

## Section A: Official Development Assistance (ODA) and GCRF strategy

### The strategy

1. Summarise the key aspects of your three year **strategy for development related and GCRF research activity**, including:
  - a. Your institution's strategy and priority objectives for all development related research activity funded through all sources for three years from 2018-19.
  - b. Summary of the key aspects of your three year strategic plan for QR GCRF in light of the criteria and objectives for the GCRF outlined in the guidance.
  - c. How activity funded through QR GCRF fits into your broader strategy and priorities for all development related research activity.
  - d. How activity funded through QR GCRF relates to the UK strategy for the GCRF.<sup>1</sup>
  - e. How your development-related and GCRF strategies relate to your wider institutional strategy for using QR.
  - f. Likely key barriers and enablers to implementing your strategy.
  - g. The key activities by which you will realise your objectives, such as capacity and capability building; mono-disciplinary interdisciplinary and collaborative research; generating impact from research; meeting the full economic cost of GCRF activity funded through other sources; rapid response to emergencies with an urgent research need; and pump priming.
  - h. The main Development Assistance Committee (DAC) list developing countries you intend to collaborate with.

The development research strategy (2018-2021) of the University of Bradford builds on our heritage and strengths aligned to our vision to be a world leader in the creation of knowledge through fundamental and applied research and the application of knowledge for the prosperity and wellbeing of people. Our vision recognises the role of UK Universities in undertaking research to understand and find solutions to complex, intractable, global problems such as poverty, poor health, climate change, energy, water supply, food security, and conflict.

Our development research strategic focus aligns to the University's core research strategy and overarching academic strengths in **Advanced Healthcare, Innovative Engineering**, and **Sustainable Societies**. The strategic focus is underpinned and informed by alignment to the requirements of ODA, the UN SDGs, and UK strategy for the GCRF to promote economic development and welfare. The University supports an

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<sup>1</sup> UK Strategy for the Global Challenges Research Fund,  
<http://www.rcuk.ac.uk/funding/gcrf/challenges/>

interdisciplinary approach to development research to deliver understanding across science, engineering, social, political, economic, and cultural behaviour. We will achieve this via an integrated programme of postdoctoral project work, doctoral training, networking, symposia and sandpits. Our intention over the next three years is to continue bidding for ODA funding through delivery partners of the Global Challenge Research Fund, Newton Fund, and through Department of Health Global Health Research. We will also explore opportunities through the Ross Fund and Prosperity Fund. Our development and GCRF strategies, themes, and priority objectives are in perfect alignment with our University Research strategy for all external and internal funding including institutional QR. This strengthens the synergy and benefits across all research areas from all strategic investment.

Many countries across the world face significant challenges in developing sustainable societies. Divided by war and conflict; energy, food, water and other resources are being rapidly depleted, and weak governance and economic models have led to corruption and stark inequalities. Our development strategies in **Sustainable Societies** will (i) support growth in political and relational wellbeing for current and future generations through innovative research. (ii) promote decent work and economic growth, and (iii) reduce gender inequality. Our research that supports **Sustainable Societies** is in the following Centres: John and Elnora Ferguson Centre for African Studies (JEFCAS), Peace Studies and International Development, Centre for Research in Organisations and Work, Bradford Centre for Sustainable Environments, Centre for Inclusion and Diversity, and Bradford Centre for Business in Society.

Our development strategies surrounding **Advanced Healthcare** are (iv) we will develop new models of sustainable healthcare delivery and health promotion to reduce the health inequalities prevalent in DAC-list countries, (v) we will reduce the burden of avoidable illness and preventable deaths and (vi) we will enhance the effectiveness of health and care interventions available to communities. Our key research areas are: Cancer Therapeutics, Dementia, Vision Science, Pharmacy, Pharmaceutical Innovation, Medical Engineering, Digital Health, and Medical Sciences.

Our development strategy surrounding **Innovative Engineering** focuses on research that advances the fundamental understanding of engineering and applied science to create technological solutions to real-world problems and needs experienced in DAC list countries. (vii) We will develop solutions for improving air quality, clean water and sanitation, sustainable energy, and responsible consumption and production under the theme of sustainable cities and communities. (viii) we will develop engineering solutions that are resilient and promote affordable and reusable infrastructure. Our research areas are: Advanced Materials Engineering, Artificial Intelligence, Applied Mathematics, Communication Systems Engineering, Cyber Security, Environmental and Infrastructure Engineering, Wired and Wireless Networks.

