

## **Newton Fund**

A performance review  
Approach paper

**August 2018**

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## 1. Purpose, scope and rationale

The purpose of this review is to assess how well the Newton Fund is delivering on its ambition “to develop science and innovation partnerships that promote the economic development and social welfare of partner countries”.<sup>1</sup> We will assess the Fund’s governance arrangements and investigate whether its processes for allocating funds and managing its portfolio are effective in supporting its objectives. We will assess the quality of the bilateral country partnerships that make up the Newton Fund, including the likelihood of the country portfolios contributing to better development outcomes for the partner countries.

The Newton Fund is an example of UK Official Development Assistance (ODA) spending with a dual purpose. It aims both to contribute to poverty reduction (its primary purpose) and to pursue the UK national interest – in this case to strengthen UK ties with Newton partner countries, promote UK science and innovation institutions as global leaders in development research and unlock wider opportunities for collaboration and trade (the Fund’s secondary purpose). The review will explore how the two purposes are pursued in tandem and how the secondary purpose aligns with the primary one.

Given its scale, maturity and strategic importance, we have decided to conduct a **performance review** of the Newton Fund. The review will cover Newton Fund activities since its inception in 2014. It will examine the Fund’s operations in a sample group of countries, assessing whether it has appropriate governance and management arrangements to ensure effectiveness and value for money. Since it can take time for investments in science and innovation to lead to development outcomes, we will explore the likelihood of the Fund achieving its intended development results.

This is one of a series of ICAI reviews of aid spent by departments other than the Department for International Development (DFID),<sup>2</sup> undertaken to ensure robust scrutiny of the most important non-DFID aid instruments. It follows on from a September 2017 rapid review of the Global Challenges Research Fund (GCRF). The Newton Fund and the GCRF both fall under the responsibility of the minister of state for universities, science, research and innovation in the Department for Business, Energy and Industrial Strategy (BEIS). Both Funds are part of a significant scale-up of the UK’s investment in science and innovation for development and work to a large extent with the same UK delivery partners.

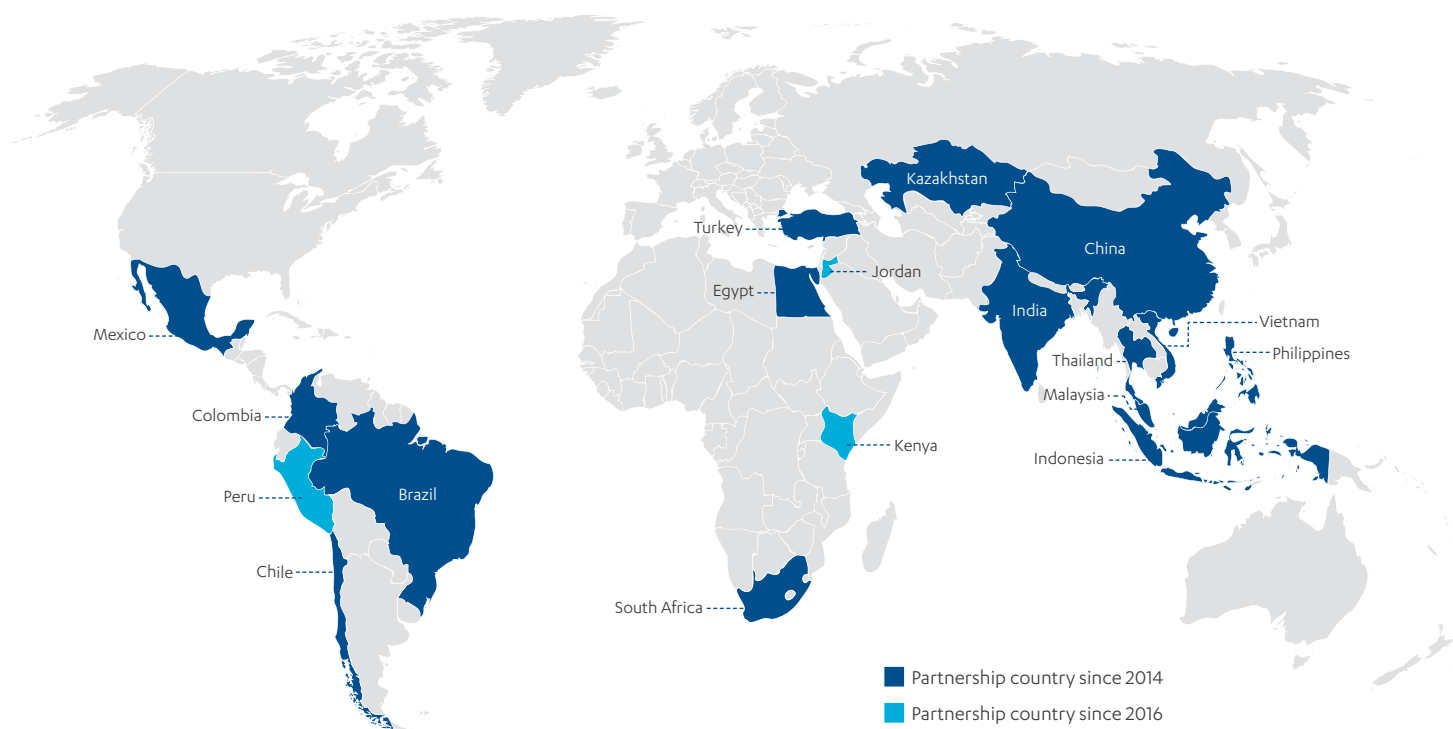
In August 2015, BEIS contracted an independent evaluation service provider to assess the impacts and pathways to impact achieved by the Fund. The ICAI review is complementary to this ongoing evaluation: the evaluator focuses primarily on the grant level, assessing the impact of individual research and innovation projects in the Newton partner countries. The ICAI review will focus primarily on the strategic level of the Fund and on the quality of country partnerships at the intergovernmental and delivery partner levels.

