

Annex A1: Template for institutional three-year GCRF strategies (AY 2018-19 onwards)

Please complete this form and the excel table in **Annex A2**. Text boxes may be expanded to the required length, and are expected to be in proportion to the level of formula Global Challenges Research Fund (GCRF) allocations received in 2017-18. Please do not attach other documents or annexes. Guidance for completing the forms is at Annex B.

Name of institution	University of St Andrews
Contact person for correspondence who is also responsible for ensuring that the head of institution has approved this strategy for submission to SFC.	
Name	Tom Brown
Position	Vice Principal (Research and Innovation)
Address	College Gate, North St, KY16 9AL
Email	vpres@st-andrews.ac.uk
Phone	01334 463202
Note that we intend to contact this person in the event of queries regarding the institutional GCRF strategy. We will also contact this person annually as part of our GCRF monitoring process.	
Has this GCRF strategy been approved for submission to SFC by the head of institution?	
Yes	
Name: Prof S Mapstone	
Email address: Principal@st-andrews.ac.uk	
Signature:	

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 formula GCRF in light of the criteria and objectives for the GCRF outlined in the guidance.
 - c. How activity funded through GCRF fits into your broader strategy and priorities for all development related research activity.
 - d. How activity funded through GCRF relates to the UK strategy for the GCRF.¹
 - e. How your development-related and GCRF strategies relate to your wider institutional strategy for using REG.
 - 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.

Maximum 3,000 words

Introduction

The University of St Andrews has an international outlook with a diverse and cosmopolitan student body, faculty and research profile, with students and staff from over 145 countries and a third of our student body from outside the European Union. In 2019 the Times Higher Education’s World University Rankings, St Andrews was placed 22nd in the world in terms of the most outward looking institutions.²

A recent report from the UK National Academies on the role of international collaboration in research found that “*international collaboration is integral to life as an active researcher across all disciplines and all career stages.*”³

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

² https://www.timeshighereducation.com/world-university-rankings/2019/world-ranking#!/page/0/length/25/sort_by/scores_international_outlook/sort_order/asc/cols/stats

³ <https://royalsociety.org/topics-policy/projects/international-researcher-mobility/role-of-international-collaboration-mobility-in-research/>

Our GCRF plans were born out of the University of St Andrews' 2015 strategy that stated that the University aims to generate *“critical mass and strength that can compete for major funding opportunities to find answers to the major challenges facing the world.”*⁴ As the University strategy has developed, with a 2018-2023 vision, so too has our SFC GCRF strategy, in dialogue with these exciting wider institutional aims. The University of St Andrews' Entrepreneurial strategy now states: *“To be entrepreneurial in our culture is to see potential in existing and future activity and to translate that into action and application. We will bring together staff, students, industrialists, policy shapers, and investors in an ecosystem that fosters a culture of collaboration, curiosity, and constructive challenge that is cognisant of impact on people and society. We will also learn from other institutions where successful networks already operate. Universities are central to delivering innovation”*.⁵

Our researchers have formed many international research networks, and these continue to be of high importance with excellent research that lies at the centre of St Andrews' endeavours. Since 2016, there have been more than 90 different projects funded which fall into the GCRF ODA remit; these have benefited more than 58 countries, with many projects involving at more than one country on the LDC list.

Our SFC GCRF strategy and processes mimic the University of St Andrews Strategy 2018-2023 for Social Responsibility of *“we will act ethically, transparently, sustainably, and for the wider public benefit at all times. This broad commitment to social responsibility and sustainability will shape our policies, practices and respect for our environment”*.⁶ Finally, our SFC GCRF activities fulfil one of the University's objectives, which is to *“promote areas of world-leading research that provide international leadership, engage with big societal questions, have the highest level of integrity, and the potential to resonate externally”*.⁷

In the first year covered by our 3-year strategy, the University of St Andrews Global Challenges Forum supported 49 projects⁸ in 48 countries, as illustrated by the map below.

⁴ [link no longer available](#)

⁵ <https://www.st-andrews.ac.uk/about/governance/university-strategy/entrepreneurial/>

⁶ <https://www.st-andrews.ac.uk/about/governance/university-strategy/university-social-responsibility/>

⁷ <https://www.st-andrews.ac.uk/about/governance/university-strategy/world-leading/>

⁸ 50 projects were originally funded, but one PI left the University before the project fully.