#### **Priority Strategic Objectives (2018-2021)**

Our priority strategic objectives for development research are **Excellence, Internationalisation, Equality and Diversity, and Sustainability.**

**Excellence:** Academic and operational excellence will be a hallmark of all our activities. We aim to deliver cutting-edge research and knowledge transfer ensuring the UK leads in addressing the problems faced by developing countries. We will ensure excellence in research and knowledge transfer and collaborate, wherever possible, with other excellent universities, institutes, laboratories, companies and GCRF delivery partners.

**Internationalisation:** We recognise that Universities participate in the global market as drivers of the knowledge economy. We will be internationally involved and internationally visible. This sits alongside our long-standing commitment to the local and regional communities and economy, and we will use our international reach to support our local and regional partners. We will (a) do research that impacts on policymakers, society and business leaders worldwide (b) deliver training that prepares post-doctoral researchers to become leaders in the global economy (c) create opportunities for international exchange with partners overseas. We aim to be a university where international researchers want to work, and overseas students want to study. **Equality and diversity:** The University of Bradford is well known internationally for its academic research into and its commitment to equality, diversity and inclusivity; and for its friendliness and interdisciplinarity. We believe that a vibrant intellectual atmosphere derives from a mix of people from different backgrounds. We will: (a) Recruit and retain researchers and staff from all regions and countries, irrespective of background or characteristics, guided by the principle that those people have the ability to succeed at the University of Bradford (b) Encourage cross-disciplinary research on global problems both within Bradford and externally with global partners (c) Build equitable and sustainable partnerships with the city and region, as well as nationally and internationally. **Sustainability:** We aim to balance academic, social, financial and environmental concerns. We want people and society to benefit from our activities, while ensuring financial viability and minimising environmental impacts. We are proud of having a world-leading eco-campus that reflects our commitment to sustainable development. We will (a) undertake development which has sustainable impact and legacy beyond our research in overseas DAC-list countries; (b) incorporate environmental, social, and financial impact into all levels of development project governance.

### **Three Year Strategic Plan for QR GCRF**

Key aspects of our three-year strategic plan for QR GCRF are to focus activities on building equitable partnerships and networks around our core strengths and undertake focused interdisciplinary and collaborative research in these areas (specific strategic focus and activities are provided below). A key strategic plan for both Capacity and Capability Building and Interdisciplinary and Collaborative Research is to catalyse an **International Development PhD Cohort** in the strategic areas of research. Activities supported under our Institution QR GCRF allocation will meet ODA-eligibility, primarily lead to impact in economic development and/or welfare in developing countries, and meet our priority strategic objective of research excellence. **Pump priming** activities to develop strong sustainable partnerships and strategies will allow our overseas academic, industrial and third sector partners in developing countries to play a key role of co-

developing and informing genuine problems and bottom-up solutions which have high likelihood of impact. Establishing and enhancing equitable and **sustainable partnerships** will further strengthen capacity for research and innovation in the UK and developing countries and will be delivered in a manner which increases the engagement across the UK research community, thereby incorporating elements of Capacity and Capability Building. We will also undertake **focused research** to deliver tangible outputs and future impact including pump priming projects to generate preliminary data for future funding applications, or through larger interdisciplinary and collaborative research. We will carry out this research in a manner which involves growing people-based capacity and capability across career stages to undertake, and support, ODA research.

#### **QR GCRF Activities and relation to Bradford's Institutional Strategy and UK strategy for the GCRF**

##### **Advanced Healthcare**

Our main strategic focus areas and activities for QR GCRF (2018-2021) in Advanced Healthcare fulfil our broader institutional development strategy and objectives outlined above and align to the UK strategy for the GCRF in sustainable health and wellbeing, sustainable communities and livelihoods, and reducing poverty and inequality due to the exacerbation of poverty and disempowerment due to poor health.