## 2. Background

The Newton Fund is an ODA-funded intergovernmental research and innovation partnership fund under the responsibility of BEIS. The Fund was launched in April 2014 to “promote the economic development and welfare of the partner countries by increasing their science and innovation capacity and unlocking further funding to support poverty alleviation”. It has active partnerships with government counterparts in 17 middle-income countries (see map below).<sup>3</sup> All of the partner countries are on the OECD DAC list of ODA-eligible countries, except for Chile, which graduated from the list on 1 January 2018 and whose Newton Fund partnership is currently under review.<sup>4</sup>

1. *Newton Fund: Building science and innovation capacity in partner countries*, policy paper, Department for Business, Energy and Industrial Strategy, 24 August 2016, [link](#).
2. These have included reviews of the Prosperity Fund, the Global Challenges Research Fund and the Conflict, Stability and Security Fund. ICAI reviews can be found at [link](#).
3. We note that most partnerships are between the UK and a single country, but BEIS informs us that the Newton Fund now has a number of regional partnerships, where the UK works with multiple Newton partner countries (for example in South-East Asia and Latin America) on a challenge important to the region.
4. The Newton Fund partnership in Chile now has the condition that projects must address wider global development challenges and that outputs from the research must be transferable to other DAC-listed countries. *Newton Fund page on Chile*, 2017, [link](#).

Figure 1: Map of Newton Fund partnership countries



The Newton Fund had an initial budget of £75 million per year over five years to 2019, with matched contributions (in funding or in kind) required from partner countries. The November 2015 spending review, published the same month as the UK aid strategy, increased the Newton Fund’s budget and time span. It now includes a total investment until 2021 of £735 million.<sup>5</sup>

In addition to its primary aim of promoting the economic development and welfare of partner countries, the Fund aims to strengthen research and innovation capacity in partner countries, build strong and deep partnerships between the UK and partner countries, and support and expand the expertise, reach and networks of UK research and innovation institutions. As its spending authority comes from the International Development Act, it is also required to contribute to the reduction of poverty and to consider the likelihood of reducing gender inequality.<sup>6</sup>