The 2018-19 funding has helped to progress all projects funded in 2017-18, and one from 2017-18 and to initiate a further 34. As the QR funding and the number of projects has grown, St Andrews’ Global Challenge research strengths by topics (fishing and coastal communities; global health, particularly TB, HIV and antimicrobial resistance; cultural heritage preservation and sustainable livelihoods; and energy security) and by region (East and sub-Saharan Africa, Amazonia and Southeast Asia) have become increasingly apparent.

As a result:

- all 17 SDGs were addressed in some way through the funded projects;
- 34 of the 49 funded projects had training elements which resulted in a total of 1,277 personnel from DAC-listed countries receiving training;
- produced, or is in the process of producing, 30 publications, 10 academic presentations / conference proceedings, 8 policy documents, 5 films/videos for web, and many webpages & blog posts; and
- seeded over £10.6M in follow-on applications and, to date, has leveraged £3.3M in additional funding.

Since the development of the University St Andrews 2018-2033 strategy, our SFC GCRF approach has also aligned more closely with the University of St Andrews’ umbrella themes⁹ of ‘Diverse (11 projects), Entrepreneurial (12 projects), and World-leading (22 projects) St Andrews, whilst all funded projects engage in different ways with ‘Global St Andrews’.

The University has implemented a number of policies to support the creation and recognition of research impact, including: a Research Impact Team, the appointment of staff who act as Directors of Impact in each academic department, a ‘research and impact’ leave scheme, inclusion of research impact and Knowledge Exchange (KE) in promotion criteria for academic staff, and a KE & Impact Fund to provide internal funding for the creation of impact across all disciplines. In terms of the GCRF landscape, our SFC GCRF funding has helped to ‘push the envelope’ by developing capacity across professional support services staff in charge of finance, due diligence, payroll and contracts. As a result of our latest success leveraged from the SFC funding, a UKRI GCRF Global Research Translation Award focused on translating research in East African settings will further enhance

⁹ <https://www.st-andrews.ac.uk/about/governance/university-strategy/>

capacity in our internal processes with regards to GCRF funding, due diligence and ODA financial compliance in this specific regional context.

Strategy for the distribution of SFC ODA GCRF funds prior to 2018

The strategy for distribution of funds to date has been to focus on projects that promise to deliver the greatest impact, have clear plans and have clear links in the ODA-eligible countries. An internal Review Panel comprises the VP Research and Innovation, VP International, the Dean of Arts and Dean of Science, and senior academics to assess the applications. The Review Panel made every effort to get the best value for money, balancing timescale and required funding with tangible benefit, while retaining the capacity for urgent requests. With this in mind, 90% of the 2016/17 SFC ODA funds full or part-funded 14 projects, 8% went to urgent appeals and 2% for top-ups to existing projects. No SFC ODA GCRF awards have been used to meet full economic costs of research funded by other sources; all money has been used to deliver economic development and well-being of countries on the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) list.

To achieve the overarching aim of the Global Challenges Research Fund, ‘to ensure the UK takes the lead in addressing the problems faced by developing countries, whilst developing our ability to deliver cutting-edge research’ (‘UK Strategy for the GCRF’), the University had in place a process of due diligence which involved: i) ensuring that all internal applications for ODA funding are carefully reviewed by Directors of Impact, the Research Impact Team, and draw on in-DAC-country expertise where it was deemed necessary and possible to check alignment with the GCRF Strategy and BEIS ODA Statement of Intent and ii) closely monitored all projects via research support units, particularly the Research Impact Team.

Discussions also took place in January 2017 involving all Scottish Universities with the intent of fostering collaborations between Scottish HEIs to address global challenges issues.

2019 update: Strategy for the distribution of SFC ODA GCRF funds since AY 2018-19

The Internal Review Panel now comprises the VP Research and Innovation, the Director of the St Andrews Global Forum and all members of the Steering Group; additionally, the Head of Research Impact reviews all applications to calibrate the threshold level for applications based on quality and funding available (just like the UKRI Grant Assessment Panels’ process). The application review process is robust and transparent and includes discussions with the entire Review Panel of all applications scoring above the threshold limit. As we are a small institution and are still building GCRF capacity, the Forum is mindful of conflicts of interest between the Panel members and applicants. We therefore have a two-pronged approach, depending on if the conflict of interest sits with a working colleague of a reviewer or the reviewer. The process ensures integrity of the review process as well as transparency. All feedback is given to successful and unsuccessful applicants and mentoring support is provided with the dual aims of building GCRF capacity for research staff and developing better GCRF projects.