We will build on our cross faculty Institutional strengths in Dementia Care, Neuroprotection, Optometry and Vision Sciences, Cancer, Psychology, Physiotherapy, Cardiometabolic Diseases, and Diabetes to deliver an integrated programme of activities that seeks to address both societal and health economic challenges of **ageing and associated long-term conditions in the Global South** with initial focus in China. Ageing and longer-term conditions present similar challenges to society in both the UK and China. In China, whilst social support is more embedded within communities, the one child policy has left a legacy whereby one individual has responsibility for the care of six ageing adults. In these cases, new solutions are required, focused on improved health in old age, more efficient deployment of health services, and unlocking the economic potential of an ageing population. We will utilise QR GCRF for pump priming activities to underpin partnership development and common goals, and small projects to generate preliminary data. We will increase engagement in the UK research community in this challenge (Capacity and Capability Activities) and undertake collaborative research between overseas partners aligned to our QR GCRF strategy to promote an International Development PhD Cohort.

We will build on our strengths in Optometry and Vision Sciences, Materials Chemistry, Social Sciences, and Management & Law to reduce the burden of **preventable visual impairment and blindness in the Global South**. Over 285 million people are estimated to be visually impaired worldwide with approximately 90% living in low-income settings. Crucially 80% of all visual impairment can be prevented or cured. This burden is inextricably linked to, and further exacerbates, conditions of poverty and disempowerment. We will focus growing research activity (pump priming, interdisciplinary and collaborative) on the developmental challenges in the Global South

namely, timely, appropriate, and affordable measures to control, treat, and rehabilitate blindness and visual impairment. This is of primary relevance to DAC-list countries where compounding factors driving vision burden include propensity (e.g. high diabetes rates), infrastructure, climate, economic, and inequalities in seeking and accessing affordable healthcare in rural compared to urban areas. Our pump priming activity will consolidate our established relationships in India (e.g. LV Prasad Eye Institute) whilst building new equitable relationships with other DAC-list countries with elements of Capacity and Capability Building. We aspire to saving the sight of patients and in doing so promote the health needs of citizens and give people below the poverty line the opportunity to lead a healthy quality of life. Eliminating this burden will enable people to escape disability and poverty.

### **Sustainable Societies**

Our main strategic focus areas and activities for QR GCRF (2018-2021) in Sustainable Societies fulfil our broader Institute development strategy and objectives and align to the UK strategy for the GCRF in inclusive and equitable quality education, sustainable livelihoods, reducing conflict and promoting peace, justice and humanitarian action and reducing poverty and inequality.

We will build on our strengths and global recognition in Peace Studies and International Development to undertake research and research-informed policy that addresses both the multi-level nature of **armed violence** (e.g. inter-personal, inter-group, inter-state and transnational) and its multi-sectoral causes, consequences and means of control (historical; religious and cultural; technological; psychological and health; political and socio-economic) drawing on insights from evolutionary biologists, archaeologists, psychologists, anthropologists, economists, historians and political scientists. There are over half a million deaths per year from armed violence and the annual economic cost of homicidal violence has been estimated at up to \$700 billion. Countries in the global south are disproportionately affected by this problem. A key issue has been a concern with the ways in which the scale, frequency and forms of armed violence have all changed. In particular, it is now widely recognised that the traditional focus on interstate and civil war has masked the fact that just 10% of deaths from armed violence occur in conflict settings or during terrorist conflict. We will increase engagement in the UK research community in this challenge (Capacity and Capability Activities, Pump Priming) and undertake collaborative research between overseas partners aligned to our QR GCRF strategy to promote an International Development PhD Cohort.

We will build on our strengths in Management and Law, and through interdisciplinary interactions across Social Sciences, and Engineering to **improve the education and wellbeing of local communities** in resource-constrained, deprived, rural and / or conflict regions. This intractable development challenge is especially prevalent in countries within South Asia such as Bangladesh, India, Pakistan, Sri Lanka and Afghanistan. These countries continue to face socio-economic hardship due to civil unrest and political instability and/or natural disasters. This focus seeks to form an interdisciplinary network that brings together academic expertise of the UK to address three GCRF areas:



inclusive and equitable education, sustainable livelihoods supported by strong foundations for inclusive economic growth and innovation, and inclusive societies. Mechanisms for impact focus will include development studies, information and communication technology, entrepreneurship, logistics, supply chain and circular economy, health and wellbeing, economics, business and management, social innovation and social advocacy. This will be achieved through investigating and formulating interventions/activities to develop capability and capacity in education and skills, promoting decent work and wellbeing for all in rural, socio-economically deprived communities. This will be encapsulated by education, entrepreneurship, food security awareness, community health and reflexive learning in order to develop resilient sustainable societies that are adaptable and responsive to local, regional and global challenges and opportunities.