The Newton Fund covers three broad categories of spending – or ‘pillars’ – which it describes as:

- **People:** improving science and innovation expertise (known as ‘capacity building’), student and researcher fellowships, mobility schemes and joint centres.
- **Research:** research collaboration on development topics.
- **Translation:** innovation partnerships and challenge funds to develop innovative solutions on development topics.<sup>7</sup>

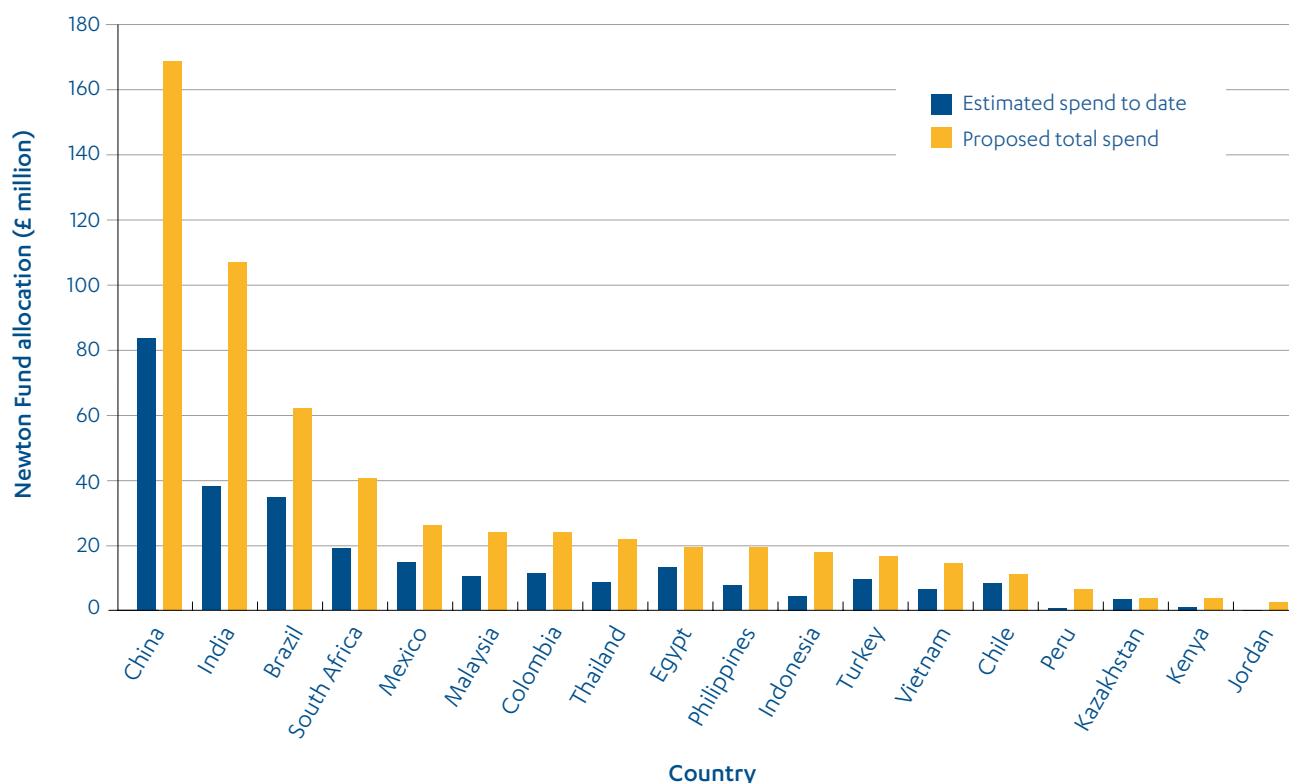
Building on these three broad pillars, the specific objectives for each partnership are set in dialogue with the partner country and are based on the latter’s development needs and priorities.

5. See *Newton Fund: Building science and innovation capacity in partner countries*, BEIS, 24 August 2016, [link](#).

6. International Development Act 2002, [link](#).

7. *Newton Fund: Building science and innovation capacity in partner countries*, BEIS, 24 August 2016, [link](#).

