# Announcement of Opportunity

# Future Climate for Africa (FCFA)

To advance scientific understanding and prediction of African climate variability and change and, through interdisciplinary research, develop the knowledge, data and tools to better integrate this science into medium-term investments, policies and plans.

# 2014 Global Climate Model Development for Africa – Full Proposals

#### Critical Deadlines:

Full Proposals to be submitted by 5<sup>th</sup> August 2014 16:00 (4pm) UK Local Time (BST / GMT +1 / UTC +1)

Deadline for Notification of Intent: 2<sup>nd</sup> June 2014 16:00 (4pm) UK Local Time (BST / GMT +1 / UTC +1)

Information about your application, including the personal information provided on the forms, will be processed and stored electronically by the FCFA Secretariat and representatives of FCFA's Funders (NERC and DFID). The Information contained in your application may be passed on to external reviewers in confidence. Reviewers will be asked to destroy information after the review and selection process is complete.

Your application and personal information will be stored by the FCFA programme for management purposes but will not be shared with other organisations outside the FCFA partnership. We will use details provided in the application for correspondence about the call and may also use this information for future analyses of the performance of the programme.

By submitting your application to the FCFA Programme you have indicated your acceptance of these data protection terms and conditions.



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# Summary

The Future Climate for Africa (FCFA) research programme is funded by the UK's Department for International Development (DFID) and Natural Environment Research Council (NERC). FCFA is an international programme which will fund world-leading interdisciplinary research to enhance scientific understanding and prediction of sub-Saharan African climate on timescales to inform medium-term (5 to 40 years) adaptation, and enhance knowledge, tools and methods to better integrate this science into decision making.

This call for an FCFA Consortium Grant, Global Climate Model Development for Africa, provides an opportunity for the world's best researchers to undertake large-scale and complex natural science research addressing one of the programme's aims of advancing scientific knowledge, understanding and prediction of African climate variability and change through delivering a stepchange in the performance of GCMs for Africa.

Applications are invited for funding of up to £3M Full Economic Cost (FEC). This call has a total available budget of up to £3M. The project will be funded for a maximum duration of 4 years with an expected start date of January 2015.

Applicants are expected to submit proposals which address the delivery of a step-change in the performance of GCMs for Africa and to make a long-term contribution to model development with an African lens.

Projects will be selected through a single stage review process. <u>This document describes that process.</u>

Full Proposals must be submitted via the Joint Electronic Submissions (Je-S) system by 16:00 BST/GMT+1/UTC+1 on 5th August 2014

### **Abbreviations**

AEJ African Easterly Jet

AMO Atlantic Multidecadal Oscillation AO Announcement of Opportunity

**BST British Summer Time** 

CCKE Coordination, Capacity Development and Knowledge Exchange (Unit)

**CMIP** Coupled Model Intercomparison Project

Co-I Co-Investigator

CV Curriculum Vitae/Resume

**DFID** Department for International Development

**DMP** Data Management Plan **ENSO** El Niño Southern Oscillation

EOI **Expression of Interest** 

Frequently Asked Questions FAQ **FCFA** Future Climate for Africa **FEC** Full Economic Cost FTE Full Time Equivalent **GBP** 

**GCM** General Circulation Model (commonly, Global Climate Model)

**GFCS** Global Framework for Climate Services

**Great British Pound** 

**GMT** Greenwich Mean Time HEI **Higher Education Institution** 

IOD Indian Ocean Dipole

Je-S Joint Electronic Submission

LIC Low-Income Country

**LMIC** Lower Middle-Income Country

MIC Middle-Income Country

**NERC** Natural Environment Research Council

NGO Non-Governmental Organisation **PDRA** Post-Doctoral Research Assistant **PEC** Programme Executive Committee

