50 awards scoring good or excellent. Although this average score falls within the range for 'at expectations' performance, it is the lowest across all subdimensions, indicating a relative weakness compared to other areas within this sample. • Most awards scored poor or 'EDI aware', indicating a gap in the implementation of EDI principles beyond project ideation stages.

	EDI transformative. The assumption is that EDI requires resources to implement well.	• Network awards have performed well, owing to their emphasis on equitable engagements and diversity of perspectives among members. • The inclusion of EDI sensitive steps in data collection, analysis and M&E plans enabled most applied innovation awards to perform well in this subdimension.
1.4. Investment in equitable partnerships and collaborations in design (Equity)	Investments of time and resources are made to ensure fair negotiations and establishment of structures and processes to support equitable partnerships and address power imbalances and co-design of awards.	• The sample has performed well in this subdimension, with most awards rated good or excellent. • Network awards with higher funding outperformed networks in the lower quintile, revealing that higher resources may be required to establish project structures supporting co-design. • Thematic research grants in the high quintile performed better than those in the middle or highest quintiles, further indicating that higher resources may be supportive of equitable partnerships, although the highest levels of funding may not be necessary.

Dimension 2: Stakeholder engagement and willingness to invest in outputs (Efficiency)

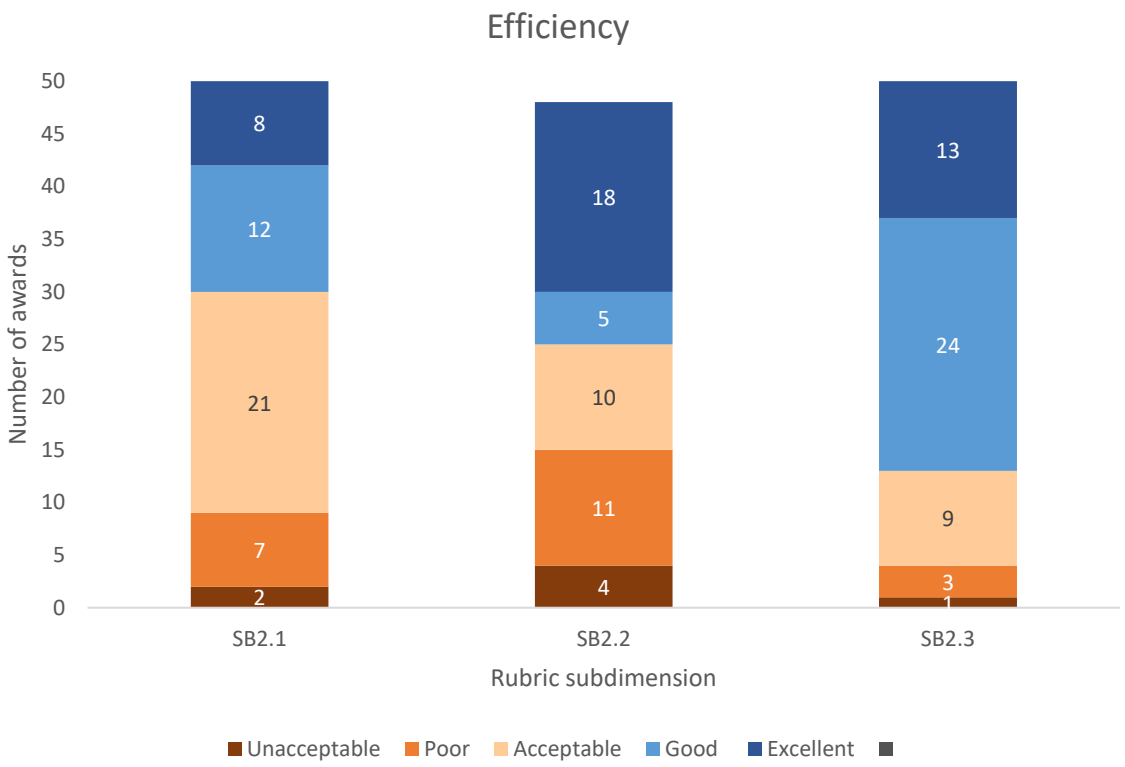
Dimension 2, Efficiency, assesses the extent to which awards planned inputs into collaboration and dissemination, including processes that support conversion of inputs into outputs and outcomes. Aligning with initial R&I activities and activities to results assumptions articulated in the GCRF ToC, the components of this dimension assume that investments supporting fair sharing of monetary and non-monetary benefits with LMIC partners are vital to establishing and sustaining an equitable partnership. This also extends to partnerships with non-academic stakeholders and enhancing their engagement with the research by investing in suitable communication platforms and formats. This includes (1) investment in LMIC capacity building, (2) equitable balance of research funding, and (3) effective sharing and communication of R&I outputs to wider audiences. A summary of the key findings on this dimension are provide in Box 5.

Box 5: Key findings on Dimension 2 – Efficiency

- Awards strongly focused on meaningful engagements with LMIC academic and non-academic stakeholders have performed well in this dimension.
- GCRF awards for the advancement of early and mid-career researchers appear to perform better when these are directly led by LMIC-based researchers as compared to those held by their UK-based counterparts.
- Significant administrative and financial challenges affected equitable distribution of research funding with LMIC partners in awards led by UK-based PIs.
- Reviewing proposal documentation for the awards, the median allocation to knowledge sharing for this set of awards was £24,239.50.
- Network awards score highly on communication and dissemination, even at lower levels of funding.

Awards within this sample performed well across the Efficiency dimension, with 47 of 50 awards performing at the expected level or higher. The sample performs at expectations across all subdimensions. The sample performs best on subdimension 2.3 (effective sharing and communication of research and innovation outputs to wider audiences), with an average rating of 2.9 and with most awards rated as good or excellent. Subdimension 2.1 (investment in LMIC capacity building) was the weakest subdimension within Efficiency, with an average score of 2.3. Figure 12 presents award ratings for subdimensions within Efficiency.

Figure 12: Award ratings for subdimensions within Efficiency



SB2.1	Investment in LMIC capacity building (Equity)
SB2.2	Equitable balance of research funding between UK and LMIC partners (Equity)
SB2.3	Investment in strategies to position research for use (e.g. comms)

Network and ECR awards performed best across the sample, with average ratings of 3.4 and 2.6 respectively. Notably, these award types overperformed on subdimension 2.2 (equitable balance of research funding), which had the poorest performance in Efficiency across the sample. Among ECR awards, there was a notable difference in performance by funding level. ECR awards in the lower funding quintile had a well-below-average score of 0.6, whereas ECR awards in the middle and high funding quartiles had average scores of 3.2 and 3.7 respectively. Lower quintile ECR awards were Springboard awards, given to UK-based ECRs, whereas middle and high ECR awards were FLAIR awards given to

LMIC-based ECRs, suggesting differences in performance on award subtype. Box 6 highlights anonymised examples of above and below expectations performance across Efficiency. Table 4 provides an overview of the subdimensions considered under this dimension, and key findings on each of these. Detailed findings by subdimension are set out in Annex E.

Box 6: Examples of above and below expectations performance across Efficiency

<table>
<tr><td colspan="3">Dimension: Efficiency

Award type: Network award

Funding level: Middle (£50,000–£151,789)

Overall score for Dimension 2: 4 (Above expectations)</td><td colspan="3">Dimension: Efficiency

Award type: Early mid-career

Funding level: Middle (£50,000–£151,789)

Overall score for Dimension 2: 0 (Below expectations)</td></tr>
<tr><td>SD2.1: 4</td><td>SD2.2: 4</td><td>SD2.3: 4</td><td>SD2.1: 0</td><td>SD2.2: 0</td><td>SD2.3: 0</td></tr>
<tr><td colspan="3">The award utilised its investment to deliver on its aim to develop LMIC capacity in the field of research of the award, allocated the vast majority of the project to LMIC activities and staff, and tailored activities and outputs to end users.

The award aimed to develop LMIC capacity through network creation and strengthening. The project identified relevant actors and stakeholders, created a network, and developed best practices and resources to improve capacity of network members.

The total amount allocated for LMIC staff and activities amounted to 87% of the total contribution. 55% of total requested contribution was requested</td><td colspan="3">The award performed poorly with regard to stakeholder engagement and willingness to invest in outputs that are fit for purpose. There was no budget allocated to LMIC partners or collaborators or to broader capacity building within the LMIC country of focus.

The proposed budget did not allocate money to training or capacity building, providing no opportunities for local technicians or stakeholders to gain experience from the project.

There is little evidence which points to LMIC-centric outputs or dissemination activities, with no involvement of LMIC partners or collaborators.</td></tr>
</table>

for costs associated with network events and dissemination and knowledge sharing, and 32% (at an average of 20.5% FTE) was requested for LMIC investigators, including dedicated funds for indirect costs, in addition to salary. Proposal financials indicate that **24% of the total requested contribution was requested for dissemination and knowledge-sharing activities and outputs.** The award focused on **engagement with end users** and conducted multiple activities with the aim of **knowledge dissemination and sharing** through varied activities and outputs, including discussion workshops, videos, social media and a dedicated website, and production of resources for best practice that were accessible.	A lack of LMIC perspectives at the design stage indicates that **project outputs were not tailored** in ways that would improve its relevance for further research/use in local contexts.

Table 4. Overview of subdimensions under Efficiency

Subdimension	Description	Findings
2.1 Investment in LMIC capacity building	There are resources dedicated to extensive planning for, and implementation of activities to enhance, research/innovation capabilities among LMIC partners, including (where relevant for the award): technical skill-building; mentorships; research management; PhDs, post-docs and early career opportunities; research infrastructure.	• The sample has performed moderately well in this subdimension, with most awards rated adequate. • Most awards ensured research opportunities and mentorship for ECRs as the direct pathway for building capacity in LMICs. • Early career fellowships awarded to LMIC-based PIs performed best, providing a direct investment in individual and institutional capacity building. • Middle quintile thematic research grants outperformed those in the high and highest quintiles.
2.2 Equitable balance of research funding	There is a significant share of funding allocated to LMIC partners as a measure of equity in partnership and support to LMIC partner benefit.	• The sample has performed well in this subdimension, with nearly half of awards scoring good or excellent. • Of the awards performing well, funding was proportionately allocated to LMIC partners for research staff, travel expenses, stakeholder engagement, training and dissemination. • Some LMIC partners faced challenges in access to or control over funding when the award was led by a UK-based PI.
2.3 Effective sharing and communication of R&I outputs	There is investment in the communication, promotion, packaging and positioning of research outputs for use above and beyond academic publishing.	• The sample has performed exceptionally well in this subdimension, with most awards scoring good or excellent. Most award types performed above expectations. • Network awards have outperformed rest of the awards in this subdimension, demonstrating value at lower levels of funding.

to wider audiences		• More time and resources are required to make adequate investments in non-academic channels of dissemination, as highlighted by awards funded for longer than two years.

Dimension 3: Potential to act on results to deliver outcomes (Effectiveness)

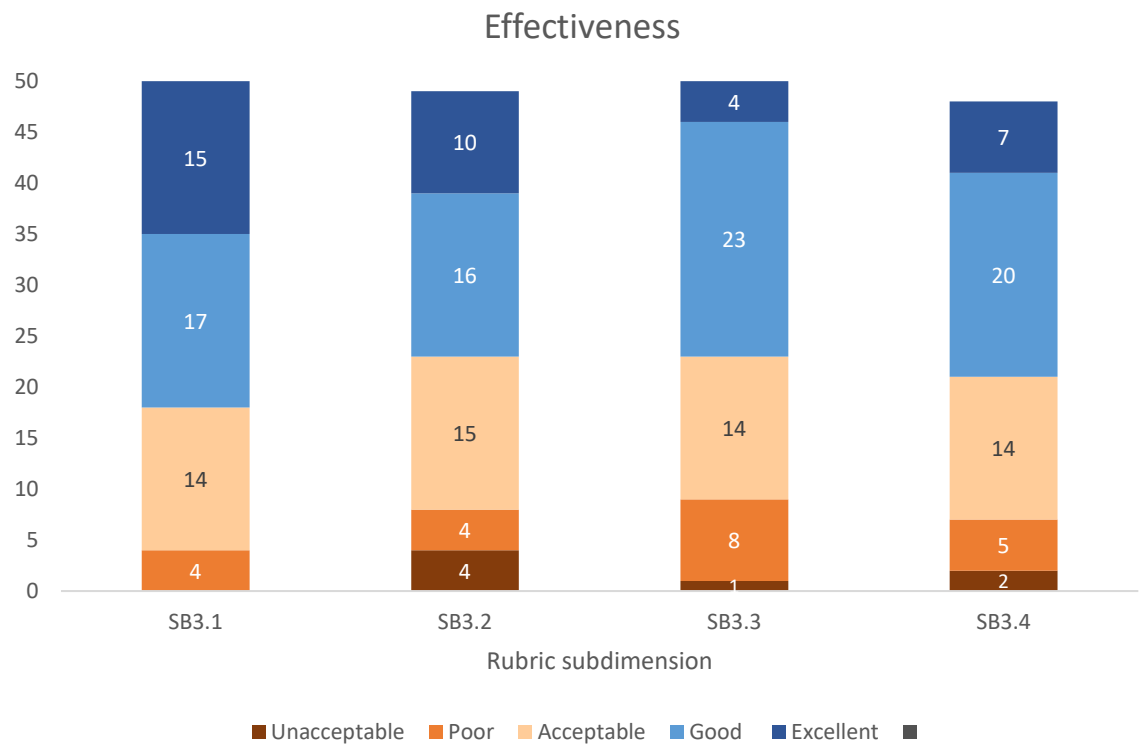
Dimension 3, Effectiveness, assesses investment to act on results to deliver outcomes. This includes (1) high-quality interdisciplinary R&I, positioned for use, (2) sustainable global R&I partnerships established across geographies and disciplines, (3) enhanced challenge-oriented capabilities for R&I, and (4) stakeholder networks established across research policy and practice, civil society and enterprise in partner countries, internationally and in the UK. These four areas are taken from the expected results set out in the GCRF ToC. According to the ToC, there should be good evidence of these results by year 5 of the Fund. We therefore established these as measures of effectiveness in this VfM assessment. Key findings for this dimension are presented in Box 7.

Box 7: Key findings on Dimension 3 – Effectiveness

- Awards with a duration of two years or longer scored better than shorter awards, mainly due to having more time to consolidate partnerships and networks which support Effectiveness.
- Networks performed disproportionately well across the whole dimension, and appear to offer particularly good VfM for awards in the lower and middle quintiles.
- Strategic investments and lower quintile early and mid-career awards performed poorly across the whole dimension, with little to no engagement with LMIC partners or strategies to position research for use.