We will build on strengths and well-funded activity, including previous GCRF funding, in our School of Archaeological Sciences and Forensics to consolidate our network of international partners across all DAC-list countries and undertake development of conflict-sensitive approaches to protect and record **fragile heritage** in ways that support community-led wealth creation and regional networks through sustainable tourism, education, and participation in the wider digital market of heritage assets. Cultural heritage contributes to the economic, social and psychological well-being of communities around the world. An intractable global challenge is the widespread and irrevocable destruction of global heritage. Such heritage is a conduit for social cohesion and a rich resource for addressing extreme poverty in the Global South. Worldwide, irrevocable destruction of heritage is a frequent occurrence, resulting from conflict, neglect, looting, vandalism, natural disaster, environmental change, and through the pressures of agricultural encroachment and unregulated development. It ensues largely without an agreed framework of response or mitigation. The loss of heritage without record is a loss of opportunity to strengthen economic and social wellbeing. We will strategically focus on pump priming and capacity and capability activities that will establish an active global network and undertake collaborative and interdisciplinary research between overseas partners.

### **Innovative Engineering**

Our main strategic focus areas and activities for QR GCRF (2018-2021) in Innovative Engineering fulfil our broader institutional development strategy and objectives and align to the UK strategy for the GCRF in clean air, water and sanitation, affordable, reliable, sustainable energy, sustainable cities and communities, sustainable production and consumption of materials and other resources.

We will build on strengths in resilient and re-usable engineered materials for sustainable built environments, and clean water and sanitation, to undertake research under the theme of **sustainable cities and communities within the global south**. We will explore opportunities with our network partners in Nigeria, Kenya, Ethiopia, Ghana, Colombia, Egypt, Malaysia, and India through pump priming activities to establish co-developed problems and solutions in areas of, for example, Sustainable settlements, affordable and

sustainable clean drinking water and sanitation, sustainable affordable houses in post-conflict areas, smart and inclusive built environment, using renewable sources of energy and local energy farms, re-using waste, community resilience to natural and man-made disaster events, sustainable infrastructure, urban conservation policies, and habitat and the human settlement. With our overseas partner countries we will undertake further collaborative and interdisciplinary research with focus on the opportunity and strategy to catalyse an International Development PhD Cohort.

The University of Bradford has established the **World Technology Universities Network (WTU-N)**. The WTU-N is a network of international universities committed to undertaking cutting-edge global challenge-led research. Strategic allocation of QR GCRF will allow us the opportunity to further synergise, strengthen, and grow our partnerships with DAC-list countries in the WTU-N, such as Tanzania, Malaysia, Thailand, India, and Brazil, through complementing the core cohort with a wider existing network in areas of shared research endeavour. QR GCRF will be used strategically on pump priming activities for mobility of international exchanges between DAC-list countries seeding research outputs to catalyse longer term collaboration and thereby enhancement of the partnerships. The proposed international exchanges will provide the mechanism to undertake short feasibility and proof of concept studies thereby strengthening our partnerships, catalysing collaboration with our partners, and providing longer-term sustainability.