Figure 2: Newton Fund allocation by country



Sources: Data provided by BEIS. Note there is also some regional spending in South-East Asia.

### 3. Review questions

The review will be built around the evaluation criteria of **relevance**, **effectiveness** and **learning**. Our review questions are set out in Table 1.

Table 1: Our review questions

Review criteria and questions	Sub-questions
<p><b>1. Relevance:</b> How well do the Newton Fund’s portfolio and approach support its strategic aims?</p>	<ul style="list-style-type: none"> <li>How well does the Newton Fund seek to meet the development research and innovation needs and priorities of its country partners at the strategic and country level?</li> <li>Does the Newton Fund’s approach to allocating funds reflect an appropriate strategy for delivering its primary and secondary objectives?</li> </ul>
<p><b>2. Effectiveness:</b> How well does the Newton Fund build partnerships for achieving development results?</p>	<ul style="list-style-type: none"> <li>How effective are the Newton Fund country partnerships at building sustainable capacity for generating and utilising research and innovation?</li> <li>Are there suitable processes in place to ensure that research and innovation outputs contribute to better development outcomes?</li> <li>How well is the Newton Fund managing and implementing its work to ensure value for money?</li> </ul>
<p><b>3. Learning:</b> How well does the Newton Fund learn and adapt?</p>	<ul style="list-style-type: none"> <li>How well has the Newton Fund learned from other ODA programmes that aim to build research and innovation capacity?</li> <li>Is learning on how to build sustainable research and innovation capacity taking place within country partnerships and being shared across countries?</li> <li>How well do the Newton Fund and its implementers assess results at project and portfolio levels and adapt in response to lessons learned?</li> </ul>

## 4. Methodology

The review methodology is designed to ensure that findings are representative of the performance of the Newton Fund as a whole, and takes account of the Fund's use of multiple delivery partners across 17 countries, each with its own partnership arrangement. It comprises three interlocking components: a literature review, a strategic review and country partnership reviews (Figure 3).

The methodological elements are designed to generate triangulated evidence to address the review questions. They will include key informant interviews with BEIS and its delivery partners and, where relevant, stakeholders from the private sector and civil society, supplemented by perception surveys of collaborating funding partners and research institutions in the partner countries. We will convene an academic focus group with expertise in research collaboration and partnerships similar to the Newton Fund. The review will also be informed by relevant findings from other ICAI reviews, in particular the September 2017 rapid review of the Global Challenges Research Fund.<sup>8</sup>

**Component 1 – Literature review:** The literature review will cover four themes:

- **North-south research and innovation partnerships:**<sup>9</sup> We will assess the evidence on what good partnerships look like and how donors can best support them. This includes the questions of (i) how to ensure equity in a partnership characterised by power and resource imbalances and (ii) how best to pursue capacity building in science and innovation.
- **Use of ODA funds in research and innovation:** We will seek out studies and findings on the efficacy, risks and challenges of using ODA funds to distribute aid for development-related research. We will investigate whether funds comparable to the Newton Fund exist and whether there are lessons that can be drawn from how they operate.
- **Pathways to research impact on development challenges:** This includes literature on what reasonable impact strategies would look like for ODA-funded research and innovation, including the questions of reasonable time frames, risk appetite and the relationship between achieving 'research excellence' and development impact. We will look in particular at the literature on how to best foster opportunities to achieve development impact from north-south research partnerships that have a strong capacity-building component as part of their objectives.
- **Dual-purpose ODA spending:** We will seek out literature on how well dual-purpose (serving both development and national interest goals) ODA spending works, and its impact on aid spending choices and effectiveness. Key to this Newton Fund review will be the effectiveness and usefulness of employing research collaboration to (i) strengthen ties with emerging powers and middle-income countries while (ii) fostering development outcomes.