Awards performed at expectations on average across the Effectiveness dimension, with 25 of 50 awards performing above expectations across the dimension. Award ratings across Effectiveness subdimensions are presented in Figure 13.

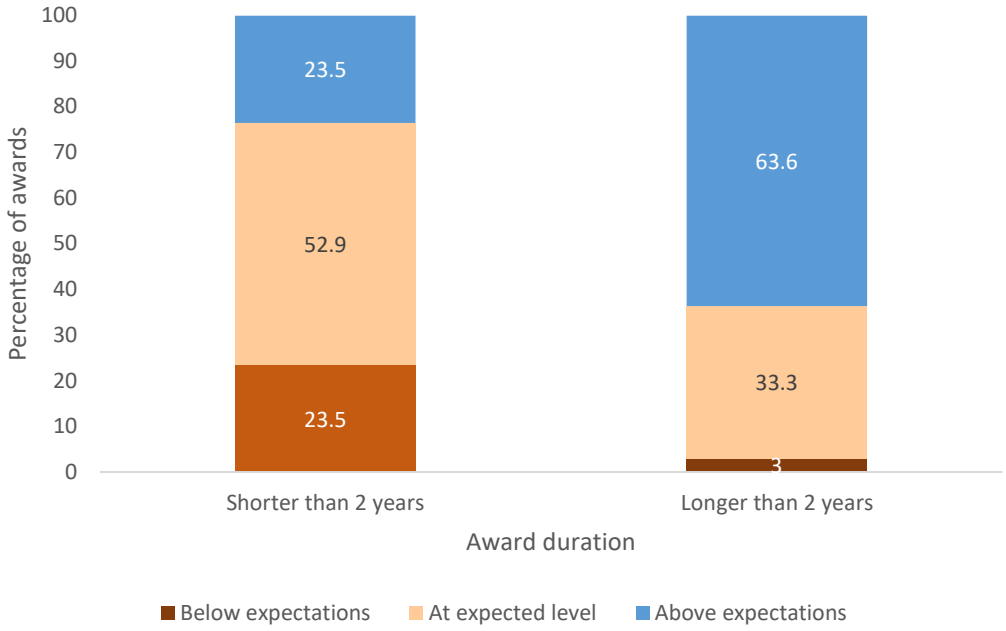
Figure 13: Award ratings across subdimensions within Effectiveness



SB3.1	High-quality research and innovation, positioned for use
SB3.2	Sustainable, equitable partnerships (Equity)
SB3.3	Enhanced challenge-oriented capabilities (Equity)
SB3.4	User-side stakeholder networks established

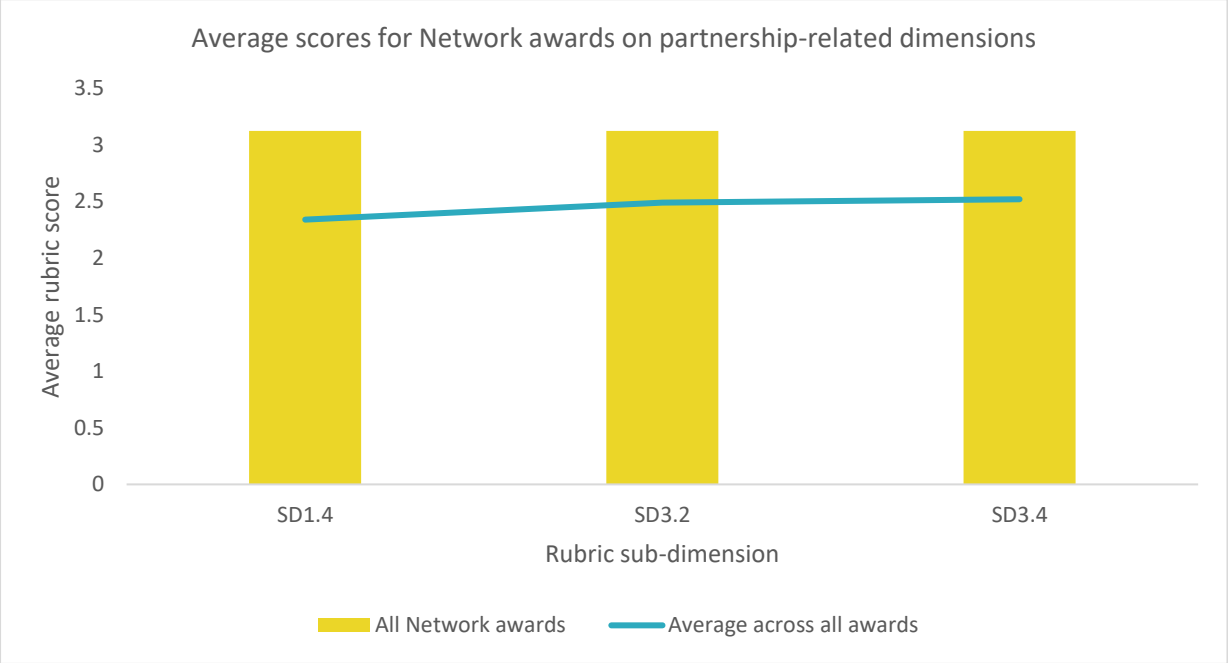
For the Effectiveness dimension overall, there are two key factors related to good performance: award duration and networking awards. Projects lasting two years or longer have scored better against Effectiveness subdimensions. Figure 10 shows the percentage distribution of average scores for four subdimensions under Effectiveness. Awards lasting at least two years have scored higher ratings on average – 21 awards in the green category, as opposed to four for awards lasting less than two years. This suggests that giving awards more time to develop their project is a key driver of achieving results.

Figure 10. Percentage of awards scoring above, at or below expectations on Dimension 3, by duration



Network awards performed better than the sample as a whole in subdimensions relating to partnership: this applies to subdimensions 1.4 (investment into equitable partnerships), 3.2 (sustainable, equitable partnerships) and 3.4 (user-side stakeholder networks established) (Figure 11).

Figure 11. Average scores for network awards on partnership-related subdimensions



SD1.4	Investment in equitable partnerships and collaborations in design (Equity)
SB3.2	Sustainable, equitable partnerships (Equity)
SB3.4	User-side stakeholder networks established

Network awards' investment into equitable partnerships has been rated higher than overall standards, as more awards have been rated good or excellent. For subdimension 3.2, across all awards, most have scored in the middle range of 2–3, and network awards have performed better on this dimension – half of these scoring an excellent. For subdimension 3.4, although most awards are rated as good in both categories, the proportion is higher for awards made specifically as network grants.

Box 9: Key findings on Dimension 4 – Cost-effectiveness provides anonymised examples of awards performing above and below expectations across the Effectiveness dimension. Table 5 provides an overview of the subdimensions considered under Effectiveness and key findings by subdimension. More detailed information on the findings by subdimension are presented in Annex F.

Box 8: Examples of awards performing above and below expectations in Effectiveness

<table>
<tr><td colspan="4">Dimension: Effectiveness

Award type: Early mid-career

Funding level: Middle (£50,000–£151,789)

Overall score for Dimension 3: 4 (Above expectations)</td><td colspan="4">Dimension: Effectiveness

Award type: Early mid-career

Funding level: Lower (£24,425–£50,000)

Overall score for Dimension 3: 0.5 (Below expectations)</td></tr>
<tr><td>SD3.1: 4</td><td>SD3.2: 4</td><td>SD3.3: 4</td><td>SD3.4: 4</td><td>SD3.1: 1</td><td>SD3.2: 0</td><td>SD3.3: 1</td><td>SD3.4: 0</td></tr>
<tr><td colspan="4">The award used its resources effectively to position the research for uptake, tailoring outputs to diverse audiences and using an interdisciplinary approach to support research into a key global development challenge.

The project used an interdisciplinary approach to produce new insights in policy and practice and developed an innovative product.

The interdisciplinary research addressed a key global development challenge and led to new thinking about the challenge at the research-to-practice interface.

The methodology developed through the award has been widely applied in policy and practice thanks to effective media and communications dissemination.</td><td colspan="4">The award did little to position the research for uptake, with little evidence on the use of its research outputs by academics or wider stakeholders, and collaborations and capacity building limited to the UK institution.

Only 2.5% of the total requested funding was allocated to dissemination, which consisted of participation in conferences, journal publication and dataset release. The project produced a publicly available dataset, although there is little evidence on its use. Similarly, there is little evidence on whether/how the findings were translated into policy impact or uptake among other researchers.

External stakeholders were not involved at the design or delivery stage. Collaboration was mainly with UK experts within the UK institution, with no LMIC/Global South partners and no plans at proposal stage for new</td></tr>
</table>

Insights were adapted to suit key and diverse audiences, including through peer-reviewed academic journals or policy-oriented publications, academic talks, policy-oriented presentations, media outputs and non-traditional outputs, including development of a game.	**partnerships**. The proposed budget also made no allocations to training at the planning stage, and any form of capacity building was limited to UK researchers and technicians.

Table 5. Overview of subdimensions under Effectiveness

Subdimension	Description	Findings
3.1 High-quality interdisciplinary research and innovation, positioned for use	R&I that has been designed, delivered and promoted in ways that help address key development challenges is considered high-quality. Interdisciplinarity is promoted because most development challenges are not monodisciplinary in nature and solution. Positioning for use is key. May be assessed looking at using (i) associated publications or (ii) associated non-formal outputs (e.g. patents, art installations).	• Awards of all sizes performed well in this subdimension, with good and excellent scores distributed across all quintiles. • Smaller network awards performed particularly well. • Early and mid-career awards perform less well in this subdimension, particularly those which fall into the lower quintile.
3.2 Sustainable global R&I partnerships established across geographies & disciplines	Partnerships are expected to sustain over time, working through multiple funding cycles and projects over time. In terms of sustainability, elements to consider include: likely sustainability of the partnership beyond the duration of the award; alignment of interests and purposes among the partners; clear value to all parties in the partnership; etc. Bibliometric information may support this assessment, including evidence on partnerships continuing post-award. Examples of this may include co-funding or co-authored publications following the award end date.	• The evidence shows that both award size and type have an impact on achieving sustainable, equitable partnerships. • Smaller awards were more likely to perform poorly, particularly lower quintile early and mid-career awards and strategic investments. • Networks, on the other hand, performed disproportionately well for awards in the lower and middle quintiles.

3.3 Enhanced challenge-oriented capabilities for R&I	Institutional and individual capabilities to address challenge-oriented problems call for capacities to work in respectful partnerships across countries and disciplines; in addition, they call for infrastructures that support equitable and fair partnerships that share decision making as well as action. These include administrative and decision systems (management, decision making, fundraising, financial management and fairness, technological and information management systems) as well as communications that are equitable and fair.	• Middle and high quintile fellowship awards performed best in this subdimension. • In contrast, lower quintile early and mid-career awards performed poorly; all three were rated as poor. • Network awards again performed well; 7 of 9 were rated as good.
3.4 Stakeholder networks established across research policy and practice, civil society and enterprise in partner countries, internationally and in the UK	Use of findings from research or innovations is the goal of challenge-oriented R&I. The global – or at least multinational – nature of development challenges calls for networks to promote and support use. Networks will include stakeholders from policy, practice and business, together with researchers/innovators, engaged in promoting and advocating for use.	• There is lower confidence in evidence overall for this subdimension. • 54% of the sample was rated good or excellent in establishing user-side stakeholder networks, with an average score of 2.52. • Networks were all rated good, with the exception of one score of excellent. • Thematic research grants in the middle quintile were less likely to perform well

		than those in the high or highest quintiles.

Dimension 4: Cost-effectiveness

Dimension 4 assesses the extent to which awards were cost-effective. The dimension aims to understand how many units of benefit the intervention (i.e. GCRF award) would have to generate before the value of the benefits outweighs the costs. It is not possible to conduct a formal cost-effectiveness analysis for most awards, because many of the aspects of value generated from GCRF awards are non-monetisable. Rather, we use a proxy measure – the level of wider investment into GCRF-funded work from other sources – which provides an indication of the 'value' placed on that work by wider stakeholders. As such, we have three subdimensions which aim to capture information on wider investment, as follows: (1) leverage of investment from non-GCRF sources in implementation per £1 of GCRF funding, (2) LMIC PIs or co-investigators (co-Is) secure further research funding per £1 of GCRF funding, and (3) co-funding achieved from other sources per £1 of GCRF funding. In addition, we also captured any information available on wider assessments of cost-effectiveness conducted as part of the awards where that was possible. Box 9 provides a summary of key findings.

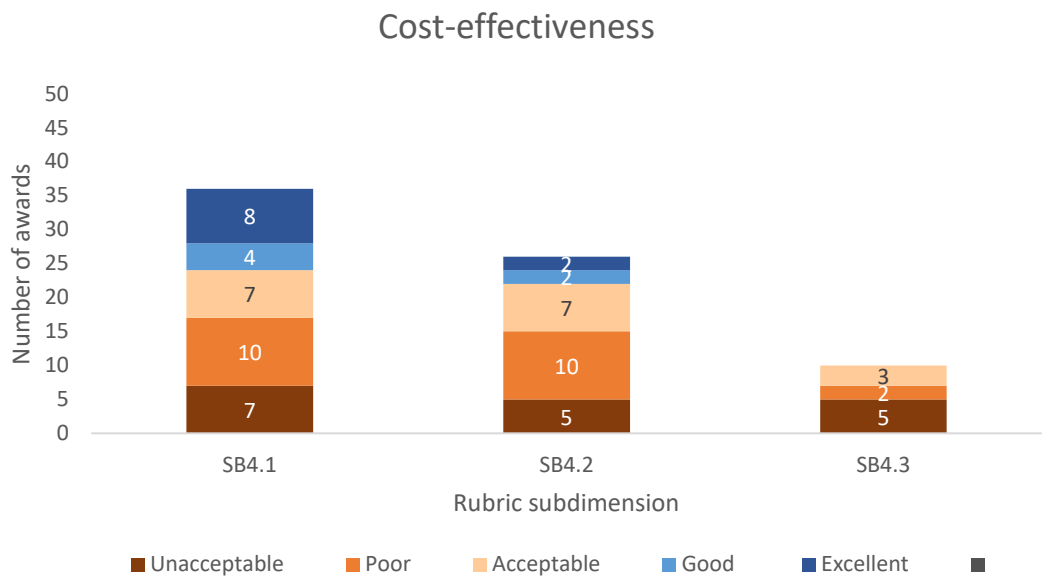
Box 9: Key findings on Dimension 4 – Cost-effectiveness

- We lacked evidence to make reliable and confident assessments for cost-effectiveness and subdimensions, mainly because of a lack of post-award reporting and a reliance on UK-based reporting systems likely to underreport on LMIC researchers.
- We identified follow-on or co-funding totalling £74.6 million related to our sample of 50 awards. This compares to the GCRF investment of approximately £30 million for our sample. This value is likely to be underrepresented because we had no evidence on follow-on funding for 14 awards and were only able to assess co-funding for 10 awards.
- A sensitivity analysis found that our sample secured additional investment of between 0.3 and 4.9 times the initial investment in the portfolio, indicating substantial variation across awards.
- Based on limited available information, approximately £1.5 million of known further research funding went to LMIC-based researchers, representing approximately 2% of the £74.6 million of total follow-on or co-funding related to our sample.
- The majority of the non-GCRF funding came from a small number of awards. Moreover, these do not really align with any specific characteristics by award size, duration or type.