ы Principal Investigator

**PMU** Programme Management Unit

RC Research Council **RCUK** Research Councils UK RO Research Organisation

**RPC** Research Programme Consortia ROD/S Research Outputs Database/System

SST Sea Surface Temperature

**TBC** To Be Confirmed

**TRAC** Transparent Approach to Costing Upper Middle-Income Country **UMIC** 

United States Dollar USD

**UTC** Co-ordinated Universal Time

# Important Terminology (Related to the Call)

Term	Definition	Reference
Developing Country Research Institutions	A national or regional research institution or an NGO with the capacity to undertake high-quality research that is operating in a low-income or a middle-income country. FCFA does not consider that offices of international agencies and research organisations or international NGOs that are located in developing countries should be considered to be developing country institutions.	
Developing Country Researcher	An individual holding the nationality of a developing country (low-income or middle-income countries) who will undertake a research role in the FCFA project.	
Low Income Country (LIC)	As classified by the World Bank.  http://data.worldbank.org/about/country-classifications  LIC countries have an average annual per capita income of less than US\$1,035 calculated using the World Bank Atlas Method.	World Bank Lending Groups
Middle Income Country (MIC)	As classified by the World Bank.  http://data.worldbank.org/about/country-classifications.  MIC countries have an average annual per capita income of between US\$1,036—\$4,085 (lower middle-income) or US\$4,086—\$12,615 (upper middle-income) calculated using the World Bank Atlas Method.	World Bank Lending Groups

# 1 The FCFA Programme

#### 1.1 Introduction

- 1.1.1 This programme, Future Climate for Africa (FCFA), is a five-year programme which is jointly funded by the UK's Department for International Development (DFID) and Natural Environment Research Council (NERC). It focuses on advancing scientific knowledge, understanding and prediction of African climate variability and change, together with interdisciplinary research and user engagement to support better integration of science into decision making. The programme specifically targets medium-term decision making (multi-annual to multi-decadal, or approximately 5 to 40 years), such as infrastructure investments, urban development plans, land-use planning and national-scale policy initiatives (for example Poverty Reduction Strategies or social protection systems)<sup>1</sup>. The partnership between DFID and NERC reflects the triple focus of the programme on scientific excellence, achieving impact and strengthening scientific capacity and international collaboration.
- 1.1.2 This Announcement of Opportunity (AO) outlines the call for an FCFA Consortium Grant, Global Climate Model Development for Africa, which is for a single large (up to £3M) consortium grant that will run for up to four years. This project (hereafter, the Global Project) provides an opportunity for the world's best researchers to undertake large-scale and complex natural science research addressing one of the programme's aims of advancing scientific knowledge, understanding and prediction of African climate variability and change through delivering a step-change in the performance of GCMs for Africa.
- 1.1.3 The Global Project will be selected through a single stage process described in this document: submission of Full Proposals.

#### 1.2 Social and Environmental Context

- 1.2.1 Many African societies are highly vulnerable to weather and climate variability and are likely to be amongst the most severely affected by future changes in climate. The majority of livelihoods of African people depend on rain-fed agriculture and, in some areas, water resources are increasingly stressed. Sub-Saharan Africa is the only region where vulnerability to weather extremes is rising; since 1980, more than 420,000 people have died and economic damages total at least \$9 billion USD<sup>2</sup>. These disasters erode gains in poverty alleviation and can set back economic development by several years. Climate change will aggravate these existing risks.
- 1.2.2 The intensity of climate hazards, such as droughts, storms and flooding, is expected to rise over the coming decades (IPCC, 2013), with early evidence that climate change may have already contributed to the Horn of Africa drought in 2011 (Lott et al, 2013). By the 2030s sub-Saharan African countries are expected to dominate the global rankings of most vulnerable countries both in terms of poverty and climate hazards.
- 1.2.3 Therefore, in parallel to reducing climate-related risks today, there is an urgent need to account for future climate in long-lived projects, planning and policymaking. Sub-Saharan Africa is a rapidly developing region, where the population is expected to almost double by 2050 and GDP could increase more than 10-fold. A failure to properly account for long-term climate in decisions now could, for example, lock-in greater risks and costs down the line.
- 1.2.4 Improvements in climate risk management across Africa will bring immediate, cost-effective benefits in terms of protecting lives and livelihoods and safeguarding development gains. High-quality climate information is a crucial foundation, yet this is not available or not accessible across many parts of Africa. This weak climate information stems largely from a lack of high-quality historical climate monitoring, the relatively low capacity of scientific and

Research explicitly to support shorter-lived decisions, such as seasonal forecasting and early warning systems, is outside the scope of this programme.

Data from EM-DAT: The OFDA/CRED International Disaster Database – www.emdat.be – Université catholique de Louvain – Brussels – Belgium. Estimates are conservative.