The literature review will help shape our key lines of inquiry, offering a concise summary of the key issues and conclusions emerging from both academic and 'grey' literature and commenting as appropriate on the state of knowledge and the quality of underlying evidence.<sup>10</sup> This will inform the standards against which we will judge the Newton Fund's performance. For efficiency, the review will make full use of any existing literature reviews and summaries and draw, when possible, on data already collected and research already undertaken on these themes (including as part of the ongoing independent evaluation of the Newton Fund).

**Component 2 – Strategy review:** This component will assess the Newton Fund's strategy and policies at global and country levels, including on aligning primary and secondary aims in a dual-purpose ODA fund. We will review the Fund's governance arrangements and core business processes, including its fund allocation, risk appetite, portfolio management, and monitoring, evaluation and learning (MEL) procedures. We will also review the Fund's expenditure and activities as well as analyse how well the Newton Fund is learning from its activities and adapting its approach and programming in response to lessons learned.

8. *Global Challenges Research Fund, a rapid review*, ICAI, September 2017, [link](#).

9. ICAI adopts the term 'north-south', used by the UK Collaborative on Development Research, to describe research collaboration and partnerships similar to the Newton Fund, [link](#). Other terminology used by BEIS includes developed economy-emerging economy research collaboration and partnerships.

10. Grey literature refers to research and materials produced outside of the traditional commercial or academic publishing channels, such as government reports and working papers.

This will be done through desk reviews of policy, strategy, guidance and other central documents. We will complement these with interviews with key stakeholders in the UK as well as in two of the partner countries. We will also include a desk-based study of comparable donor-funded north-south science and innovation collaboration partnerships to identify to what extent they have design features that the Newton Fund could learn from, and whether they have generated learning that the Newton Fund could tap into.

**Component 3 – Country partnership case studies:** We will assess how effective the Newton Fund is at developing and sustaining country partnerships that deliver on the Newton Fund’s strategic objectives. The case studies will explore the desired outcomes of the country partnerships at three levels, focusing primarily on the first two:

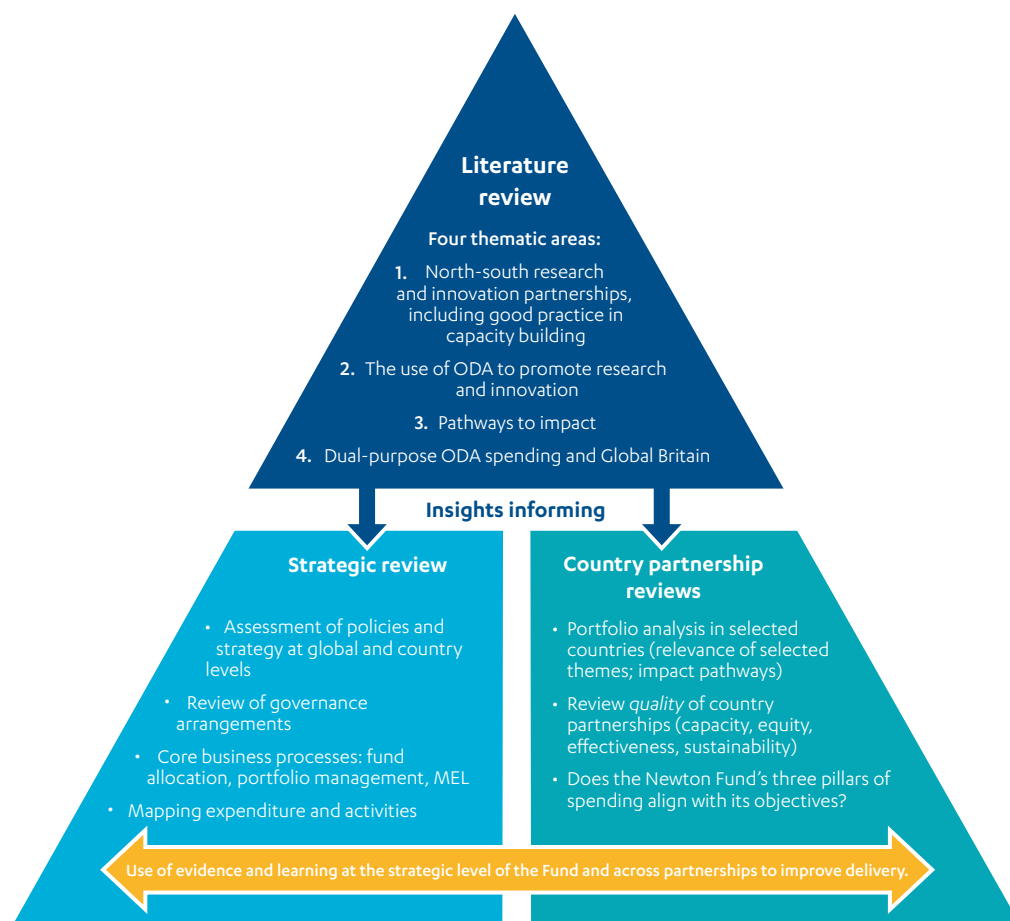
- the intergovernmental level between BEIS and its national counterparts
- between UK delivery partners and the national funding partners
- between grantee delivery agents – research and innovation bodies in the UK and partner countries that are collaborating on Newton-funded projects.