Going forward, we aim to mimic UKRI review panels by including members of our Advisory Panel as external reviewers of grant proposals.

We continually strive to achieve the overarching aim of the Global Challenges Research Fund ‘to ensure the UK takes the lead in addressing the problems faced by developing countries, whilst developing our ability to deliver cutting-edge research’ (‘UK Strategy for the GCRF’). However, the due diligence process at St Andrews in place for the 2018-19 round of funding was unprepared and protracted for the quick response mode needed for GCRF funding in general. These processes, in some cases, delayed the start of projects to the extent that they threatened to jeopardise the projects’ outcomes and objectives. The GC Forum brought several support units together with the result that the University has a due diligence policy (pending approval by Academic Court) to ensure it is as streamlined, speedy and minimally burdensome as is possible. Our due diligence process, where research funds are to be transferred to an overseas partner organisation (OPO), involves: i) a pre-award PI check and evaluation, using specific criteria, by the Finance and Research Integrity Teams, ii) a post-award check which gathers residual information, as determined by Finance Advice & Support (FAS) and Research & Innovation Services (RIS) reviewers in the pre-award stage, generally requiring input from the OPO. The conclusion of the post-award stage is that a risk-based decision is made to determine how to proceed.

Expertise from 2017 building through 2021

The 2017-18 SFC GCRF funding allocation was used to move St Andrews strengths in ‘sustainable health’, ‘secure and sustainable food systems’, ‘sustainable energy and resources’, ‘sustainable livelihoods’, and ‘promoting justice and humanitarian action’ beyond mono-disciplinary approaches to stimulate innovative collaborations. Funding generated new interdisciplinary teams aimed at deepening understanding of intractable development challenges. Internal networking and capacity building produced a series of research hubs supported by pump-priming, outputs of which include new collaborations with other Scottish Universities.

In 2018, we identified three umbrella themes for the duration of this strategy:

- Energy and innovation
- Global health and inequality
- Sustainability and environmental change

Sustainable livelihoods, promoting justice and humanitarian action and secure and sustainable food systems, gender equity, rapid urbanization and cultural heritage preservation are embedded within each theme in line with Sustainable Development Goal (SDG) priorities. The yearly block grants are enabling individual projects to be planned more thoroughly with a view to achieving longer-term goals and ensuring continued sustainability when project funding finishes. Also, it has allowed more flexible internal deadlines, which can start the application process earlier thus allowing longer funded periods for any given year. This is proving vital to facilitate making the right contacts in DAC-listed countries, especially where research infrastructure is ‘poor’, new networks are being established from scratch and/or where language barriers impede progress initially. More certainty around this avenue of funding also means that attention can be given to knowledge sharing between projects and partners including across individual DAC-listed ODA-recipient countries. While our ODA country expertise in these fields is diverse, we have regional concentrations in sub-Saharan Africa, Amazonia, and coastal areas of the Pacific Rim . We continue to prioritise research, network building and strengthening

capacity building and knowledge exchange between Scotland and individual ODA countries in these regions.

The above areas relate closely to the University of St Andrews and UK strategic objectives and we propose investing SFC GCRF funding in these three areas to achieve critical mass and to deliver maximum impact.

The Global Challenge Steering Group, chaired by Professor Nina Laurie (School of Geography and Sustainable Development), manages the distribution of funding with yearly open and rapid response calls.

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

Maximum 500 words

The University of St Andrews strives to support projects which make a real difference to the lives of people in ODA countries, particularly in countries on the Least Developed, Low Income and Lower Middle Income DAC list, focusing especially, but not exclusively, on our three priority regions. We encourage and prepare individuals and UK partner organisations to work closely with ODA partners to ensure that they have a real voice in discussions and are integral to any activities which endeavor to lead to global challenge solutions.

Our intended outcomes and impacts are aligned with GCRF aims: to improve the economic activity and strength of ODA countries by strengthening capability for research and innovation in developing countries and the UK, as well as building structures which will enable agile responses to emergencies and opportunities.