#### **Key Barriers and Enablers**

Key barriers to implementing our development strategy are; skills and knowledge gaps of our academics familiar with research but unfamiliar with international development; awareness of international development and the opportunities; and establishing a strong grounding of social sciences in traditional Engineering and Life Science focused themes. To mitigate these risks to the success of our strategy our key enablers will be to foster a truly interdisciplinary approach using our existing expertise in Peace Studies and International Development; we will provide central training via experienced researchers in international development and our central Research Support Office focused on international development, specifically consideration of research truly impacting the poorest and most vulnerable; co-development of research with developing countries; Sustainability and legacy of project showing evidence of scalable and sustainable impact; present and previous work in the field and working with NGOs on the ground for evidence gathering and implementation; monitoring and evaluation built into the research; clear governance structures and Roles and Responsibility. We will also use our structure of Associate Deans for International and implemented GCRF/ODA champions within faculties and central Research and Knowledge Transfer Support to champion international development opportunities and best practice. We will also continue to promote cross-faculty interaction through our Associate Deans for Research with strong ties between Engineering, Life Sciences, and Health Studies, and Social Sciences and Management and Law.

The main Development Assistance Committee (DAC) list developing countries we intend to collaborate with are; in East Asia (including China, Malaysia, and Thailand); South Asia (including India, Bangladesh, and Pakistan); Latin America (including Mexico, Brazil, and Peru); and Middle East and Africa (including mainly Tanzania, Kenya, Nepal but also Ethiopia, Malawi, and Yemen). Through both our WTU-Network and congress and strategy in protecting Heritage we will collaborate globally across many countries including those on both the 'least developed' and 'Low Income' recipients.

2. Provide details of the main intended **outcomes and impacts** of your strategy.

The main intended outcomes and impacts of our research and activity that directly and primarily benefit developing countries on the DAC list includes; Improved wellbeing of an ageing population in China through enhancing the effectiveness of health and care interventions in associated long-term conditions which will have longer term impact in reducing social inequalities, healthy ageing, and unlocking the economic potential of an ageing population; Reduction in visual impairment and blindness in India through timely, appropriate, and affordable measures to control, treat, and rehabilitate patients will have longer term impact on allowing those people to undertake work and escape poverty; Through investigating and formulating interventions/activities to develop capability and capacity in education and skills, in rural, socio-economically deprived communities in South Asia our outcomes will be increasing the number of youth and adults who have relevant skills for employment, decent work, and entrepreneurship leading to longer term impact on economic growth; Through protection and recording of cultural heritage across global DAC-list countries we will propose a better understanding of the economic and social value of heritage and more specifically the mechanisms to commoditise heritage locally leading to outcomes in strengthening efforts to protect and safeguard the world's cultural and natural heritage and impact on increased expenditure (public and private) spent on preservation, protection and conservation of all cultural and natural heritage.

In further areas of our GCRF strategy we will undertake pump priming, and capacity and capability activities to establish further equitable and sustainable partnerships across DAC-list countries, and in a manner, which will increase engagement in the wider UK research community. These partnerships will allow our overseas academic, industrial and third sector partners in developing countries to play a key role of co-developing and informing genuine problems and bottom-up solutions which have high direct relevance to countries on the DAC-list and high likelihood of economic and welfare impact in the strategic areas of research. The outcomes will be an increase in the number of partnerships, and the number of countries we are active in, and the number of researchers at Bradford and in the UK involved in development research. Our intention to focus collaborative and interdisciplinary research through an International Development PhD Cohort and postdoctoral work leads to outcomes in improved capability. The Impact of both partnership building and training of a new generation of global academics in development research is directly beneficial to developing countries in growing people-based capacity and capability across career stages to undertake, and support, ODA research.



### Management of GCRF

3. How will your HEI **monitor** and **evaluate** its progress and compliance in ODA and GCRF activity, including assessing geographical distribution of activity, outputs, outcomes and economic and social impacts?

Please describe the policies, procedures and approach you have in place to measure progress, evaluate outcomes, identify lessons learned, and ensure ODA compliance