The country partnership reviews will include interviews with officials and other key informants through two country visit case studies and six desk-based country case studies (for more on this, see the sampling approach below).

We will also conduct a survey of country-based funding partners in all 17 active partner countries, as well as a survey of UK delivery partners. This will enable us to triangulate findings from the case studies and assess to what extent they are representative across all partner countries.

When assessing the partnership at the level of grantee delivery agents, we will make use, wherever possible, of the material and findings generated by the ongoing independent evaluation of the Newton Fund (including thematic impact studies, online surveys and telephone interviews).

Figure 3: Summary of methodological elements for the performance review of the Newton Fund



## 5. Sampling approach

Each Newton Fund country partnership has been set up separately and with its own structure and processes, in collaboration with the partner country. To ensure our review covers a variety of contexts and partnership approaches, we will select eight out of the 17 active country partnerships for review: six desk-based reviews and two detailed case studies with country visits. The desk-based reviews will cover partnerships with **Chile, China, India, Kenya, Mexico** and **Vietnam**. The two country visits will be to Brazil and South Africa. We have arrived at this number of case studies to ensure that the review covers both key variations and common traits in the nature of the partnerships and how well they are performing so far.<sup>11</sup>

We used the following selection criteria to ensure a representative sample: partnership status, strength of existing research and innovation ties to the UK, and research and innovation capacity (see Table 2 for details of the criteria and how they apply to our sample).

Table 2: Sampling criteria

Sampling criteria	Rationale
<b>1. Partnership status</b>	<p>We have considered the duration and scope of partnerships in our sampling. Most of the countries in our sample are part of the original 15 Newton Fund partnerships established in 2014. Kenya, however, joined in 2016, representing one of three new partnerships for the Newton Fund. Chile, one of the original Newton Fund partners, graduated from the OECD list of ODA-eligible countries after joining the Newton Fund (and this may happen to other countries before 2021). Our sample includes all categories in order to examine how effectively BEIS manages both more mature and emerging partnerships, and how it exits partnerships after ODA graduation.</p> <p>Whilst most Newton Fund partnerships are between the UK and a single country partner, the South African partnership also allows for collaboration with the wider Africa region.</p>
<b>Original country partnerships:</b> China, Brazil, Mexico, India, Vietnam	<p><b>New partnership:</b> Kenya</p> <p><b>Partnership with a role beyond country:</b> South Africa and wider Africa</p> <p><b>Graduated country partnership:</b> Chile</p>
<b>2. UK research and innovation ties before the establishment of the Newton Fund</b>	<p>We would expect Newton partnerships to differ based on whether they draw on pre-existing research and innovation ties between the UK and the partner country, or whether they represent relatively new forms of collaboration on research and innovation.</p> <p>Pre-existing ties can be based on history and commonality between the UK and the partner country's higher education sectors and research culture (such as Commonwealth countries) or on more recent strategic decisions (such as the rapid rise in research collaboration between the UK and China over the past two decades).</p>
<p>On a continuum according to the strength of pre-Newton research and innovation links, we estimate the case study countries to distribute from strongest to weakest as follows:</p> <p>China ----- India ----- South Africa ----- Kenya ----- Brazil, Chile ----- Mexico, Vietnam</p>	
<b>3. Level of in-country research and innovation activity and investment:</b>	<p>Applying BEIS's original categorisation of pre-existing research and innovation activities in each country, which informed its selection criteria for Newton Fund partners, we have sampled across the four different categories: <b>Tier 1:</b> high, <b>Tier 2:</b> some, <b>Tier 3:</b> little. Kenya is not assessed as it is a new partner.</p> <p>We expect BEIS to manage partnerships differently in countries with different levels, and to focus its efforts on different types of activities across the three Newton Fund pillars (people, research, translation).</p>