- A handful of awards within this sample conducted cost-effectiveness analyses as part of their M&E process, which showed positive cost-effectiveness ratios and positive returns on investments.

We identified follow-on or co-funding totalling £74.6 million related to our sample of 50 awards. This compares to the GCRF investment of approximately £30 million in our sample. **We calculated that the total further investment from wider sources was, on average, 2.5 times the initial investment in GCRF. However, this value should be treated with caution because this value is highly dependent on a small number of awards.** Figure 14 presents the ratings of awards across subdimensions within Cost-effectiveness.

Figure 14: Award ratings across subdimensions with Cost-effectiveness



SB4.1	Leverage of investment from non-GCRF sources per £1 GCRF
SB4.2	LMIC PIs secure further funding, per £1 of GCRF funding (Equity)
SB4.3	Matched funding achieved by a subset of innovation, market-facing awards per £1 of GCRF funding

Note: only awards with evidence sufficient for assessment are shown.

We conducted a sensitivity analysis by taking the top 40 and the bottom 40 awards in terms of their level of 'return' as characterised by further investment from other sources. We found that our sample secured additional investment of between 0.3 and 4.9 times the initial investment in the portfolio, showing how much this figure varies depending on the sample of awards chosen. **Although the overall level of additional investment exceeds the initial GCRF investment considerably in this sample, only 11 of the 50 awards had evidence of investment which exceeded their initial award value, and over half of the further investment identified (52%) came from just five awards.**

In one sense this is a conservative estimate, as we found discussions of many further awards but where no information on award value was provided. However, in another sense it is not conservative, as other prior work and awards may have also contributed to this further funding – we cannot easily say that these future investments are solely attributable to GCRF. This is not a 'return' in a formal sense, but it gives an estimate of value as seen by others based on their further investment in the work.

The vast majority (over 90%) of the follow-on funding was found in subdimension 4.1. There was little evidence regarding follow-on funding award to LMIC PIs and co-Is.

Table 6**Error! Reference source not found.** provides an overview of the subdimensions considered under Cost-effectiveness and our findings regarding each of them. These findings are set out in more detail in Annex G.

Table 6. Overview of subdimensions under Cost-effectiveness

Subdimension	Description	Findings
4.1 Leverage of investment from non-GCRF sources in implementation per £1 GCRF funding	Other, non-GCRF funders or businesses are willing to invest in the ideas/knowledge outputs from GCRF projects. For assessments, captured the value leveraged per £1 of GCRF funding if this was available and gave a rating with justification.	• Most of the additional funding leveraged beyond GCRF came from a small number of GCRF awards in our sample. Leveraging of investment from non-GCRF sources was not related to award characteristics, including type, size or duration. • There was a sparse evidence base to assess further funding for this subdimension, and hence there is a need for better data to be collected on investments leveraged.
4.2 LMIC PIs/Co-Is secure further research funding per £1 of GCRF funding	LMIC researchers have gained sufficient profile and capacities to mobilise follow-on funding for the work. For assessments, we recorded the value leveraged per £1 of GCRF funding if this was available and gave a rating with justification (qualitatively if necessary).	• Approximately £1.5 million of known further funding went to LMIC-based researchers, representing around 2% of the £74.6 million of total matched or follow-on funding in the sample. • There was a sparse evidence base with which to assess further funding secured by LMIC PIs, with 32% of awards in the sample lacking sufficient evidence for a rating on this subdimension. Of those rated, most had low or medium confidence in evidence
4.3 Matched funding achieved from other	For a subset of awards that are explicitly focused on innovation and market-oriented, co-funding.	• This subdimension was not applicable to 78% of the sample, as most awards were not market-oriented.

sources per £1 of GCRF funding	For assessments, noted the value leveraged per £1 of GCRF funding if this was available and gave a rating with justification.	• Awards assessed had an average rating of 0.8, indicating that the average was between unacceptable and poor, based on the evidence available. • Awards secured a range of co-funding between approximately £70,000 and £1.8 million per award.
4.4 Additional cost-effectiveness information	For this subdimension we aimed to capture qualitatively – including any quantitative information available – any additional information on cost-effectiveness available in relation to the award. Only a few awards, however, did cost-effectiveness calculations as part of their M&E processes.	• A formal methodology to assess cost-effectiveness of awards (by looking at total present value of costs and total present value of impact) was done by one delivery partner on their GCRF awards. This analysis found that these awards had positive cost-effectiveness ratios and positive returns on investments.

Conclusion and recommendations

Different award types provide different strengths, and it is challenging to perform well on across all dimensions.

Different award types are aimed at addressing different aspects of the GCRF ToC, and our evidence shows that the type of award may be more important in the assessment of VfM than the level of funding. This can be seen in scores for ECR awards and Thematic research grants, where awards within the middle and high funding quintiles perform similarly across all subdimensions.

Very few awards performed well on all subdimensions, suggesting that there are trade-offs to be made with different awards and award types emphasising and focusing resources on specific areas across the VfM rubric. For funders this reinforces the value of a portfolio approach with different types of awards, and it also means that care should be taken to align the funding mechanism with the intended outcomes, whether these be partnership development, capacity building, or other aspects denoted by the rubric subdimensions.

Recommendation: Future investments should tailor award type to intended purposes – for example, LMIC fellowship awards for capacity building or network awards for collaboration and network development – and ensure a mixed portfolio to address all the requirements of effective research for development.

Sustained stakeholder engagement was foundational to supporting value in alignment with GCRF's value proposition and requires dedicated resources.

Stakeholder engagement facilitated other actions that improve the value generated by awards. For example, stakeholder engagement provided contextual knowledge that enhanced research relevance and positioning for use, allowing awards to score above expectations on aspects of equitable partnerships, research uptake and capacity building.

Stakeholder engagement requires great resources, and having dedicated funds for these activities is an enabler. Across research awards (i.e. non-network awards), best-performing awards were those that had resources allocated at proposal stage to stakeholder engagement and collaborations throughout the duration of the project. This includes engagement beyond project design, such as dedicated staff and external viewpoint inclusion through advisory boards or similar structures. This is also supported by the outperforming network awards, where funding was explicitly aimed at building sustainable stakeholder networks, facilitating new partnerships building as a low level of investment that may be sustained beyond the award.

Although specific networking awards that are smaller in size can be effective, when trying to achieve networking and partnership development outcomes alongside original research or other activities, additional resources are required that reflect the time and effort involved in these relationship development processes. Therefore, outside of specific networking awards, larger award sizes should be considered if these outcomes are desired.

Recommendation: Allocate additional resources recognising the time needed for effective networking and partnership development with LMIC partners, either within other awards or as additional networking awards.

Network awards are an example of the benefits of an explicit focus on stakeholder engagement, as reflected by their performance across Economy, Efficiency and Effectiveness.

Furthermore, this type of award may be the best VfM, as they are generally low to middle-level investments that performed above expected levels across Dimensions 1, 2 and 3. Most network awards are provided to fill a gap in engagement across the field of research, particularly across LMICs, and it is therefore unsurprising that these awards add value to intended users, informed by interdisciplinary and cross-sectoral engagement in design, and facilitate the establishment of equitable partnerships and collaboration. Although network awards serve a specific purpose within the wider GCRF portfolio and hence could not form the entirety of the portfolio, they do reflect a good investment and provide a useful complement to other award types.

Recommendation: Network awards should be included as part of the portfolio of future investments to complement other award types.

Building interdisciplinary teams and/or networks takes time, and therefore awards with pre-existing partnerships or collaborations were more likely to perform above expectations across Economy and Effectiveness.

We see a distinct increase in performance with regard to positioning for use and wider uptake of findings for awards that are over two years in length. Longer-duration awards showed better interdisciplinarity, suggesting that longer grant periods may better enable stakeholder engagement, providing more opportunities for building relationships and trust. In addition, ECR awards, which generally require building networks from scratch, received lower scores on subdimensions of Economy and Effectiveness related to interdisciplinary and stakeholder engagement, compared to other award types, highlighting the need for sufficient time to build sustainable

networks and collaborations. Care should be taken when funding short-term awards that are intended to have a development outcome, because the VfM of these awards seems to be lower, at least for this sample.

Recommendation: Most awards should be at least two years in length in future investments to support dissemination and uptake of research findings.

Although most awards considered some aspects of EDI in their design, only a handful of awards did so at a level that would enable transformational change, such as long-term practical changes in structural power relations.

Awards perform least well on EDI relative to other areas covered by the VfM rubric. The evidence from this assessment suggests that, at least across the awards in the sample, there has been a lower level of focus on EDI relative to other considerations (e.g. relevance of research, networking and collaboration) and that there is room for improvement in this area. Broadly, some of the challenges observed correspond to the findings from previous GCRF evaluations. For example, we note that EDI considerations are largely limited to a focus on gender in most awards, with very few actively addressing other aspects of diversity. We also note that equity in research funding was an area of lower performance, and that most awards that performed well on this subdimension had an LMIC-based PI. Therefore, to perform well in terms of equity, future investments should consider awarding funds directly to LMIC PIs where possible.

Recommendation: Future funds should set expectations and provide support to award holders to take a wider lens when considering EDI, looking beyond just consideration of gender.

Having an LMIC PI, or significant LMIC involvement, enhances relevance and directly supports capacity building and equity, in line with GCRF's value proposition.

Involvement of cross-sectoral partners and stakeholders facilitated responsiveness to LMIC contexts and challenges. Awards that performed well had invested in partnerships beyond academic circles and ensured that Global South team members shared any resulting benefits, such as follow-on funding, authorship and networking opportunities.

The most common pathway to capacity building was through involvement of LMIC researchers. A total of 28 awards showed evidence of investments into upskilling

opportunities for postgraduate students and researchers in partner countries, leading to individual and institutional capacity building. In addition, the highest-scoring awards on enhancing capabilities were FLAIR Fellowships, which had capacity building as a central objective and provided funding directly to LMIC ECRs.

Recommendation: Future investments should aim to award funds directly to LMIC PIs where possible to improve equity and capacity building.

There is limited evidence to support the assessment of cost-effectiveness.

Data we were able to identify on cost-effectiveness are patchy and largely cover follow-on funding to UK researchers. The data available have largely been sourced from Gateway to Research. Some other sources of information were available to provide information on additional funding from wider sources. For example, UKSA awards typically had quantitative information on this available in their end-of-grant reporting documents. However, in these cases the information was time-consuming to extract from large narrative documents. Gateway to Research was a valuable source in providing the quantitative information on future funding related to GCRF awards in an easily accessible manner. However, there are some limitations. First, only UKRI awards are covered by this dataset. Second, the information provided is typically focused on further awards to UK partners, because they are more commonly the award PIs (who complete the ReseachFish return, which is the source of these data). Therefore, information on follow-on funding to LMIC partners is very limited. Finally, the data are self-reported and therefore might be incomplete or may include additional funding that is not directly linked to the GCRF award.

Recommendation: Future funds should consider collecting qualitative and quantitative information on cost-effectiveness and other measures relevant to ODA VfM in a systematic manner and in a way that also captures information on LMIC funding. Systematic capture of data on follow-on funding would enable a more complete quantitative assessment of cost-effectiveness for future funds. Similarly, systematic capture of award outputs and outcomes would provide a more comprehensive evidence base for VfM assessment in future funds.

Due to time lags, it is the first time that Effectiveness and Cost-effectiveness has been assessed, and it is likely that improved performance may be seen on these dimensions over time.

The Effectiveness dimension performed at similar levels to Economy and Efficiency (at or above expectations), but slightly lower scores for some award types may be

related to two things: (1) time lags in realisation of outcomes, as articulated in the GCRF ToC and (2) availability of evidence of outcomes, including incomplete capture of ‘non-academic’ outcomes, where the reporting may be patchy. Similarly, performance in cost-effectiveness may improve over time as different kinds of research may generate returns over longer timescales; however, additional information on cost-effectiveness is unlikely to be captured through existing monitoring and reporting mechanisms.

Recommendation: Assessment of VfM should consider time lags in realisation of outcomes and the availability of evidence to support non-traditional outcomes that are common to research for development.