The University of Bradford will allocate QR GCRF through internal controls that recommend funding for all planned activities that qualify as ODA. All activities will have to demonstrate ODA compliance in line with current guidance from Research Councils UK <http://www.rcuk.ac.uk/documents/international/gcrfodaguidance-pdf/> as per definitions by the OECD that only research directly and primarily relevant to the problems of developing countries may be counted as ODA. Practically this will involve those in the institution seeking QR GCRF funding writing an ODA statement on which country/countries on the DAC-list will directly benefit, how is the proposal directly and primarily relevant to the development challenges of these countries, and how do they expect that the outcome of the proposed activities will promote economic development and welfare. Where a proposed research project may involve multiple activities, each activity will be assessed in compliance to ODA before the work is undertaken. Further to ODA compliance, activities will only be funded where there is a clear plan for monitoring and evaluation of outcomes and social and economic impacts within the activity. This will include assessment of geographical distribution. Where research plans are changed or updated during the activity the University will assess the new plan for ODA compliance before approving changes. It is expected that both the activity lead and University will support monitoring of long term impact beyond the funded activity period. Allocation of QR GCRF will follow the Universities standard policies and procedures for internal approval of activity by the Faculty Finance Manager and Delegated University Authority (e.g. Dean, Associate Dean for Research and Knowledge Transfer or the Head of School) with support from the University's Research and Knowledge Transfer Support (RKTS) service. Where funds are being requested directly for an overseas partner a questionnaire will be completed in-line with the current Research Council Financial and Capability Due Diligence Check. For internal assessment the GCRF Steering Group will evaluate ODA compliance, plans for monitoring and evaluation, and strategic fit to our QR GCRF strategy and priority strategic objectives. On approval the activity will follow the University's standard procedure for project initiation. Where the activity involves a PhD research project the lead will also follow the PGR approval process for the faculty. At the transfer stage to the post-award research finance team the project will be flagged as ODA.

To ensure project quality/management we will appoint faculty-based GCRF Champions who will oversee ODA work undertaken at project level and support the lead in monitoring and evaluating progress and outcomes during and after funded activity.

These champions will be members of a University GCRF Steering Group that will monitor and evaluate activity funded by the QR GCRF fund but will also have a broader responsibility to set strategy and manage all GCRF and related activity for the University. This GCRF Steering Group will be led by PVC RKT and supported by the Research and Knowledge Transfer Support Team. The lead will also be supported by the University's Research Finance team to ensure continued ODA compliance, and Research & Knowledge Transfer Support (RKTS) team which includes an Impact Officer to support longer term monitoring and capture of impact.

All QR GCRF funded activities will be managed under the University's standard project management, close-down and legacy approach in line with other research projects. This will mean that activity will be tracked throughout the project and outcomes and impacts recorded against those projects. Each funded activity will be required to submit timely reports to the GCRF Steering Group which will review and evaluate progress against the planned activities, review compliance, and give appropriate feedback to the activity leader. The University of Bradford GCRF Steering Group will submit an annual statement to the University RKT Strategy Committee for review and approval in readiness for submission to HEFCE.

In regards to project close-down, at the end of each funded activity a final report will be required detailing the countries worked with and/or directly benefiting from the work, the economic and welfare outcomes and impact of the work, and issues/barriers identified which may have been experienced and how the team was able to overcome these issues to record and feedback lessons learned and promote best practice. The criteria for measuring success of an activity may take the form of using UN SDG target indicators where appropriate, and specifically how the outcomes and impact realised match the planned outcomes and impact. The expected 'legacy' of the work will be recorded at this stage and reviewed regularly e.g. follow-on grant applications to GCRF.

## **Section B: Use of QR GCRF 2018-19 allocation and future QR GCRF priorities**

4. Please complete the table in Annex A2 detailing the expected spending and activities for QR GCRF in the academic year 2018-19. Note that the total QR GCRF spending must equal the indicative allocation (available in Annex C), and all activities must be ODA-compliant for strategies to be assessed as ODA-compliant overall.

5. Please add here any explanatory notes on how you have completed the table in Annex A2 that will help inform assessment of ODA compliance.

The completed table flows from our strategic themes and key research areas outlined in our QR GCRF strategy in relation to ODA funded activities. A key part of our strategy is to fund an international development PhD cohort of five in the three-year period, the budget is for stipend and tuition fees (£19,037), training and variable research costs

dependent on lab and non-lab based projects (average £22,500 per PhD, total budget £112,500).

Where there is a flexible need to explore partnerships, co-develop research questions of direct benefit to the DAC-list country, and allow the University to be responsive to needs and new opportunities, pump priming activities including relationship building are proposed. This will include networking meetings and other events to develop sustainable strategies and partnerships for future activities, and small pump-priming projects to generate preliminary data for future applications (£32,542). We further propose mobility grants through our World Technology University Network with DAC-List countries to develop new collaborations to establish short research visits and pump priming projects to establish preliminary data (£5,000).