11. We note that the independent evaluator also selected eight from the original 15 countries.



<b>Tier 1:</b> Brazil, China, India, South Africa	<b>Tier 2:</b> Mexico, Chile	<b>Tier 3:</b> Vietnam	<b>Not assessed:</b> Kenya
<b>4. Subsequent baseline classification of research capacity by independent evaluator</b>	The Newton Fund’s independent evaluator assessed the partnership countries’ research capacity as part of their baseline classification. <sup>12</sup>		
<b>High capacity:</b> China, South Africa	<b>Intermediate capacity:</b> Brazil, Chile, India, Mexico	<b>Incipient capacity:</b> Vietnam	<b>Not assessed:</b> Kenya

Within those eight countries, we identified further criteria for selecting which ones to visit. To make best use of our time in country, we chose partnerships that cover a significant proportion of the Newton Fund’s spending, with a broad range of Newton Fund delivery partners and national funding partners active in managing the portfolio and a good spread of research and innovation activities. Second, in order to investigate the role and function of the Newton Fund’s secondary purpose, we chose partnerships that are also important to the UK’s ‘Global Britain’ foreign policy agenda – seeking diplomatic and economic opportunities beyond the EU, and particularly with emerging markets – as assessed through two proxies described below. The two additional criteria are set out in Table 3.

Table 3: Additional criteria to aid country visit selection

Sampling criteria	Rationale
<b>5. Proportion of total Newton Fund spending</b>	<p>We expect the scale of spending to be a significant determinant of how developed and substantial the Newton Fund partnership is, with higher-spend countries receiving more government resources and attention from both BEIS and its counterpart institution.</p> <p>We also want to make sure that we cover enough of the Newton Fund’s activities and programmes to provide robust answers to our review questions, particularly on the Fund’s contribution to delivering development results. This is particularly important for our two country visits. Overall we have identified a sample that covers more than two thirds of total Newton Fund spending.</p> <p>At the same time, we have included countries with different levels of spending in order to capture any variation between low, medium and high spending categories.</p>
<b>High:</b> Brazil, China, India, South Africa (and wider Africa)	<b>Medium:</b> Mexico, Vietnam
	<b>Low:</b> Kenya, Chile
<b>6. Global Britain: Relevance to secondary benefit</b>	<p>We have taken the Prosperity Fund’s published country investments as a proxy for the countries’ strategic importance to the UK and therefore for the importance of the secondary purpose (strengthening ties with partner countries and promoting UK excellence in development research and innovation).<sup>13</sup></p> <p>We have tested this proxy against the Strategic Defence and Security Review, which mentions India 19 times, China 19, Brazil ten, Mexico five, Kenya four, South Africa twice (but Africa as a region 54 times), Vietnam twice and Chile once.<sup>14</sup></p>
<b>Higher Prosperity Fund spend:</b> Brazil, China, India, Kenya, Mexico, South Africa	<b>Lower Prosperity Fund spend:</b> Vietnam
	<b>No allocation:</b> Chile

12. The independent evaluator also selected Brazil, China, India, Mexico and South Africa as case study countries (the ICAI additions are Chile, Kenya and Vietnam).  
13. The Prosperity Fund, announced in the 2015 Strategic Defence and Security Review, is a £1.3 billion cross-government ODA fund that aims to promote growth and prosperity in key partner countries, particularly across emerging markets and middle-income countries, [link](#).  
14. National Security Strategy and Strategic Defence and Security Review 2015, HM Government, November 2015, [link](#).