4. References

Academy of Medical Sciences. 2024. ‘Springboard’. As of 31 May: https://acmedsci.ac.uk/grants-and-schemes/grant-schemes/springboard

BEIS. 2017a. ‘UK Strategy for the Global Challenges Research Fund (GCRF)’. GOV.UK. As of 31 May 2024: https://assets.publishing.service.gov.uk/media/5a822337e5274a2e87dc156d/global-challenges-research-fund-gcrf-strategy.pdf

BEIS. 2017b. ‘Global Challenges Research Fund (GCRF): How the Fund Works’. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/global-challenges-research-fund/global-challenges-research-fund-gcrf-how-the-fund-works#:~:text=GCRF%20forms%20part%20of%20the,the%20poorest%20people%20and%20countries

DFID. 2011. ‘DFID’s approach to Value for Money (VfM)’. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/dfids-approach-to-value-for-money-vfm

DSIT. 2023. ‘International Science Partnership Fund’. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/international-science-partnerships-fund-ispf/international-science-partnerships-fund-ispf

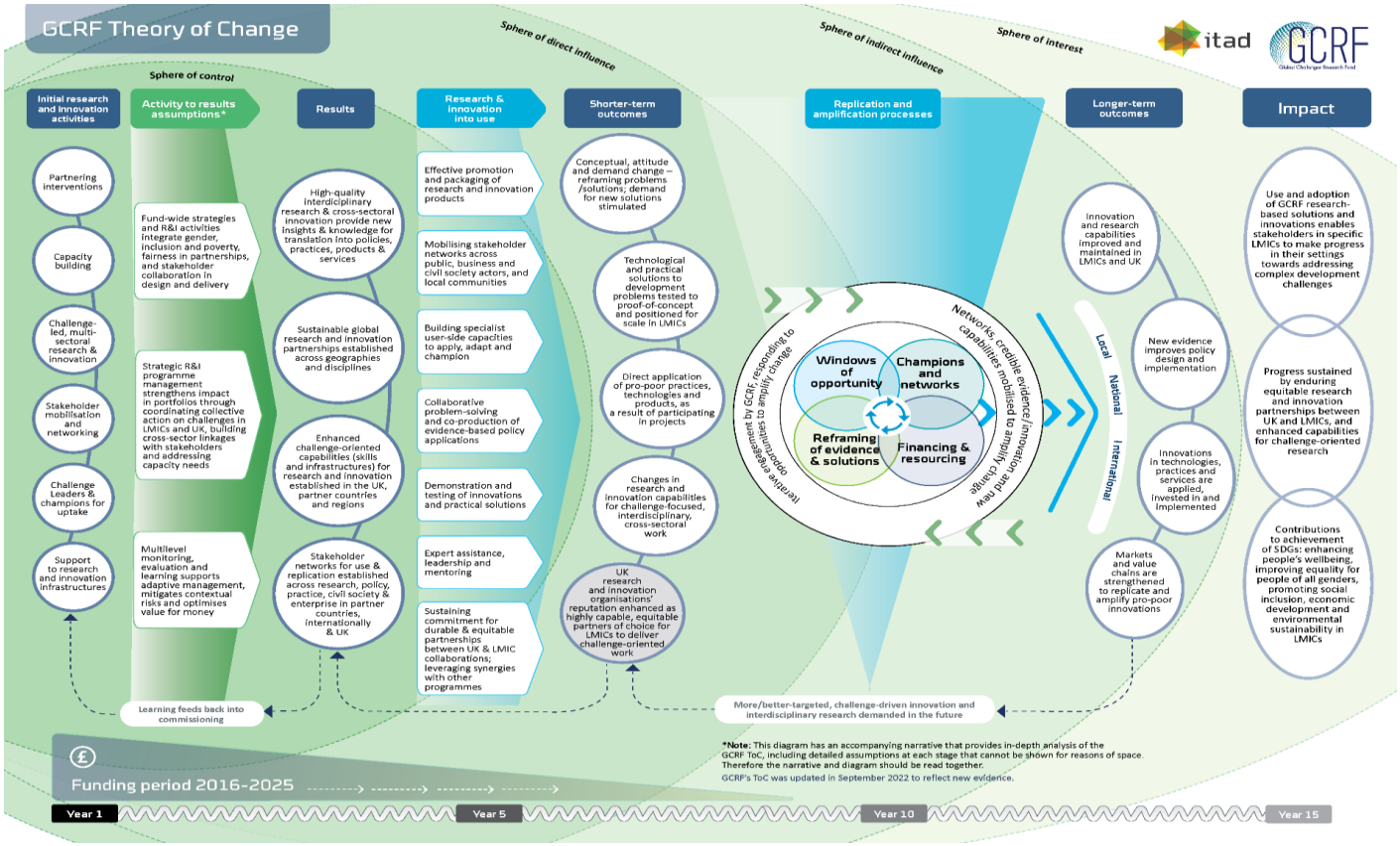
HM Treasury. 2019. ‘UK aid: tackling global challenges in the national interest’. GOV.UK. As of 31 May 2024: https://www.gov.uk/government/publications/uk-aid-tackling-global-challenges-in-the-national-interest

King, J. and OPM. 2018. ‘The OPM approach to assessing value for money: A guide’. Oxford Policy Management Ltd. As of 31 May 2024: https://www.opml.co.uk/sites/default/files/migrated_bolt_files/opm-approach-assessing-value-for-money.pdf

The Royal Society. 2024. ‘FLAIR Fellowships’. As of 31 May: https://royalsociety.org/grants/flair/

Wozniak, P. 2023. ‘Three years of UK aid cuts: where has ODA been hit hardest?’ Development Initiatives. As of 31 May 2024: https://devinit.org/resources/three-years-of-uk-aid-cuts-where-has-oda-been-hit-hardest/

Annex A: GCRF Theory of Change



Annex B: GCRF Value for Money assessment rubric

VfM assessment template

Project information

Grant ID/ref number	
Name of reviewer and date of review	
Project title	
Countries	
Institutions	
Project start date	
PO (e.g. funder) awarding	
Project duration and whether complete	

Project value (£)	
Brief description of project Please include one brief paragraph	

VfM assessment summary

When you have completed the whole assessment, please complete this table, giving an overview of the ratings.

Summary of award features and considerations Please note the award type, duration, completion status, date completed and amount of funding and indicate implications for subdimension relevance.	

1. Economy (Investments in foundations for development impact)	Rating	Confidence in evidence
1.1 Research innovation/originality		
1.2 Investment in interdisciplinary cross-sectoral research in design		
1.3 Investment in equality, diversity and inclusion processes (Equity)		
1.4 Investment in equitable partnerships and collaborations in design (Equity)		
2. Efficiency (stakeholder engagement and willingness to invest in outputs)	Rating	Confidence in evidence
2.1 Investment in LMIC capacity building (Equity)		
2.2 Equitable balance of research funding between UK and LMIC partners (Equity)		
2.3 Investment in strategies to position research for use (e.g. comms)		
3. Effectiveness (potential to act on results to deliver outcomes)	Rating	Confidence in evidence
3.1 High-quality research and innovation, positioned for use		

3.2 Sustainable, equitable partnerships (Equity)		
3.3 Enhanced challenge-oriented capabilities (Equity)		
3.4 User-side stakeholder networks established		
4. Cost-effectiveness	Rating	Confidence in evidence
4.1 Leverage of investment from non-GCRF sources per £1 GCRF funding		
4.2 LMIC PIs secure further research funding per £1 of GCRF funding (Equity)		
4.3 Matched funding achieved by a subset of innovation, market-facing awards per £1 of GCRF funding		

Dimension 1: Investments in foundations for development impact: Economy

1.1 Research innovation/originality							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
This subdimension refers to the perceived importance and value of the knowledge and understanding generated by the research/innovation to key intended users. Importance is defined here in terms of (i) the perceived relevance of research processes and products to the needs and priorities of potential users, and (ii) the contribution of the	The research/ innovation fails to build on and extend existing knowledge. It does not break new ground or make improvements in existing technologies and/or methods.	The research/ innovation marginally adds to what is already known in the field. The research is not innovative, is not well connected to what is already	Research adds to existing evidence base in some dimensions, brings limited innovation, and is relevant to user needs and priorities in	The research/ innovation presents fresh ideas, brings an innovative approach to solving existing challenges, and/or deals with a new, emerging issue worth pursuing. It is relevant	The research/ innovation is innovative and groundbreaking. It builds on existing knowledge in a substantive way, making significant advancements to technologies, methods, frameworks and techniques. It responds to user needs in		High Medium Low No evidence

1.1 Research innovation/originality							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
research to theory and/or practice. Investments to promote innovation might include scoping phases or inception phases to strengthen relevance and responsiveness to needs. Capture costs if possible, as £/% of whole award value.		known, and does not respond to user needs.	a broad way.	and aligned to user needs in specific contexts. It challenges taken-for-granted assumptions, builds on existing knowledge, and is well connected to what is already known.	LMICs in an explicit way.		

1.1 Research innovation/originality							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Assessment: Please enter your rating 0–4 (or N/A):							
Comment: Give brief rationale for choice.							
Confidence in evidence (high/medium/low/no evidence):							
Comment: Give brief rationale for choice.							

1.2 Investment in interdisciplinary cross-sectoral research in design							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Interdisciplinary/ cross-sectoral research is promoted because most development challenges are not monodisciplinary in nature and solution. Some exceptions may apply, but these should be clearly identified and justified.	No interdisciplinary/ cross-sectoral element in research where this would clearly benefit the intended research results.	Minimal investment into processes to support interdisciplinary/ cross-sectoral working, and only in marginal areas of the project.	Some investment into processes to support interdisciplinary/ cross-sectoral working in a few key areas of the project, but it is not a core feature of the project.	Good level of investment into processes to support interdisciplinary/ cross-sectoral working as an integral way of working in the award, e.g. internal communications, investment in learning, new methodologies in development.	Significant level of investment into processes to support interdisciplinary/ cross-sectoral working as an integral way of working in the award, e.g. internal communications, investment in learning, specialist staff, new		High Medium Low No evidence

1.2 Investment in interdisciplinary cross-sectoral research in design							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Capture £ of investments in interdisciplinary/ cross-sectoral approach if possible, as % of whole budget.					methodologies in development.		
Assessment: Please enter your rating 0–4 (or N/A):							
Comment: Give brief rationale for choice.							

1.2 Investment in interdisciplinary cross-sectoral research in design							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Confidence in evidence (high/medium/low/no evidence):							
Comment: Give brief rationale for choice.							

1.3 Investment into EDI							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
GCRF promotes research that supports diversity,	EDI unaware: EDI not considered	EDI aware: EDI – the differentiated	EDI sensitive: EDI is	EDI responsive: EDI is	EDI transformative: The project		High Medium Low

1.3 Investment into EDI							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
equity and inclusion, facilitates empowerment of all relevant stakeholders, and builds the capacity of researchers to become leaders in diversity, equity and inclusion in research. EDI can be addressed through measures ranging from EDI aware to EDI transformative. The assumption is that EDI requires	by the award in design at any stage.	and intersectional experiences of all intersectional groups involved or affected by the research (sexual, religious, racial, sociocultural and socioeconomic groups) – is considered in the project's	addressed throughout the award but does not (yet) extend to analysis and action to address inequalities.	considered in the project's rationale, design and methodology and is rigorously analysed to inform implementation and communication and to influence strategies. EDI responsiveness does not (yet) address	examines, analyses and builds an evidence base to inform long-term practical changes in structural power relations and norms, roles and inequalities that define the differentiated experiences of all groups. EDI transformative		No evidence

1.3 Investment into EDI							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
resources to implement well. Capture £ of investments into EDI approach if possible, as % of whole budget.		rationale, but is not an operative concept in the design and methodology.		structural power relations that lead to inequalities.	research should lead to sustained change through action (e.g. partnerships, outreach and interventions).		
Assessment: Please enter your rating 0–4 (or N/A):							
Comment: Give brief rationale for choice.							

1.3 Investment into EDI							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Confidence in evidence (high/medium/low/no evidence):							
Comment: Give brief rationale for choice.							

1.4 Investment into equitable partnerships and collaborations							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Investments of time and	Evidence suggests no	Evidence suggests	Evidence suggests an acceptable degree	Evidence suggests	Evidence suggests		High Medium

1.4 Investment into equitable partnerships and collaborations							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
resources are made to ensure fair negotiations and establishment of structures and processes to support equitable partnerships and address power imbalances and co-	equitable partnerships or collaborations. This could include project resources being used in an inequitable fashion and no evidence of co-design, fair opportunity, fair process, and fair	minimal equitable partnerships or collaborations. This could include project resources being used in an inequitable fashion and limited evidence of co-design, fair opportunity,	of equitable partnerships or collaborations. This could include project resources being used to encourage equitable partnerships, and evidence of some co-design and some fair opportunity, fair process, and fair sharing of benefits costs and outcomes.	positive equitable partnerships or collaborations. This could include project resources being used in a way that encourages equitable partnerships or collaborations, and evidence of a good extent of co-design, fair opportunity, fair process, and fair sharing of	highly equitable partnerships or collaborations. For example, project resources are being used in a way that encourages strong equitable partnerships or collaboration		Low No evidence

1.4 Investment into equitable partnerships and collaborations							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
design of awards. Capture £ of investments into partnership approach if possible, as £ and % of whole budget.	sharing of benefits, costs and outcomes.	fair process, and fair sharing of benefits, costs and outcomes.		benefits, costs and outcomes.	s, with evidence of significant co-design, fair opportunity, fair process, and fair sharing of benefits, costs and outcomes for all partners, including beneficiaries beyond the		

1.4 Investment into equitable partnerships and collaborations							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
					research partnership.		

Assessment: Please enter your rating 0–4 (or N/A):	
Comment: Give brief rationale for choice.	
Confidence in evidence (high/medium/low/no evidence):	
Comment: Give brief rationale for choice.	

Dimension 2: Stakeholder engagement and willingness to invest in outputs: Efficiency

2.1 Investment in LMIC capacity building							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
There are resources dedicated to extensive planning for and implementation of activities to enhance research/innovation capabilities among LMIC partners, including (where relevant for the award): technical skill-	There is no evidence that the research/innovation has invested in planning or implementation of activities to support improvements in capabilities for research/innovation among LMIC partners.	Evidence that attention to improving research /innovation capabilities was inadequate, with minimal investment towards improving individual skills or	Evidence of an acceptable level of attention to enhancing research/innovation capabilities of LMIC partners. This is present in the design and many of the activities of the project. An adequate level of investment can be seen	Evidence that significant attention was paid to the planning and implementation of research/innovation capability enhancement. There is a good range of activities to support LMIC partner capacities,	Evidence that there was extensive planning for and implementation of a wide range of activities to enhance research/innovation capabilities, including skills-building, publishing, research management, and capacity to		High Medium Low No evidence

2.1 Investment in LMIC capacity building							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
building; mentorships; research management;, PhDs, post-docs and early career opportunities; research infrastructure. Capture number of LMIC PhDs, number of LMIC post-doc researchers (FTE/headcount) and number of LMIC ECRs		institutional technological and information infrastructures or towards improving capacity to secure funding resources.	towards improving individual skills, institutional technological and information infrastructures.	including investments into PhDs, post-docs and early career opportunities to improve individual skills, publishing, management and capacity to secure funding resources. Alongside this, there was good support to institutional technological	secure funding resources. Alongside this, there was extensive financial support to institutional technological and information infrastructures.		

2.1 Investment in LMIC capacity building							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
(FTE/headcount), disaggregated by gender. Capture £ of investments into capacity development if possible, as £ and % of whole budget.				and information infrastructures.			
Assessment: Please enter your rating 0–4 (or N/A):							
Comment: Give brief rationale for choice.							

2.1 Investment in LMIC capacity building							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Confidence in evidence (high/medium/low/no evidence):							
Comment: Give brief rationale for choice.							

2.2 Equitable balance of research funding							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
There is a significant share of funding	Value of LMIC	Value of LMIC	Value of LMIC research	Value of LMIC research	Value of LMIC research		High Medium

2.2 Equitable balance of research funding							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
allocated to LMIC partners as a measure of equity in partnership and support to LMIC partner benefit. Where funding values are not available, please make a qualitative assessment based on the available evidence, but make clear in your narrative that these data were not available, and assess the confidence in evidence accordingly	research funding as percentage of total = 0%	research funding as percentage of total >0% but <25%	funding as percentage of total >25% but <50%	funding as percentage of total >50% but <75%	funding as percentage of total >75%		Low No evidence

2.2 Equitable balance of research funding							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Assessment: Please enter your rating 0–4 (or N/A):							
Comment: Give brief rationale for choice.							
Confidence in evidence (high/medium/low/no evidence):							
Comment: Give brief rationale for choice.							