6. How would your **priorities and activities** for 2018-19 QR GCRF change if the funding level differs from that outlined in indicative allocations? Please include detail of how priorities will change with increases and decreases to QR GCRF funding, and details of how each priority meets ODA criteria.

Our priority will be to maintain research activities undertaken by our international development PhD cohort as this ensures robust, tangible research of direct benefit to DAC-list countries arising from QR GCRF and builds a pipeline of globally aware early career researchers, and cements significant partnerships with overseas partners. These International Development PhDs are budgeted in Table A under the activities classified as collaborative and interdisciplinary research. New activities for 2019-20 could include an additional International Development PhD based on outcomes from 2018-19 pump priming activities. Lower Priority areas that might be cut if our GCRF allocation is reduced are pump priming activities for networking meetings that are aimed at developing new partnerships that would lead onto research projects in subsequent years. On reflection, an Increase in QR GCRF budget would allow the University to explore further opportunities with new partnerships across a broader range of DAC-list countries through a pipeline of undertaking pump priming activities that lead to collaborative and interdisciplinary research undertaken as a strategic priority by international development PhDs. These new research activities would remain under our current overarching themes and key research areas where there are strengths and inclusion over many disciplines within the University. This will ensure the research remains of direct benefit to DAC-list countries and will lead to improvement in economic and welfare outcomes and impact.

7. Based on indicative funding allocations, what are your **priorities** for QR GCRF activity in 2019-20? Please include detail of how priorities will change with increases and decreases to QR GCRF funding, and details of how each priority meets ODA criteria.

Our priority will be to maintain research activities undertaken by our international development PhD cohort as this ensures robust, tangible research of direct benefit to DAC-list countries arising from QR GCRF and builds a pipeline of globally aware early

career researchers, and cements significant partnerships with overseas partners. Lower Priority areas that might be cut if our GCRF allocation is reduced in subsequent years are exploratory pump priming activities for developing new partnerships and new research projects.

An Increase in QR GCRF budget would allow the University to explore further opportunities with new partnerships across a broader range of DAC-list countries through a pipeline of undertaking pump priming activities that lead to collaborative and interdisciplinary research undertaken as a strategic priority by international development PhDs. As pump priming budget is available for new activities/areas in 2019-2020 these new research activities will remain under our current strategic overarching themes, but the key research areas can grow. For example, in Vision Sciences we have been working in India on rapid diagnostics and smart delivery of drugs for fungal eye infection. Fungal disease in the global south (eye, skin, respiratory) is a serious neglected topic with many countries having poor access to anti-fungal drugs, and existing gaps in diagnosis and treatment. Therefore, research in this area is directly and primarily relevant to the problems of developing countries and will have health and economic outcomes and impact.

8. Based on indicative funding allocations, what are your **priorities** for QR GCRF activity in 2020-21? Please include detail of how priorities will change with increases and decreases to QR GCRF funding, and details of how each priority meets ODA criteria.

Our priority will be to maintain research activities undertaken by our international development PhD cohort as this ensures robust, tangible research of direct benefit to DAC-list countries arising from QR GCRF and builds a pipeline of globally aware early career researchers, and cements significant partnerships with overseas partners. 2020-21 would represent the final year of our first international development cohort and therefore new priorities outside the PhD cohort would be (i) to explore "Generating Impact from Research" dependent on the outcomes within the focus of international development PhD projects, and (ii) to focus on new partnerships and co-develop new projects for a new international development PhD cohort to start in 2021-22. This would mean that Lowest Priority area that might be cut if our GCRF allocation is reduced in 2020-21 would be our pump priming activities.

An Increase in QR GCRF budget would allow the University to explore further opportunities with new partnerships across a broader range of DAC-list countries through a pipeline of undertaking pump priming activities that lead to collaborative and interdisciplinary research undertaken as a strategic priority by international development PhDs. In 2020-21, an increase allows an opportunity to focus on discreet projects within the academic year to generate impact from research that has been undertaken by the

international development PhD Cohort. This would increase the likelihood of impact within the developing countries the research directly benefitted.