We are working to develop strong and enduring partnerships between the University and developing-country researchers to enhance the research and innovation capacity of both and to deliver substantial impact on improved social welfare, economic development, and environmental sustainability. A measure of success will be to deliver a programme with a legacy beyond the initial funding investment period.

We anticipate outcomes will cover a range of both quantitative and qualitative indicators, such as:

- Immediate and/or potential economic benefit to DAC-listed partners (evidenced by factual statements from relevant DAC-listed partners; where applicable, supported by relevant economic indicators);
- Establishment and strengthening of formal links with scientists, commercial companies and end users in DAC-listed countries (measured by the number of newly established links);
- Establishment of ‘communication-based’ and fact-finding networks in ODA countries (measured by the number of newly established networks in DAC-listed countries, including wider links between ODA country networks in our three priority regions);

- Establishment of communication-based and fact-finding networks in the UK, with the aim of producing benefit to DAC-listed countries (measured by the newly established DAC-listed networks in the UK);
- Students and local personnel in DAC-listed countries trained by researchers from the University of St Andrews – noting the areas where there are gaps in knowledge or skills shortages in the DAC-listed country concerned (measured by the numbers of newly trained personnel);
- Influence of research on practitioner and public perceptions via documents, web pages, newsletters and commentaries published to raise awareness, influence policy and form opinions (evidenced by Altmetric data and as reported by PIs);
- Added value to current research in terms of contributions to publications, and other academic outputs (measured via internal monitoring and Pure – a proprietary Content management information system);
- Leverage follow-on funding (measured via internal monitoring and factual statements).
- In line with the UKRI aim of better compliance with the International Development (Gender Equality) Act, we monitor gender, both in terms of substantive focus in lines with embedded themes but also in terms of equity issues with a specific focus on early career women, that is, opportunities created for early career women in ODA context as well as St Andrews.

All projects will collect relevant outcome information, to be held centrally, for monitoring and sharing as appropriate to underpin the development of longer-term relationships and collaborations, with the aim of positioning the University to make maximum use of UKRI Global Challenges funding initiatives over the coming years. This approach will enable our researchers to maximise their effectiveness in continuing to address the development problems as identified by the United Nations in its Sustainable Development Goals ([SDG](#)).

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.

Maximum 1,500 words

Governance, delivery and monitoring

A Steering Group will be led by Prof. Nina Laurie (School of Geography and Sustainable Development) comprising: Vice-Principal (Research and Innovation); a team of champions for each umbrella theme drawn from the sciences, social sciences and arts and humanities and to include heritage expertise (a minimum of nine in total); Research and Innovation Services team (as required, three from the Research Impact Team); and, whenever possible, two members of the Advisory Group. The Steering Group will meet quarterly, and the Director will meet with individual Steering Group members as required.

An Advisory Group will be formed drawn from relevant stakeholders (Scottish Government, DfID, INGOs, commercial partners, the charity sector and relevant international stakeholders). Emphasis will be placed on convening this group using the University of St Andrews' extensive contact network working in these sectors.

2019 update: An Advisory Group of nine external stakeholders was set up, with members actively engaged with the work of the Forum.

A secretariat, to support the work of the Steering Group and the administration of GCRF proposal development and management, will be drawn from existing University research support services (FAS, Research & Business Development & Contracts (RBDC) and RIS, as appropriate).

2019 update: Communication between groups is proving vital to progressing policies around due diligence, successfully applying for institutionally strategic UKRI GCRF funds, and within the University to facilitate more interdisciplinary academic involvement with the Forum's work and goals.

Together, the Steering and Advisory Groups:

1. Coordinate institutional activity and advise the Principal's Office on matters relating to the UK Global Challenges Research Fund (GCRF) and support the development of ongoing University research strategy;
2. Identify priority research areas for the University to champion, to promote, and to increase the likelihood of success via future and current GCRF funding streams;
3. Regularly update the University International Committee on GCRF activity (one member of the Steering Group is on this Committee) and to ensure that the GCRF is properly recognised in the new University International Strategy;
4. Agree and implement internal allocation processes for any GCRF institutional priming awards and oversee robust and transparent allocation;
5. Support the University in its engagement with key external stakeholders (including international stakeholders) relating to GCRF relevant research, including business, industry, the government and funding agencies; and
6. Monitor and influence the development of Global Challenges research policy and strategy of key national and international agencies in the interests of the University (in particular UKRI).