2.3 Effective sharing and communication of research and innovation outputs to wider audiences							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
There is investment in the communication, promotion, packaging and positioning of research outputs for use above and beyond academic publishing. Capture £ of investments into positioning for use if possible, as £ and % of whole budget. Bibliometric information might support this	Research outputs not aligned with national/regional/ local gaps in knowledge, and/or research outputs are not visible and tailored for stakeholder audiences. No evidence of Altmetric	Research outputs minimal alignment with national/ regional/ local gaps in knowledge and/or that research outputs are not sufficiently visible and tailored for	Evidence that research outputs partially address national/ regional/ local gaps in knowledge and/or that outputs are tailored for stakeholder audiences and near investment-ready in part.	Evidence that research outputs mostly address national/ regional/ local gaps in knowledge and/or that outputs are tailored for stakeholder audiences and mostly near	Evidence that research outputs meet the full range of national/ regional/local gaps in knowledge and that the outputs are tailored for stakeholder audiences, investment-ready and implementable.		High Medium Low No evidence

2.3 Effective sharing and communication of research and innovation outputs to wider audiences							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
assessment using the Altmetric Attention Score.[23]	attention – score of 0.	stakeholder audiences. Low rates of Altmetric attention – score of 0<n<10.	Average levels of Altmetric attention - score of 11<n<20.	investment-ready. Above average levels of Altmetric attention – score of 20<n<30.	Top levels of Altmetric attention – score of 30<n.		
Assessment: Please enter your rating 0–4 (or N/A):							

[23] The Altmetric Attention Score for a research output provides an indicator of the amount of attention (social and traditional media, policy documents and patents) that the output has received. In general, a score above 20 means that the publication had received more attention than its contemporaries, and a score of 0 means the article received no attention.

2.3 Effective sharing and communication of research and innovation outputs to wider audiences							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Comment: Give brief rationale for choice.							
Confidence in evidence (high/medium/low/no evidence):							
Comment: Give brief rationale for choice.							

Dimension 3: Potential to act on results to deliver outcomes: Effectiveness

3.1 High-quality interdisciplinary research and innovation, positioned for use							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
R&I that has been designed, delivered and promoted in ways that help address key development challenges is considered high-quality. Interdisciplinarity is promoted because most development challenges are not	The research/innovation was not carried out with a multidisciplinary, interdisciplinary or transdisciplinary team or lens, where this would have been beneficial to the challenge being	The research/innovation included minimal representation of the disciplines that should have been represented to address the development challenge. Any insights, although potentially	The research/innovation was carried out by an appropriate interdisciplinary approach and/or team. It produced some new insights and knowledge in at least one of policy, practice, institutional, organisational,	The research/innovation was carried out by a good interdisciplinary approach and/or team. It produced several new insights and knowledge in at least two of policy, practice, institutional, organisational, systems,	The research/innovation was carried out by an exceptional interdisciplinary approach and/or team. It provided important new insights and knowledge for translation into policies, practices, institutional,		High Medium Low No evidence

3.1 High-quality interdisciplinary research and innovation, positioned for use							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
monodisciplinary in nature and solution. Positioning for use is key. May be assessed looking at using (i) associated publications or (ii) associated non-formal outputs (e.g. patents, art installations). Capture £ value of any innovations if	addressed, and did not provide new insights or advance the field. There is little to no likelihood of solutions to significant development challenges emerging. No evidence of (i) associated publications or	novel, were poorly presented and could not be effectively used for policy, practice, institutional and organisational, systems, product or service development. Little evidence of (i) associated	systems, product or service development. These were presented in a manner(s) suitable to most key audiences. Some evidence of (i) associated publications or (ii) associated	technology, product or service development. These were presented in a manner(s) tailored to key audiences/next users. Good evidence of (i) associated publications or (ii) associated	organisational or other systems development, technology, products or services, of value to and potential use by the intended stakeholders. A high degree of evidence of (i) associated publications or		

3.1 High-quality interdisciplinary research and innovation, positioned for use							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
applicable/possible. Bibliometric information might support this assessment where appropriate. Where bibliometric measures are used, we would consider the Field Citation Ratio (FCR) of the associated	(ii) associated non-formal outputs.	publications or (ii) associated non-formal outputs. FCR of associated publications 0<n<0.5.	non-formal outputs. FCR of associated publications 0.5<n<1.	non-formal outputs. FCR of associated publications 1<n<1.5.	(ii) associated non-formal outputs. FCR of associated publications 1.5<n.		

3.1 High-quality interdisciplinary research and innovation, positioned for use							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
publications.[24] Journal-level metrics will not be used.							

Assessment: Please enter your rating 0–4 (or N/A):	
Comment: Give brief rationale for choice.	
Confidence in evidence (high/medium/low/no evidence):	

[24] FCR "is a citation-based measure of scientific influence of one or more articles. It is calculated by dividing the number of citations an article has received by the average number received by documents published in the same year and in the same Fields of Research (FoR) category." Digital Science. 2022. 'What is the FCR? How is it calculated?' As of 12 June 2024: https://plus.dimensions.ai/support/solutions/articles/23000018848-what-is-the-fcr-how-is-it-calculated-#:~:text=The%20Field%20Citation%20Ratio%20%28FCR%29%20is%20a%20citation-based,in%20the%20same%20Fields%20of%20Research%20%28FoR%29%20category. An FCR value of more than 1.0 shows that the publication has a higher-than-average number of citations. Highly cited publications are those which rank in the top 1% per year within the same FoR.

Comment: Give brief rationale for choice.	

3.2 Sustainable global research and innovation partnerships established across geographies & disciplines							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Partnerships are expected to sustain over time, working through multiple funding cycles and projects over time.	The teams were unsuccessful in developing sustainable research/innovation partnerships. No evidence of post-award partnerships.	Some international partnerships were established, but these were very limited in scale and scope and are unlikely	International interdisciplinary research/innovation partnerships were established, with some limitations in scope and scale, e.g. academic partners only. With some effort to sustain	International interdisciplinary research/innovation partnerships were established successfully, including many of the key stakeholders. With some effort to sustain collaboration,	International interdisciplinary research/innovation partnerships were established successfully, with broad engagement across relevant disciplines and geographies, and they focused on		High Medium Low No evidence

3.2 Sustainable global research and innovation partnerships established across geographies & disciplines							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
In terms of sustainability. Elements to consider include: likely sustainability of the partnership beyond the duration of the award; alignment of interests and purposes among the partners;		to continue past completion of the project, or are limited to pre-existing partnerships when the challenge calls for a broader dialogue and exchange.	collaboration, these show potential to continue to provide value beyond the end of the project (i.e. in terms of policies and/or products to address a development or other global challenge).	these show good potential to continue to provide value beyond the end of the project (i.e. in terms of policies and/or products to address a development or other global challenge). Good evidence of post-award partnerships.	important development challenges. They show strong promise for sustainability and continue to seek funding to continue their efforts. Very good evidence of post-award partnerships.		

3.2 Sustainable global research and innovation partnerships established across geographies & disciplines							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
clear value to all parties in the partnership; etc. Bibliometric information may support this assessment, including evidence on partnerships continuing post-award.		Little evidence of post-award partnerships.	Some evidence of post-award partnerships.				

3.2 Sustainable global research and innovation partnerships established across geographies & disciplines							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Examples of this may include co-funding or co-authored publications following the award end date.							

Assessment: Please enter your rating 0–4 (or N/A):	
Comment: Give brief rationale for choice.	
Confidence in evidence (high/medium/low/no evidence):	

Comment: Give brief rationale for choice.	

3.3 Enhanced challenge-oriented capabilities for R&I							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Institutional and individual capabilities to address challenge-oriented problems call for capacities to work in respectful partnerships across	The research/innovation did not lead to improvements in capabilities for research/innovation among UK and LMIC national/regional/local stakeholders to drive practice	Some minimal improvement in skills and/or technological and information infrastructures to drive practice and/or policy change can be observed among UK and LMIC national/regional/lo	There is evidence of some enhancement of capabilities in a limited set of partners, UK and LMIC national/ regional/local stakeholders	There is evidence of enhanced capabilities in some partners, UK and LMIC national/ regional/local stakeholders to lead adoption of	There is clear evidence of enhanced capabilities across the research/innovation partnership as a result, including national/regional/local stakeholders to		High Medium Low No evidence

3.3 Enhanced challenge-oriented capabilities for R&I							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
countries and disciplines; in addition, they call for infrastructures that support equitable and fair partnerships that share decision making as well as action. These include administrative and decision systems (management	and/or policy change. Stakeholders continue to lack access to managerial ability, financial, technological and information resources and/or political influence required to bring about change. No linked LMIC PhDs have been completed.	cal stakeholders. There are signs of marginal improvements in communication between organisations, greater community engagement with decision making and/or improved capacity to secure funding resources.	to lead adoption of practice and/or policy change, but significant gaps remain. There is some evidence of improvements in individual capacity, for example increased knowledge and skills, some	practice and/or policy change, with some gaps remaining. There is evidence of improvements in individuals' increased knowledge and skills' institutional capacity, for example technology and	lead adoption of practice and/or policy change. There is good evidence of durable improvements in individual and institutional capacity, for example increased knowledge and/or skills, improved communication between organisations,		

3.3 Enhanced challenge-oriented capabilities for R&I							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
, decision making, fundraising, financial management and fairness, technological and information management systems) as well as communications that are equitable and fair.	LMIC authors are not discernible in award-linked publications. No evidence of increased capabilities to mobilised follow-on funding.		institutional capacities (e.g. technology and information infrastructures), improved communication between organisations, greater community engagement with decision making, and/or limited improved	information infrastructures, improved communication between organisations, greater community engagement with decision making, and/or improved capacity to secure funding resources.	greater community engagement with decision making, measurement, standards and targets, and improved capacity to secure funding resources.		

3.3 Enhanced challenge-oriented capabilities for R&I							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Expected to be reflected in results such as: number of LMIC PhDs completed; LMIC lead authors in published research outputs; LMIC research infrastructure			capacity to secure funding resources.				

3.3 Enhanced challenge-oriented capabilities for R&I							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
enhancement (new research facilities, equipment, labs, information infrastructure, support, etc.)							

Assessment: Please enter your rating 0–4 (or N/A):	
Comment: Give brief rationale for choice.	
Confidence in evidence (high/medium/low/no evidence):	
Comment: Give brief rationale for choice.	

3.4 Stakeholder networks established across research policy and practice, civil society & enterprise in partner countries, internationally & UK							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Use of findings from research or innovations is the goal of challenge-oriented R&I. The global – or at least multinational – nature of development challenges calls for networks to promote and support use.	No evidence that stakeholders external to the research process have engaged with research/innovation process or outputs. It is highly unlikely that results will make a	Stakeholders external to the research process have engaged to a very limited extent with the research/innovation process and outputs. Potential for use of the	Stakeholders from an adequate mix of backgrounds have engaged in networks to develop next steps, strategies and/or implementat	Stakeholders from most relevant backgrounds have engaged in networks to develop next steps, strategies and/or implementation plans. There is good evidence	Stakeholders from all relevant backgrounds have engaged in networks to develop next steps, strategies and/or implementation plans. There is good evidence of progress in		High Medium Low No evidence

3.4 Stakeholder networks established across research policy and practice, civil society & enterprise in partner countries, internationally & UK							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Networks will include stakeholders from policy, practice and business, together with researchers/innovators, engaged in promoting and advocating for use. Capture also any £ data on the benefit that networks could generate.	contribution to addressing a development challenge.	results remains very low.	ion plans. There is evidence that some of the sought-after results are beginning to emerge in ways that could be used in policies, practices, products or services.	of progress in achieving the intended applications and/or next steps of the research/innovation activities, and potential for use and replication of these is high.	achieving the intended applications and/or next steps of the research/innovation activities, and potential for use and replication of these is high, including to new sites that could also benefit.		

Assessment: Please enter your rating 0–4 (or N/A):	
Comment: Give brief rationale for choice.	
Confidence in evidence (high/medium/low/no evidence):	
Comment: Give brief rationale for choice.	

Dimension 4: Cost-effectiveness (Break-even analysis: 'How many units of benefit would the intervention have to generate before the value of the benefits outweighs the costs?')

4.1 Leverage of investment from non-GCRF sources in implementation per £1 GCRF							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
Other, non-GCRF funders or businesses are willing to invest in the ideas/knowledge outputs from GCRF projects. Capture value of £ leveraged. For assessments, please write down the value	No consequent investment as a result of the research £0 leverage	Bottom quartile £ levered per £1 GCRF	Third quartile £ levered per £1 GCRF	Second quartile £ levered per £1 GCRF	Top quartile £ levered per £1 GCRF		High Medium Low No evidence

4.1 Leverage of investment from non-GCRF sources in implementation per £1 GCRF							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
leveraged if you have it, and make your assessment of the rating with justification. We can consider whether it is appropriate to calculate quartiles later.							
Assessment: Please provide the value of £ leveraged here (or N/A):							
Comment: Give a brief description/rationale. If values aren't known but qualitative evidence is							

available please provide it, with some comments on a potential rating.	
Confidence in evidence (high/medium/low/no evidence):	
Comment: Give brief rationale for choice.	

4.2 LMIC PIs/Co-Is secure further research funding per £1 of GCRF funding							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
LMIC researchers have gained sufficient profile and capacities to mobilise follow-on	No consequent investment as a result of the research £0 leverage	Bottom quartile £ levered per £1 GCRF	Third quartile £ levered per £1 GCRF	Second quartile £ levered per £1 GCRF	Top quartile £ levered per £1 GCRF		High Medium Low No evidence

4.2 LMIC PIs/Co-Is secure further research funding per £1 of GCRF funding							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
funding for the work. For assessments, please write down the value leveraged if you have it, and make your assessment of the rating with justification (qualitatively if necessary). We can consider whether it is appropriate to							

4.2 LMIC PIs/Co-Is secure further research funding per £1 of GCRF funding							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
calculate quartiles later.							

Assessment: Please provide the value of £ leveraged here (or N/A):	
Comment: Give a brief description/rationale. If values aren't known but qualitative evidence is available please provide it, with some comments on a potential rating.	
Confidence in evidence (high/medium/low/no evidence):	
Comment: Give brief rationale for choice.	