Based on these two additional criteria, we have chosen to visit Brazil and South Africa. They are among the four Newton Fund countries with the largest allocated budgets. Together, the two country partnerships cover 17.3% of the Newton Fund’s proposed total budget. Brazil has ten national funding partners while South Africa has 11, and both countries have large research and innovation portfolios involving many UK delivery partners. Brazil and the region of Africa (with South Africa having a wider role within the region) are both important to the UK’s Global Britain foreign policy agenda.

At the same time as scoring high on our two additional criteria, **Brazil** and **South Africa** vary on three out of the four criteria set out in Table 2:

- They have different Newton partnership status, with the South Africa partnership also allowing for collaboration with wider Africa.
- They have been rated by the independent evaluator as having different levels of research capacity, with South Africa rated as ‘high’ and Brazil as ‘intermediate’.
- South Africa has considerably stronger pre-existing research ties to the UK than Brazil does.

## 6. Limitations to the methodology

We anticipate three primary methodological challenges:

- **Results data:** Investment in research and innovation can take a long time to produce development outcomes, and it is not possible at the outset of a research project to determine what findings – and thus what impact – it will lead to. We may therefore have limited results data, and will instead assess the likelihood of effectiveness – or the plausibility of what the UK delivery partners call ‘pathways to impact’.
- **Representativeness of findings:** Each country partnership has different objectives, co-designed with national counterparts, which will make it challenging to generalise our findings. We have therefore opted for a broad sample that will allow us to take account of variations while also identifying similarities and common themes between countries.
- **Attribution of outputs to the Newton Fund:** There will be challenges in establishing whether any increased research and innovation capacity in partner countries is a result of the Newton Fund, as other factors (including the efforts of national governments and other development partners) may also have contributed. We will conduct a contribution analysis, assessing (i) the plausibility of causal claims made by the Newton Fund delivery partners against documentary evidence and stakeholder feedback, and (ii) through stakeholder interviews, exploring whether other causal factors were at play.

## 7. Risk management

Risk	Mitigation and management actions
Overlap with or duplication of the ongoing independent evaluation of the Newton Fund.	We have ensured that the focus of the ICAI review is different but complementary to that of the independent evaluation, so that we minimise duplication while benefiting from existing evaluation data. The team is coordinating closely with the independent evaluator to ensure this is maintained throughout the review, and to avoid over-burdening key UK and country partner stakeholders with data collection activities.
Challenge of balancing breadth and depth of analysis to arrive at representative findings, given the wide range of UK delivery partners and national funding partners operating across the 17 active partner countries.	We aim to achieve breadth of analysis through a survey that covers all 17 active partner countries and depth of analysis through our sample of eight case studies of country partnerships. The two country visits to South Africa and Brazil will allow for a deeper investigation into two distinct types of partnership. Taken together, this sample will ensure that our findings on relevance, effectiveness and learning are representative of the Newton Fund as a whole.

## 8. Quality assurance

The review will be carried out under the guidance of ICAI commissioner Dr Alison Evans, with support from the ICAI secretariat. The review will be subject to quality assurance by the service provider consortium.

Both the methodology and the final report will be peer-reviewed by Professor Scarlett Cornelissen from Stellenbosch University, working in an individual capacity and not as a representative of the university.

## 9. Timing and deliverables

The review will be undertaken between June 2018 and April 2019.

Phase	Timing and deliverables
Inception	Approach paper: July and August 2018
Data collection	Country visits: October and November 2018 Evidence pack: December 2018 Emerging findings presentation: January 2019
Reporting	Final report: mid-April 2019



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