- meteorological institutions in Africa and global and regional climate models being built by developed countries, with little investment in improving them for Africa.
- 1.2.5 Africa's climate is very diverse and highly variable, driven by processes that are interrelated in many complex ways that are not fully understood. Knowledge of African climate variability is relatively poor, with major gaps in the research base for Africa. For example, how will rainfall change in the future? And why are there discrepancies between observed and modelled climate trends in some areas?
- 1.2.6 To increase the quality, relevance and use of climate information in adaptation decision making requires more than world-leading natural science. First and foremost, research in this area requires an interdisciplinary approach with a philosophy of co-production. For example:
  - There is an important role for economics and decision science in providing robust and user-relevant tools for interpreting and applying climate projections in decision making while adequately recognising different sources of uncertainty.
  - There is a particular gap in research to support longer-lived adaptation decisions in Africa, such as infrastructure investments, urban development and land-use planning. Therefore other disciplines, for example civil engineering, may have an important role to play in research.
  - The High Level Taskforce to the Global Framework for Climate Services (GFCS) concluded that while our understanding of climate is advancing this is not being effectively translated into services that can inform decision making. This suggests an important role for social and behavioural sciences, in understanding the barriers and how climate information and tools can be better designed and communicated to enhance uptake.

# 1.3 Programme Objectives

- 1.3.1 The Future Climate for Africa (FCFA) programme aims to build towards the delivery of robust and relevant climate services to Africa to inform adaptation on medium-term timescales (5 to 40 years). Specifically, it has three main objectives:
  - 1. To produce world-leading science to advance knowledge of African climate variability and change and enhance prediction of future African climate.
  - 2. To drive improved interdisciplinary knowledge, methods and tools on how climate information and services can be better designed for, delivered and integrated into medium-term decisions today.
  - 3. To support international collaboration and the development of scientific capacity in Africa.
- 1.3.2 FCFA will achieve these objectives through supporting several programme elements:

#### **Regional Consortium Grants**

- 1.3.3 FCFA will support around 3 world-leading, interdisciplinary, regionally-focussed research programme consortia (RPC).
- 1.3.4 To achieve the objectives of the programme, the consortia will work both to strengthen scientific understanding and provide improved knowledge and tools to use this science in practice, including for example, themes of decision making under uncertainty and risk communication. The consortia will draw on multiple disciplines to do this, such as economics, decision science, social science, civil engineering and behavioural science. Importantly, they will also place equal emphasis on extracting more value from the existing body of climate information in addition to generating new information.
- 1.3.5 To achieve impact, stakeholder engagement will be central to FCFA. The successful consortia will take a co-production approach, generating information and services that are designed and tested with practitioners.

1.3.6 The scope of the consortium grants are the subject of a separate call. Consortium Grants are expected to deliver the bulk of the research for the FCFA Programme. There will be a £12M investment in this element of the programme, supporting around 3 regional programme consortia targeting specific climatic regions of Sub-Saharan Africa that will run for 4 years. FCFA anticipates funding one project per region of sub-Saharan Africa.

#### **Global Climate Model Development for Africa Project**

- 1.3.7 In parallel to the regional consortia, and the subject of this call, FCFA will fund a single project that aims to deliver a step-change in the performance of General Circulation Models (GCMs) for Africa and to make a long-term contribution to model development with an African lens.
- 1.3.8 This call is described in more detail in Section 2. It seeks proposals to deliver improved process-based understanding of climate variability and change at the pan-African scale, and consequent development of GCMs with an African lens. The research will target processes in GCMs that are important for climate prediction over Africa in the coming decades<sup>3</sup>.

#### **Scoping Activities**

1.3.9 A scoping phase for FCFA began in July 2013 and included desk-based research, two workshops and four pilot studies to better understand the needs and opportunities for climate information to support adaptation. A report detailing the results from the desk-based research and workshops is available at <a href="http://cdkn.org/resource/fcfa">http://cdkn.org/resource/fcfa</a> background/. The four pilot projects were initiated in March 2014 (in Zambia, Ghana, Rwanda and Malawi) and initial results from the pilot studies will be available in September 2014.

#### **Supporting Projects**

1.3.10 A further call will be announced in Year 2 of the FCFA Programme. This will identify supporting projects in response to the first call, allowing complementary activities to be supported.

#### **CCKE**

1.3.11 A Coordination, Capacity Development and Knowledge Exchange (CCKE) Unit will complement the activities of the consortia through targeted pan-African cross-programme research, capacity development and knowledge exchange activities. The CCKE has a clear mandate to ensure FCFA maximises its impact.