4.3 Matched funding achieved from other sources per £1 of GCRF							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
For a subset of awards that are explicitly focused on innovation and market-oriented, matched funding. For assessments, please write down the value leveraged if you have it, and	No consequent investment as a result of the research £0 leverage	Bottom quartile £ levered per £1 GCRF	Third quartile £ levered per £1 GCRF	Second quartile £ levered per £1 GCRF	Top quartile £ levered per £1 GCRF		High Medium Low No evidence

4.3 Matched funding achieved from other sources per £1 of GCRF							
	Unacceptable 0	Poor 1	Adequate 2	Good 3	Excellent 4	Not applicable	Confidence in evidence
make your assessment of the rating with justification. We can consider whether it is appropriate to calculate quartiles later.							
Assessment: Please provide the value of £ leveraged here (or N/A):							
Comment: Give a brief description/rationale. If values aren't known but qualitative evidence is available please provide it, with some comments on a potential rating.							

Confidence in evidence (high/medium/low/no evidence):	
Comment: Give brief rationale for choice.	

4.4 Additional cost-effectiveness information	
Please capture qualitatively – including any quantitative information available – any additional information on cost-effectiveness available in relation to the award.	

Annex C: Overview of scores by subdimension and award

Figure 13. Performance of awards across all VfM subdimensions

			ECONOMY				EFFICIENCY			EFFECTIVENESS				COST-EFFECTIVENESS		
AWARD TYPE	FUNDING LEVEL	PROJECT ID	SD1.1	SD1.2	SD1.3	SD1.4	SB2.1	SB2.2	SB2.3	SB3.1	SB3.2	SB3.3	SB3.4	SB4.1	SB4.2	SB4.3
Applied innovation	Highest	AWAVFM24_01	4	4	3	2	2	1	4	3	3	3	3			2
Applied innovation	Highest	AWAVFM24_02	4	3	3	2	3	2	3	4	4	3	4			2
Applied innovation	Highest	AWAVFM24_03	3	2	1	3	2		3	3	3	3	4			2
Applied innovation	Highest	AWAVFM24_04	2	4	3	3	2		2	2	2	2	2			1
Applied innovation	Highest	AWAVFM24_05	3	3	2	2	2	2	4	2	0	1	1	0	0	0
ECR	High	AWAVFM24_06	3	2	1		4	4	3	3	3	4	2	1	1	
ECR	High	AWAVFM24_07	3	2	2		4	4	3	2	3	4	1	1	1	
ECR	Lower	AWAVFM24_08	2		0	0	0	0	0	1	1	1	0	4		
ECR	Lower	AWAVFM24_09	3		1	0	0	0	1	1	0	1	0	4		0
ECR	Lower	AWAVFM24_10	3	2	1	1	1	0	3	2	1	1		0		
ECR	Middle	AWAVFM24_11	3	3	1		4	4	3	4	4	4	4	3	3	
ECR	Middle	AWAVFM24_12	4	2	1	1	3	4	2	2	2	3	3	1	1	
ECR	Middle	AWAVFM24_13	4	2	2	2	3	4	4	2	2	3	3	1	1	
ECR	Middle	AWAVFM24_14	3	2	1	2	4	4	3	3	2	3	2			
ECR	Middle	AWAVFM24_15	3	1	1	1	4	4	2	2	4	3	2	1	1	0
ECR	Middle	AWAVFM24_16	3	2	1		3	4	2	2	2	3	1		4	
ECR	Middle	AWAVFM24_17	3	2	1		2	4	1	1	2	2	2	2	2	
ECR	Middle	AWAVFM24_18	3	3	1		2	4	2	3	2	3	2	2	2	
Network	Lower	AWAVFM24_19	3	4	1	3	2	4	4	4	4	3	3	1		
Network	Lower	AWAVFM24_20	2	2	3	3	3	4	4	4	4	3	3	1	3	
Network	Lower	AWAVFM24_21	3	3	2	1	2	4	3	3	1	2	3			
Network	Lower	AWAVFM24_22	3	4	4	4	4	4	4	4	2	3	3	2	2	
Network	Lower	AWAVFM24_23	2	4	3	3	4	3	3	3	4	3	3	4	2	0
Network	Middle	AWAVFM24_24	3	3	4	4	3	4	3	4	4	2	3			
RGT	High	AWAVFM24_25	3	4	2	4	2	1	3	4	4	2	3	4	2	
RGT	High	AWAVFM24_26	3	3	3	2	1	1	3	2	3	2	2	4		
RGT	High	AWAVFM24_27	4	4	2	2	2	1	4	4	4	3	4	2		
RGT	High	AWAVFM24_28	2	4	1	3	1	3	3	3	3	2	3			
RGT	High	AWAVFM24_29	2	4	1	3	1	1	2	2	2	2	3	2	1	
RGT	Highest	AWAVFM24_30	2	2	1	1	1	2	1	2	1	1	2			
RGT	Highest	AWAVFM24_31	3	3	3	3	2	2	3	4	3	3	4	3		
RGT	Highest	AWAVFM24_32	3	3	1	1	1	1	2	3	2	3	3	3		
RGT	Highest	AWAVFM24_33	2	4	4	4	3	2	4	3	3	3	3	1		
RGT	Highest	AWAVFM24_34	2	2	3	3	2	3	3	3	3	2	2	1	1	
RGT	Highest	AWAVFM24_35	3	2	2	3	2	1	3	3	3	3	4	4		
RGT	Highest	AWAVFM24_36	1	2	1	1	1	0	2	2	2	0	3		0	1
RGT	Middle	AWAVFM24_37	3	2	0	2	2	1	3	3	3	2	2		0	
RGT	Middle	AWAVFM24_38	3	2	2	2	2	2	4	4	2	1	3			
Strategic	Middle	AWAVFM24_39	3	2	3	3	4	2	3	2	2	3	3	4	1	
Strategic	Middle	AWAVFM24_40	3	2	0	1	2	1	4	2	0	1	1	0		
Strategic	Middle	AWAVFM24_41	2	1	0	1	2	2	2	1	0	1	1	3	4	
RGT	Middle	AWAVFM24_42	3	3	2	2	3	4	3	3		3		2	2	
RGT	High	AWAVFM24_43	2	1	3	2	2	1	3	3	3	2	2	1		0
Network	Lower	AWAVFM24_44	4	3	3	3	2	2	3	3	3	3	3	2	2	
Network	Middle	AWAVFM24_45	4	4	3	3	3	4	4	4	3	3	3			
Network	Middle	AWAVFM24_46	3	3	3	4	3	4	4	4	4	3	4	4		
RGT	High	AWAVFM24_47	3	2	4	4	2	3	3	4	2	2	2	0	0	
RGT	High	AWAVFM24_48	3	2	3	4	3	3	4	4	3	3	3	0	1	
RGT	Middle	AWAVFM24_49	3	2	2	3	2	2	3	3	2	4	2	0	0	
RGT	Middle	AWAVFM24_50	3	2	3	2	3	1	3	4	3	2	2	0	1	

Key	Rubric rating
0	Unacceptable
1	Poor
2	Acceptable
3	Good
4	Excellent

Annex D: Economy – detailed findings by subdimension

1.1. Research innovation/originality

Box 9. Key findings on research innovation/originality

- The sample performed well on this subdimension, with most awards rated good or excellent. Well-performing awards spanned funding quintiles and types of awards.
- Applied innovation awards performed particularly well, driven by their focus on innovation and therefore scoring highly on innovation/originality and interdisciplinarity.
- ECR awards performed well, largely owing to leadership from LMIC PIs, which enabled a thorough understanding of local research gaps and needs, supporting relevance.
- Network awards showed innovation, originality and relevance at lower levels of funding.
- Thematic research grants performed above expectations on average, with middle quintile awards performing better than those in the high or highest quintiles.

Overall, the sample performed very well on this subdimension, 38 of 50 awards rated as good or excellent. Research innovation and originality was assessed based on relevance of processes and products to users and contributions to theory or practice. Innovation and originality were commonly pursued through addressing research gaps, developing novel tools and approaches, translating existing approaches to new contexts, and responding explicitly to LMIC user needs. Relevance of processes and products to users required an understanding of the local needs and context, enabling awards to address knowledge or research gaps.

Applied innovation awards outperformed other award types, with 4 of 5 awards rated as good or excellent. Their strong performance was driven largely by an explicit focus on innovation, particularly in developing novel tools and approaches. Applied innovation awards rated as excellent demonstrated relevance and

responsiveness to LMIC contexts and challenges, facilitated by involvement of cross-sectoral partners and stakeholders throughout the research process. This was further supported by all awards being within the highest funding quintile, suggesting that greater resources may be needed to support sustained stakeholder engagement.

ECR awards also performed better than the sample overall, with 12 of 13 awards rated as good or excellent. ECR awards tended to score well because of strong evidence supporting the relevance of their processes and products to potential users in LMIC contexts. Many ECR awards, notably FLAIR Fellowships - which offered additional support, such as cohort building, support with networking and connections, which enabled better positioning for use - involved LMIC PIs who possess a thorough understanding of local research gaps and needs. This indicates that having an LMIC PI or significant LMIC involvement enhances relevance, supporting strong performance in this subdimension.

Thematic research grants performed above expectations, with 13 of 20 awards rated as good or excellent. Those in the middle quintile outperformed those in the high and highest quintiles, often showing innovation and originality through engaging in novel interdisciplinary approaches to address known challenges. This indicated that smaller investments, when directed towards relevant foundations for impact, can offer good value for money in GCRF. Well-performing awards were present across funding quintiles. This suggests that though high levels of funding can support effective delivery of the subdimensions described here (as seen for large applied innovation awards), smaller awards can still deliver innovative, original research. Most well-performing awards in the lower quintile were network awards, which often demonstrated innovation in their focus and governance processes, providing originality at lower investment levels.

1.2. Investment in interdisciplinary cross-sectoral research in design

Box 10. Key findings on investment in interdisciplinary cross-sectoral research in design

- The sample performed well on this subdimension, with most awards rated good or excellent.
- Network awards performed well because of their focus on broad reach and engagement. Dedicated time and resources for communication and collaboration activities supported interdisciplinary and cross-sectoral approaches.

- Applied innovation awards performed well, frequently including government, civil society organisations or the private sector as research partners or advisors and investing in communication and knowledge exchange activities.
- Thematic research grants performed above expectations on average, with high quintile awards performing better than those in the middle and highest quintiles.
- Longer-duration awards showed better interdisciplinarity, suggesting that longer grant periods may better enable stakeholder engagement, providing more opportunities for building relationships and trust.

The sample demonstrated strong performance in this subdimension, with 23 of 50 awards rated as good or excellent. Well-performing awards featured researchers and partners with varied disciplinary backgrounds and showed strong investment in activities that support collaboration and knowledge exchange across project stages, including meetings, workshops and, in some cases, formal collaboration agreements.

Network awards performed particularly well in this subdimension, with 8 of 9 awards rated as good or excellent. Lower quintile network awards performed somewhat better than those in the middle quintile. The strong performance of network awards reflects their focus on broad reach and engagement. Many network awards explicitly adopted interdisciplinary and cross-sectoral approaches, dedicating time and resources to regular communication and collaboration among network members.

Applied innovation awards likewise performed well with regard to this subdimension, with 4 of 5 awards rated as good or excellent. These awards involved highly interdisciplinary and cross-sectoral teams, frequently including government, civil society organisations or the private sector as research partners or advisors. These awards also invested in communication and knowledge exchange activities, including meetings and workshops, underscoring the importance of dedicated funding for fostering cross-sectoral involvement and interdisciplinary approaches.

Strategic and ECR awards underperformed in this subdimension compared to other award types. Those rated as poor or acceptable generally had smaller research teams and a monodisciplinary research focus. In the case of FLAIR

Fellowships, which were awarded to individual researchers, the scope for interdisciplinarity was naturally limited by the size and experience of the ECR. ECR awards in the lower quintile performed poorest.

Thematic research grants performed above expectations, with high quintile awards performing better than those in the middle and highest quintiles. As compared to thematic research grants in other quintiles, high quintile thematic research grants showed investment into formal processes to support interdisciplinarity such as collaboration agreements.

Longer-duration awards performed better with regard to interdisciplinarity. Longer-duration awards commonly incorporated interdisciplinarity and cross-sectoral engagement activities across project stages, sometimes utilising intensive participatory processes such as co-design. In contrast, shorter-duration awards generally limited engagement to specific project stages, and overall they had less cross-sectoral involvement. This suggests that longer grant periods may enable more comprehensive and sustained engagement with non-academic stakeholders, providing more opportunities to build trust and establish relationships that enhance communication over time.

1.3. Investment in EDI processes (Equity)

Box 11. Key findings on investment in EDI processes

- The sample performed poorly on EDI processes, with only 19 of 50 awards scoring good or excellent. Although this average score falls within the range for ‘at expectations’ performance, it is the lowest across all subdimensions, indicating a relative weakness compared to other areas within this sample.
- Most awards scored poor or ‘EDI aware’, indicating a gap in the implementation of EDI principles beyond project ideation stages.
- Network awards have performed well, owing to their emphasis on equitable engagements and diversity of perspectives among members.
- The inclusion of EDI sensitive steps in data collection, analysis and M&E plans enabled most applied innovation awards to perform well in this subdimension.

The sample performed poorly on EDI processes, with only 19 of 50 awards scoring good or excellent. Although this average score falls within the range for ‘at

expectations' performance, it is the lowest across all subdimensions, indicating a relative weakness compared to other areas within this sample.

A total of 17 awards scored poor or 'EDI aware', revealing that EDI was considered in many project rationales but was not operationalised in the implementation stages. Only 4 of 50 awards were scored the highest at 'EDI transformative', indicating the limited impact of GCRF awards on long-term structural power relations – to score as 'EDI transformative' awards need to demonstrate that they support 'sustained change' beyond the scope of the individual award.

Out of 50 awards, only 22 reported having a gender equality and social inclusion (GESI) plan, and 19 received expert advice on EDI. A total of 22 awards also showed evidence of EDI balance in their project teams. However, in most cases this only included gender balance, with very few awards considering other demographic characteristics such as race, nationality or socioeconomic background. Further, among these awards there was limited evidence on any conscious steps taken to ensure equitable working environments between different groups and across international teams. In some awards, equitable distribution of funds was impacted by differing financial rules between the UK and LMIC partners. This affected the day-to-day operations of some projects, also creating an imbalance in their relationships.

Underperforming and overperforming awards were observed across funding quintiles. Early and mid-career awards, thematic research grants in the middle quintile, and strategic awards in the middle quintile made up the bulk of awards rated unacceptable or poor on EDI. Having an LMIC PI was not related to better performance with regard to EDI in this sample; however, the majority of awards with an LMIC PI were ECR awards targeted at an individual researcher, suggesting either that consideration of EDI may be related to PI experience level or that there may be fewer opportunities to address EDI within a small research team.