University of St Andrews' co-funding

Administrators from the Research Impact Team in RIS support the Steering Group and lead the Secretariat. Responsibilities include managing a dedicated shared electronic platform for grant monitoring and evaluation and coordinating institutionally strategically focussed UKRI GCRF applications. In addition, the University is supporting 9 PhD Global Challenge studentships (3 per year) for international students from DAC countries, taking a long-term view towards relationship building in those countries. The first cohort of three PhD candidates is due to start in January 2020, with three more to be selected awarded in Spring 2020 with an Autumn 2020 start and the final three to be selected in Autumn 2020 with a start of January 2021. All PhD studentships are required to be linked to past or existing SFC GCRF work. In addition, the Director of the Global Challenges Forum is seconded to the role for one day per week.

We continue to support GCRF activities using minimal SFC funding to cover FEC.

Section B: Use of GCRF 2018-19 allocation and future formula GCRF priorities

4. Please complete the table in Annex A2 detailing the expected spending and activities for GCRF in the academic year 2018-19. This should show how all expected GCRF will be committed to ODA-compliant activities.
5. Please add here any explanatory notes on how you have completed the table in Annex A2 that will demonstrate ODA compliance.

Maximum 500 words

The University of St Andrews strategy is to prioritise those projects where there is the strongest demonstrable expertise to deliver maximum benefits to the global poor. We intend to fund larger projects in increments to ensure that each continues to deliver value for money. To encourage strategic consolidation of related projects and interdisciplinarity, we increased the top level to £60K (most projects topped the £30K region for 2018-19) of funding and allowed for projects up to £150K for multi-disciplinary projects of three or more Schools/Disciplines.

6. What are your priorities for GCRF activity in 2019-20? Please describe how the profile of activity will adjust to increases or decreases to expected GCRF funding.

Maximum 1,000 words

We continue to support projects in the three areas identified as our umbrella themes and to establish a core of strong sustainable projects. We also recognise that some projects will need funding across the whole three years.

Priority areas are:

- Energy and innovation
- Global health and inequality
- Sustainability and environmental change

For 2018-19: We allocated over 60% of available funding to the three priority areas. The remaining 40% was made available for unanticipated rapid response projects. The reserve was vital to properly resource new or existing projects as situations and/or circumstances change or as new opportunities present themselves and will enable the steering group to adjust to changes in GCRF funding.

For 2019-20: On analysis of use of funds for year 2018-19, we aim to allocate 90% of available funding to the three priority areas and 10% to rapid response and contingency projects. As already

stated, we upped limit to £150K to strategically bring together related projects to consolidate themed projects unique to St Andrews.

7. What are your priorities for GCRF activity in 2020-21? Please describe how the profile of activity will adjust to increases or decreases to expected GCRF funding.

Maximum 1,000 words

For year 2018-19: As mentioned above, we proposed allocating 20% of the available funding to each of the three core themes and 40% to the rapid response segment. The emphasis in allocating funding, however, was not by theme but by applications which demonstrated the strongest pathways to impact and where there was the strongest demonstrable expertise to deliver maximum benefits to the global poor. In maintaining the competitive allocation of the funding and having reserve rapid response funds, we retained ability to respond to changing landscapes.

For year 2019-20: We aim to maintain a focused approach around the three core themes identified above but with flexibility of projects as a result of experience and in response to progress. The Steering Group will monitor progress on projects with the Advisory Group's support to ensure continued success in achieving project objectives and achieving maximum benefit in DAC-listed partner countries and will help to explore new project opportunities.

We expect to continue to support some of the larger and more advanced projects in the pipeline, but the aim is that they progress to being sustained through external means. The 2018-19 funding has already leveraged £3.3M of externally awarded grants to further support 18 of this past year's projects.

The overall aim of the St Andrews Global Challenges Forum is to leave a research legacy by ensuring a small number of 'big ideas', which coalesce the emerging strengths of St Andrews GCRF challenged research, to take hold and flourish. Two that are already starting to rise to the fore are (1) preserving tangible and intangible cultural heritage, and (2) food security and health as a highly connected developmental issue.