The sample performed poorly on average; network and applied innovation awards performed best, with average scores of 2.89 and 2.4 respectively. Out of the 9 network awards, 7 scored good or excellent in this subdimension. Network awards showed emphasis on inclusivity and diversity of perspectives, combined with objectives of equitable representation from stakeholders across disciplines and sectors. Similarly, 3 of 5 applied innovation awards scored good, showing evidence of applied EDI processes such as disaggregated data collection and analysis, gender-sensitive outreach and EDI key performance indicators in their M&E plans.

Overall, the poor performance of many awards in this subdimension highlights important gaps in the research process. First, the **lack of evidence on EDI processes was severe in the case of lab-based projects, indicating a perceived discrepancy between the nature of basic research and the applicability of EDI principles.** Second, in cases where awards leveraged their institutional GESI policies at the proposal stage, there is limited evidence on its implementation in later stages, indicating that awards were not successful in leveraging investment in EDI into impact.

Projects performing well in this subdimension overcame these challenges by recognising the implicit impact of different inequalities among their research contexts, participants and proposed interventions.

1.4. Investment in equitable partnerships and collaborations in design (Equity)

Box 12. Key findings on investment in equitable partnerships and collaborations in design

- The sample has performed well in this subdimension, with most awards rated good or excellent.
- Network awards with higher funding outperformed networks in the lower quintile, revealing that higher resources may be required to establish project structures supporting co-design.
- Thematic research grants in the high quintile performed better than those in the middle or highest quintiles, further indicating that higher resources may be supportive of equitable partnerships, although the highest levels of funding may not be necessary.

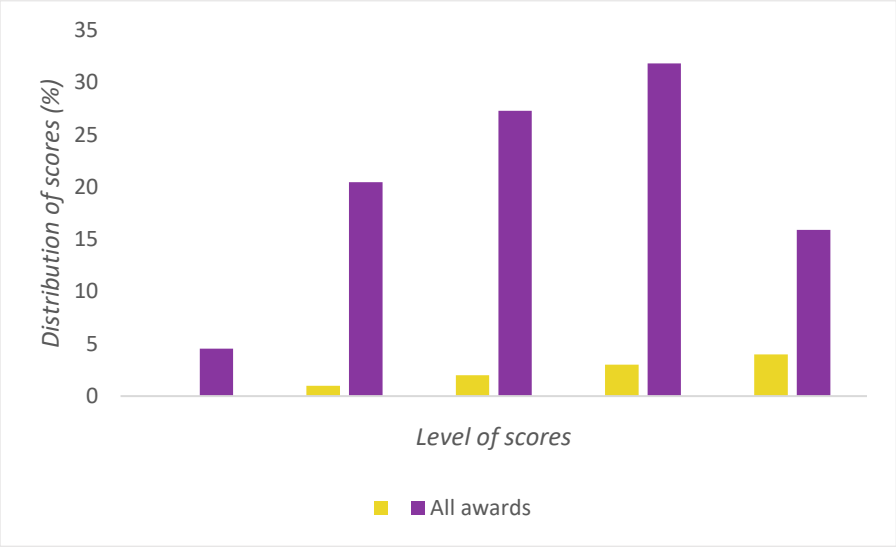
The sample has performed well in this subdimension, with 21 of 50 awards scoring good or excellent. Awards rated highly for equitable partnerships showed evidence of collaborative working through processes established at the proposal and project inception stages. These included budgeted workshops among all partners, regular check-ins for key project decisions, and mapping of capacities for fair distribution of responsibilities.

The impact of award type and its objectives is evident from the distribution of scores in this subdimension. For example, 5 of 13 early and mid-career awards

have scored unacceptable or poor on equitable partnerships. These are fellowships targeted for developing capacities of an individual. Because they are not intended for a collaborative team, these awards have not performed well on this subdimension.

Commensurate with their focus, network awards performed well in investment in equitable partnerships and collaborations. As is evident from Error! Reference source not found.**, network awards have performed better than the rest of the sample, with 7 of 9 awards scoring good or excellent.** In particular, network awards from the middle quintile have outperformed network awards from the lower quintile (average scores of 3.67 versus 2.8 respectively). This may indicate that higher levels of financial resources are needed to invest in concrete processes to support co-designed projects and collaborative decision making.

Figure 14. Distribution of scores for SD1.4 based on type of award – network



Among thematic research grants, high quintile awards performed better than those in the middle or highest quintiles. Those that performed well involved partners in development of formal processes to support equity from early project stages, creating structures such as meetings and workshops to support collaboration and sharing and formal agreements, including those for co-authorship. This suggests that, just as for network awards, greater financial resources may be needed to invest in these processes, but that the highest level of investment is not necessary to support equitable partnerships.

Annex E: Efficiency – detailed findings by subdimension

2.1. Investment in LMIC capacity building (Equity)

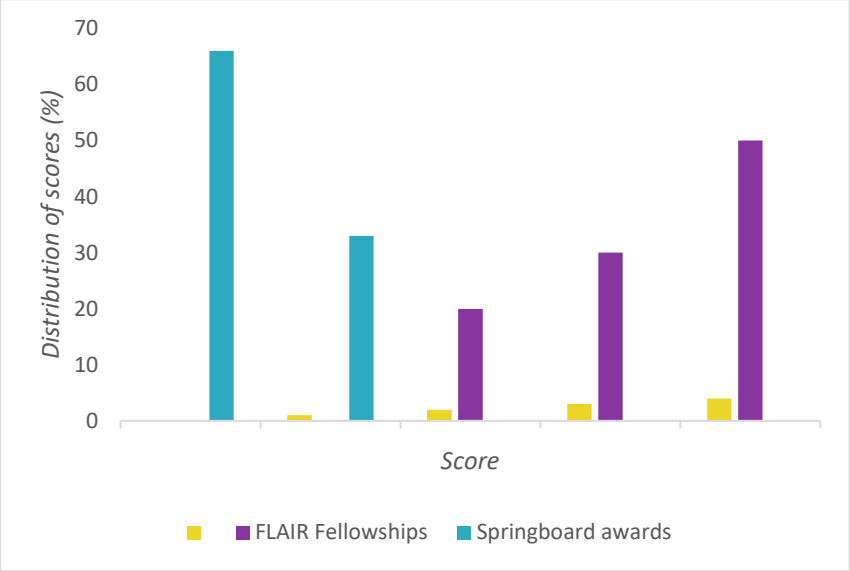
Box 13. Key findings on investment in LMIC capacity building

- The sample has performed moderately well in this subdimension, with most awards rated adequate.
- Most awards ensured research opportunities and mentorship for ECRs as the direct pathway for building capacity in LMICs.
- Early career fellowships awarded to LMIC-based PIs performed best, providing a direct investment in individual and institutional capacity building.
- Middle quintile thematic research grants outperformed those in the high and highest quintiles.

The sample has performed at expectations on this subdimension, with 20 of 50 awards scoring good or excellent. The most common pathway to capacity building was through involvement of ECRs: 28 awards showed evidence of investments into upskilling opportunities for postgraduate students and researchers in partner countries. Similarly, 13 awards planned training workshops for external stakeholders such as practitioners and policymakers.

Within-group analysis of ECR awards reveals that **awards perform better on capacity building when these are awarded directly to researchers in LMICs. Error! Reference source not found.** illustrates the distribution of scores for two types of early career awards: Springboard awards and FLAIR Fellowships. All Springboard awards in our sample were made to UK-based researchers, few of whom established partnerships with LMIC researchers. Consequently, no Springboard awards scored above poor, as additional capacities generated through these awards were limited to the UK because of a lack of LMIC project partners. As a result, GCRF funding made solely to UK-based ECRs did not support LMIC capacity building.

Figure 15. Distribution of scores for SD2.1 based on type of early and mid-career award



In comparison, 80% of FLAIR Fellowships scored good or excellent on this criterion, also outperforming the sample-wide average. Because the fellowship was awarded to LMIC-based researchers, it had a direct pathway to enhance capabilities of the fellow and their host institution. For example, the funding enabled fellows to advance a relevant research idea and build their capabilities in the discipline through research and mentoring. Additionally, 8 of 10 FLAIR Fellowships also showed evidence that the funding led to purchase of newer instruments and facilities in LMIC host institutions. Hence, awards made directly to LMIC PIs provide an efficient means of investment in LMIC capacity building. These fellowships have also generated additional value through infrastructural developments beyond the primary objective of improving individual capabilities.

When considering thematic research grants, higher levels of funding did not translate into increased investments in LMIC capacity building. The average score for thematic grants in the middle quintile (2.4) is higher than that for both the highest (1.71) and high (1.75) quintile grants in the same category. Evidence from this sample indicates that highest and high quintile awards scored lower because of a lack of funded positions for ECRs in partner institutions. Thus, the absence of substantial research and/or mentorship opportunities created in LMICs limited impact among better-funded thematic research grants. This suggests that i) funding allocation aligned with the GCRF's strategic aims and ii) institutional support among partners were important drivers of value in this subdimension.

Overall, awards performing well in this subdimension show evidence of positive engagements with ECRs in LMICs. These have also invested in expanding the scope of their capacity-building activities in several ways, including institution-level improvements through stakeholder workshops, purchase of new equipment, and sustaining impact with existing/future training programmes based on their project findings.

2.2. Equitable balance of research funding between UK and LMIC partners (Equity)

Box 14. Key findings on equitable balance of research funding between UK and LMIC partners

- The sample has performed well in this subdimension, with nearly half of awards scoring good or excellent, indicating at least half of the award is spent in LMICs.
- Of the awards performing well, funding was proportionately allocated to LMIC partners for research staff, travel expenses, stakeholder engagement, training and dissemination.
- Some LMIC partners faced challenges in access to or control over funding when the award was led by a UK-based PI.

The sample has performed well in this subdimension, with 23 of 50 awards scoring good or excellent. Because most awards lacked financial documentation beyond the proposal stage, assessment for this subdimension was frequently based on budget allocations provided at the proposal stage rather than on evidence of actual spend after implementation. Furthermore, because a large proportion of the data reviewed in this assessment was supplied by UK partners, there are limitations to the extent to which the available data sufficiently captures LMIC partners' perceptions of the equitable balance of research funding.

Awards performing well in this subdimension showed proportionate allocation of funds to LMIC partners and host institutions in several categories. These included research staff and indirect costs, equipment and expenses covering travel, fieldwork, publications, stakeholder engagement and training. Equitable balance of research funding between partners appears to have underpinned the overall strength of their relationships by facilitating greater activities in LMICs.

Most award types – including thematic research grants, applied innovation awards and strategic investments – performed at expectations in this subdimension. Among thematic research grants, those in the middle quintile performed marginally better than those in the high and highest quintiles, generally showing more proportionate allocations of funds. Similarly, **network awards performed well across funding quintiles, with an average rating of 3.7.** Network awards commonly had LMIC leaders and allocated funding proportionately across network members.

Of the 23 awards scoring good or excellent, only 5 were led by UK-based PIs. The remaining 18 were either led by an LMIC-based PI or awarded entirely to an LMIC-based researcher (i.e. fellowships). Thus, **the allocation of GCRF funding was more equitable when directly awarded to or led by researchers and organisations in LMICs.** ECR awards within this sample provide contrasting cases of funding allocation among UK and LMIC researchers. FLAIR Fellowships, all of which fell into the middle and high quintiles in this sample, were rated 4.0 on average, representing a case where all funding was awarded to an LMIC partner. On the other hand, Springboard awards, all of which fell in the lower quintile in this sample, were awarded to UK-based researchers, often with no LMIC partners, and were rated 0.0 on average, representing a case where little or no funding was awarded to LMIC partners.

Aside from fellowships, analysis of the awards performing poorly in this subdimension revealed the common challenges faced by LMIC partners while working with UK leads. Notably differing financial rules among countries compelled LMIC partners to rely on UK organisations' processes, which caused delays and/or difficulties in transfer of funds. This led to lack of financial control and distrust among partners, creating power imbalances that affected their research environments.

2.3. Investment in strategies to position research for use

Box 15. Key findings on investment in strategies to position research for use

- The sample has performed exceptionally well in this subdimension, with most awards scoring good or excellent. Most award types performed above expectations.
- Network awards have outperformed rest of the awards in this subdimension, demonstrating value at lower levels of funding.

- More time and resources are required to make adequate investments in non-academic channels of dissemination, as highlighted by awards funded for longer than two years.

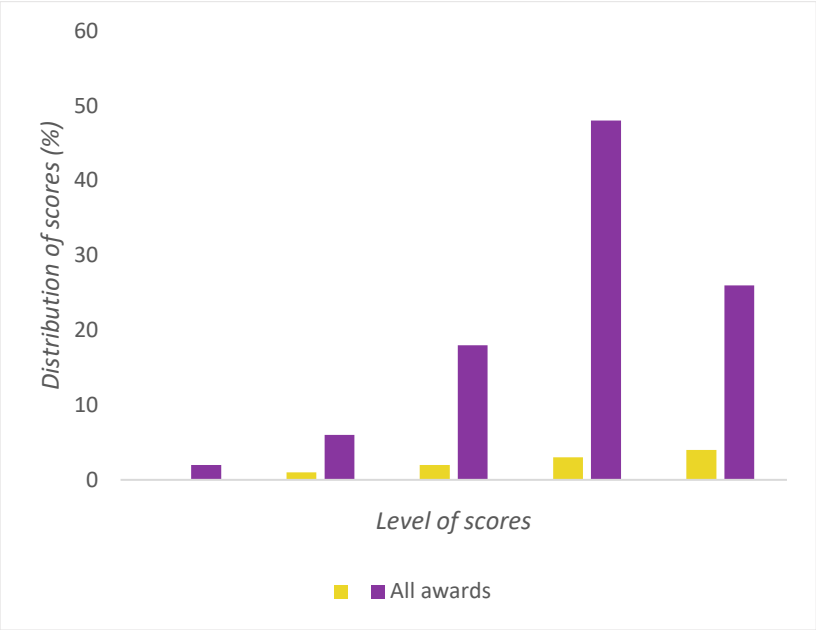
The sample has performed exceptionally well in this subdimension, with 37 of 50 awards scoring good or excellent. This is the highest-scoring subdimension in this assessment, indicating that investment in positioning for use is a relative strength within this sample. The median allocation to communication and dissemination activities among awards with disaggregated financial information was £24,239.50 at the proposal stage.[25] Common non-academic outputs included stakeholder workshops, presentations to community representatives, policymakers and practitioners, and training programmes for sustaining impact of their findings.

Most award types, including thematic research grants, applied innovation awards and strategic investments, performed above expectations. Thematic research grants in the middle and higher quintiles performed better than those in the highest quintile. ECR awards performed at expectations on average, with a marked disparity by funding quintile. Lower quintile ECR awards were rated 1.3 on average, whereas those in the middle and high quintiles were rated 2.4 and 3.0 respectively.

With an average score of 3.5, network awards demonstrated the strongest performance among all types, exceeding the sample-wide average of 2.9. As illustrated in **Error! Reference source not found.**, nearly 50% of all awards have scored good in this subdimension. Some network awards have also been rated as good, but the proportion of networks scoring excellent is higher (55%). This may be because network awards were funded with knowledge exchange as their cornerstone and their high scores in this subdimension reflect well on the value offered against its primary goals.

[25] This figure is based on distribution of funds provided at the application stage by 20 of 50 awards.

Figure 16. Distribution of scores for SD2.3 based on type of award – network



Longer award duration was related to better performance in this subdimension. On average, projects with longer grant periods scored 3.12 in this subdimension, compared to an average score of 2.47 for projects lasting less than two years. This suggests that longer grant periods may enable better engagements with non-academic stakeholders, who support research relevance and positioning for use by providing contextual knowledge and local routes for uptake and dissemination.

Overall, dissemination appears to be an essential component of most GCRF awards. Most non-academic dissemination activities involved stakeholder engagements to facilitate uptake of research findings or insights. In particular, network awards, commensurate with their explicit focus on communication, demonstrated value in alignment with GCRF's value proposition. Longer grant periods also appear to encourage more substantial stakeholder engagement, providing context and supporting uptake and dissemination.

Annex F: Effectiveness – detailed findings by subdimension

3.1. High-quality research and innovation, positioned for use

Box 16. Key findings on High-quality R&I, positioned for use

- Awards of all sizes performed well in this subdimension, with good and excellent scores distributed across all quintiles.
- Smaller network awards performed particularly well.
- Early and mid-career awards perform less well in this subdimension, particularly those which fall into the lower quintile.

The sample overall performed well on this subdimension, with 13 of 50 awards rated as excellent. This is good evidence that investment in this sample of awards led to high-quality R&I outputs, tailored to intended users and positioned well for uptake. Awards of all sizes achieved this score, largely because they showed exceptional attention to at least one of the following aspects: investing time in developing a truly interdisciplinary approach; engaging with intended users and stakeholders throughout the project; producing non-formal R&I outputs.

Awards of all sizes performed well in this subdimension, with good and excellent scores distributed across all quintiles. Smaller network awards performed particularly well. The nine network awards in the sample are all in the lower or middle quintiles, but all rated good or excellent in this subdimension. This suggests that networks are a particularly effective use of smaller grants and support value in line with GCRF's value proposition.

Early and mid-career awards perform less well in this subdimension, particularly those which fall into the lower quintile. Those early and mid-career awards rated poor or acceptable typically lacked evidence of positioning their R&I outputs for use. The three awards in the lower quintile all rated poor or acceptable. The 10 FLAIR awards, all in the middle or high quintiles, tended to perform better than smaller fellowship awards. These awards were part of the FLAIR Fellowship programme, which offered additional support, such as cohort building, support with networking and connections, which enabled better positioning for use. Our evidence

therefore suggests that investing in this approach was an important driver of value in this subdimension.

3.2. Sustainable, equitable partnerships (Equity)

Box 17. Key findings on sustainable, equitable partnerships

- The evidence shows that both award size and type have an impact on achieving sustainable, equitable partnerships.
- Smaller awards were more likely to perform poorly, particularly lower quintile early and mid-career awards and strategic investments.
- Networks, on the other hand, performed disproportionately well for awards in the lower and middle quintiles.

The sample has performed less well in this subdimension overall than in producing high-quality R&I, with 10 of 50 awards rated as excellent. Structural and contextual factors were sometimes a barrier to developing equitable partnerships, with GCRF funding largely tied to a UK lead institution, and with COVID-19 delaying or preventing in-person meetings. However, 54% scored good or excellent, so the sample nonetheless shows evidence of achieving some sustainable, equitable partnerships. Awards that performed well had invested in partnerships beyond academic circles and ensured that Global South team members shared any resulting benefits, such as follow-on funding, authorship and networking opportunities.

Evidence suggests that both award size and type have an impact on achieving sustainable, equitable partnerships. Smaller awards were more likely to perform poorly, with lower quintile awards making up half of those which rated poor or acceptable, while representing only 3 of 50 awards sampled. They typically had a smaller range of partners and often operated for a shorter length of time than the average award in the sample. This suggests that building partnerships typically requires a higher level of investment, in terms of both overall award size and award duration, in order to foster both equity and sustainability.

Award type also appeared to make a difference. Both lower quintile early and mid-career awards and strategic investments performed poorly. Out of 6 awards, 3 were rated unacceptable, 2 were rated poor, and only 1 was rated adequate. It is to be expected that fellowships intended for a single researcher will

have a narrower range of partners than a larger award, but 2 of 3 lower quintile early and mid-career awards had no Global South researcher or partner at all. They therefore did not align with the basic pillars of GCRF's approach. The resulting lack of equity means that they did not support value with regard to GCRF's value proposition.

Networks, on the other hand, performed disproportionately well for awards in the lower and middle quintiles. Among network awards in the sample, 5 of 9 were rated excellent and 2 of 9 were rated good. This type of award had building partnerships across sectors and disciplines as a central objective, with a focus on connecting researchers in different institutions to each other and to stakeholders with the capacity to use the R&I outputs. All these awards invested in convening and engagement events, designed with a view to sustaining connections after the award closed. The evidence from this sample suggests that networking awards are an effective way to support equitable partnership with smaller grants, supporting value at lower investment levels.

3.3. Enhanced challenge-oriented capabilities (Equity)

Box 18. Key findings on enhanced challenge-oriented capabilities

- Middle and high quintile fellowship awards performed best in this subdimension.
- In contrast, lower quintile early and mid-career awards performed poorly; all three were rated as poor.
- Network awards again performed well; 7 of 9 were rated as good.

The sample performed well in enhancing challenge-oriented capabilities, with scores concentrated in the adequate to good range. Middle and high quintile fellowship awards performed best in this subdimension. Of the 10 awards in this subdimension, 8 were rated good or excellent. These awards, particularly those rated as excellent, went beyond individual-level career development and built institutional or longer-term capacities. These awards were all from the FLAIR programme, which had capacity building as a central objective, built in explicitly throughout. FLAIR's programmatic approach included work to build cohorts of researchers and offer support beyond the career development offered by the fellowship itself. FLAIR also invested directly in African researchers rather than tying the funding to a UK lead institution. The evidence therefore indicates that this more

equitable model leads to more benefits in the Global South and offers value in alignment with GCRF's value proposition.

In contrast, lower quintile early and mid-career awards performed poorly; all 3 were rated as poor. The evidence showed little to no capacity building in the Global South and only isolated results for UK-based researchers. These awards, although part of a programme, did not benefit from additional support beyond the fellowship, nor was capacity building for Southern researchers a priority.

Network awards again performed well; 7 of 9 were rated as good. The evidence suggests that teams used capacity-building activities as a form of engagement to drive network building and that this served as an effective strategy for achieving results. This is a result that may not have been expected from a network award, because capacity building was not integral to their design in the way that partnerships or user-side stakeholder networks were. This lends weight to the conclusion that these awards represent support value in alignment with the GCRF value proposition and represent an effective use of smaller grants. It also indicates that effective capacity building can result from lower quintile awards if they invest in some form of cohort building and networking (as was present in networks and in the FLAIR programme).

3.4. User-side stakeholder networks established

Box 19. Key findings on user-side stakeholder networks established

- There is lower confidence in evidence overall for this subdimension.
- 54% of the sample was rated good or excellent in establishing user-side stakeholder networks, with an average score of 2.52.
- Networks were all rated good, with the exception of one score of excellent.
- Thematic research grants in the middle quintile were less likely to perform well than those in the high or highest quintiles.

There is lower confidence in evidence overall for this subdimension. The scope of the assessment did not extend to following up with stakeholders to understand how R&I had been taken up (except where specific evaluations had been commissioned, as in the innovation awards). This means that these findings are more heavily caveated than for the other subdimensions of effectiveness and should be taken as less definitive.

Overall, 54% of the sample was rated good or excellent in establishing user-side stakeholder networks. Early and mid-career awards performed less well in establishing user-side stakeholder networks, which is to be expected given the nature of fellowships. The only award rated as excellent was held by a fellow who had existing networks through which their work could be shared. Early and mid-career awards were also more likely to be focused on basic science. These awards tend to be focused on producing new knowledge and insights of innovations for other researchers. Positive outliers within this group treated other researchers or R&I institutions as the intended users, however, holding engagement activities to disseminate their research. This suggests that where basic science is included in a fund such as GCRF, with an emphasis on use and uptake, award holders should be supported to allocate resources to this kind of activity.

Networks were all rated good, except for one score of excellent. This is to be expected, because these awards were designed to establish and maintain connections between award holders and relevant user-side stakeholders. Assessors consistently reported, however, that a lack of evidence meant that they were unable to understand the extent of policy influence. This was the most common reason given for not rating an award as excellent.

Thematic research grants in the middle quintile were less likely to perform well than those in the high or highest quintile. All the thematic research grants rated as excellent were in the highest quintile. They were characterised by clear, significant budget allocation to engagement activities, often from design or outset of the award. This suggests that resources need to be dedicated intentionally to network building throughout the award's lifetime.

Notably, ratings in this subdimension were related to underperformance or overperformance on subdimension 1.4 (investment into equitable partnerships and collaborations). For example, awards rated good or excellent on this subdimension commonly rated good or excellent for subdimension 1.4. This suggests that awards that invested in equitable partnerships laid the foundation for developing strong stakeholder networks throughout the award duration, ultimately positioning awards to be better able to promote and advocate for the research products and supporting impact.

Annex G: Cost-effectiveness – detailed findings by subdimension

4.1. Leverage of investment from non-GCRF sources per £1 GCRF funding

Box 20. Key findings on leveraging of investment from non-GCRF sources per £1 GCRF funding

- Most of the additional funding leveraged beyond GCRF came from a small number of GCRF awards in our sample. Leveraging of investment from non-GCRF sources was not related to award characteristics, including type, size or duration.
- There was a sparse evidence base to assess further funding for this subdimension, and hence there is a need for better data to be collected on investments leveraged.

Within this sample, a small number of awards leveraged the majority non-GCRF investment. Although this indicates discrepancies in the ability of awards to leverage further funds, evidence for this subdimension was relatively limited, and therefore findings should be considered less definitive.

The average score for this subdimension was 1.89, with 12 out of 50 awards (24%) rated as good or excellent. Of the 50 awards, 17 (34%) were rated as unacceptable or poor, and 7 out of 50 awards (13%) were rated as adequate. Just over one-quarter (26%) lacked sufficient evidence to make an assessment. **Leveraging of investment from non-GCRF sources was not related to award characteristics, including type, size or duration.**

4.2. LMIC PIs secure further research funding per £1 of GCRF funding (Equity)

Box 21. Key findings on LMIC PIs secure research funding per £1 of GCRF funding

- Approximately £1.5 million of known further funding went to LMIC-based researchers, representing around 2% of the £74.6 million of total matched or follow-on funding in the sample.
- There was a sparse evidence base with which to assess further funding secured by LMIC PIs, with 32% of awards in the sample lacking sufficient evidence for a rating on this subdimension. Of those rated, most had low or medium confidence in evidence.

On this dimension, 15 out of 50 awards (30%) in our sample rated as unacceptable or poor. 7 out of 50 awards (14%) were rated as adequate. For almost one-third (32%) of the awards in our sample, there was insufficient evidence to make an assessment for this subdimension. For awards assessed, confidence in evidence remained low, with 34 out of the 50 awards in the sample (68%) rated as low or medium confidence. Given these limitations, findings should be considered less definitive for this subdimension.

Based on the information available, approximately £1.5 million of known further research funding went to LMIC-based researchers. This represents around 2% of the £74.6 million of total matched or follow-on funding related to our sample of 50 awards. Lack of data means that the total amount of further research funding secured by LMIC-based researchers funded by GCRF awards is likely to have been higher.

Gateway to Research was the main source of evidence of further research funding, which only shows information from awards disbursed through UKRI. Therefore, there was limited evidence for awards disbursed through other delivery partners. Furthermore, Gateway to Research award profiles are self-reported and may consequently fail to capture all sources of further funding comprehensively. In particular ResearchFish (the survey which captures the data which populates Gateway to Research) seeks input only from award PIs. Therefore, given most PIs are UK-based, there is very limited information on follow-on funding to LMIC partners.

4.3. Matched funding achieved by a subset of innovation, market-facing awards per £1 of GCRF funding

Box 22. Key findings on matched funding achieved by a subset of innovation, market-facing awards per £1 of GCRF funding

- This subdimension was not applicable to 78% of the sample, as most awards were not market-oriented.
- Awards assessed had an average rating of 0.8, indicating that the average was between unacceptable and poor, based on the evidence available.
- Awards secured a range of matched funding between approximately £70,000 and £1.8 million per award.

For 78% of awards in the sample, subdimension 4.3 was assessed as 'not applicable' because the award's scope did not involve a focus on innovation or because the award was not market-oriented. Awards assessed had an average rating of 0.8, indicating that the average was between unacceptable and poor, based on the evidence available. Only nine awards were market-oriented, and of these it was only possible to find financial evidence to calculate matched funding per £1 of GCRF funding for a subset of four awards. These awards secured a wide range of matched funding – between approximately £70,000 and £1.8 million per award. The ratios of matched funding to GCRF funding for the four awards were 0.28, 0.60, 0.40 and 0.30.

4.4. Cost-effectiveness

Box 23. Key findings on cost-effectiveness

- A formal methodology to assess cost-effectiveness of awards (by looking at total present value of costs and total present value of impact) was done by one delivery partner on their GCRF awards. This analysis found that these awards had positive cost-effectiveness ratios and positive returns on investments.

One delivery partner conducted their own, formal evaluations of cost-effectiveness on their GCRF awards (under the International Partnership Programme) as part of their M&E processes. In brief, this analysis divided the total present value of costs by the total present value of impact to work out the cost-effectiveness ratio. These awards were a small subset of the awards in this sample (4 out of 50 awards), and they had positive cost-effectiveness ratios and positive returns on investments. Other delivery partners did not conduct such M&E processes and consequently data systems were not established to collect data on cost-effectiveness across the entirety of the sample.

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