- 1.3.12 The CCKE Unit is based in Africa and has expertise and experience in capacity development and in using science in practice to inform adaptation. The CCKE Unit will provide support to individual consortia in stakeholder engagement and knowledge transfer using their experience and networks. In addition, they are responsible for co-ordinating cross-programme activities including, for example, annual reporting, managing a summer school for early career researchers, producing cross-programme outputs, user training workshops and exploiting synergies with other DFID and wider programmes. The consortia will be expected to contribute responsible time to support these cross-programme activities.
- 1.3.13 The CCKE Unit will act as a knowledge manager for FCFA, identifying lessons and shared narratives across the RPCs, developing them and sharing them with a wider audience. The CCKE Unit will help to maximise, but will not replace, the knowledge exchange activities of individual consortia.
- 1.3.14 The FCFA Global Project will be expected to work together and with other project components, for example through the Programme Management Unit (PMU). Please refer to the background paper for details of the governance structure of FCFA, which will be available on the FCFA programme webpages in mid-May 2014.

<sup>3</sup> For this reason, Regional Projects should not propose work to develop GCMs, aside from model evaluation to better understand the drivers of model-based uncertainty for their specific region. Regional Climate Model evaluation and development is within scope. The Regional Projects will be expected to collaborate with the Global Project where there are advantages to doing so.

### 1.4 FCFA: The Programme Vision

- 1.4.1 Our vision combines research excellence with development impact<sup>4</sup>. The whole programme is guided by the following principles:
  - **Research Excellence:** Internationally recognised and competitive natural and social science as evidenced by publications in high impact journals which represent world-leading standards in terms of quality, independence, significance and scientific impact.
  - **Development Impact:** All research should be able to demonstrate its potential to contribute to development challenges in sub-Saharan Africa and its contribution to delivering the overall impact of this programme; delivering robust climate information and services to support medium-term (5 to 40 year) adaptation decisions.
  - African-led research and the creation of meaningful international partnerships with/between African researchers/research institutions: Active engagement of African institutional partners is welcomed in the Global Project. Consortia will be expected to demonstrate capacity development of all partner institutions. Senior researchers within the consortia will also be expected to contribute reasonable time to cross-programme shared capacity development activities (for example, a summer school).
  - Interdisciplinary Approach: Research projects are expected to take an
    interdisciplinary approach to address the three objectives of FCFA. For the Global
    Project, the proposal should outline how the research will be developed, supported and
    managed to contribute an integrated, end-to-end research programme that achieves the
    aims of the FCFA Programme.
  - **Co-production Approach:** Stakeholder engagement will be central to FCFA to ensure its outputs are relevant and useful to decision makers in Africa. The FCFA programme will support a co-production approach, where users are involved at each stage of the research process to design and test outputs. For the Global Project, this is less relevant but the proposal must still outline its Pathway to Impact (see Section 5.8).
  - Impact and Value for Money: Proposals must include clear evaluation components in all research. A strategy for developing an innovative value for money approach that enables costs and benefits to be tracked and evidence of research impact to be captured is also expected. To ensure value for money, the cost of projects and the benefit of potential outcomes will be assessed with on-going assurance of appropriate expenditure required throughout. Successful applicants will be expected to work with FCFA in demonstrating impacts and outcomes (rather than just outputs).

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<sup>&</sup>lt;sup>4</sup> See also the Research Councils UK document 'RCUK Excellence with Impact'.

# 2 Scope of the Call for the FCFA 2014 Global Climate Model Development for Africa

### 2.1 Objective

2.1.1 The goal of the Global Climate Model Development for Africa call is to deliver a step-change in the performance of General Circulation Models (GCMs) for Africa and to make a long-term contribution to model development with an African lens. This should lead to improved projections of future changes in rainfall and extreme weather for Africa, increasing the availability of high quality, robust climate information across the continent.

#### 2.2 Overview

- 2.2.1 The IPCC AR5 concluded that current climate models have only a modest ability to capture those phenomena that are most important in driving African climate. It also concluded that Africa is one of the few continents where GCMs have shown little improvement in performance since the AR4 in 2007. This constrains the confidence we can attach to climate projections for Africa. FCFA will respond to this by supporting two streams of research that will improve the understanding of climate variability and enhance medium-term (5 to 40 years) climate projections across sub-Saharan Africa.
  - The first stream will involve around three regional projects that focus on enhancing the
    quality and use of climate information to support long-term adaptation decisions. These
    projects will have a regional focus to enable strong engagement with users (see
    separate AO for FCFA 2014 Regional Consortium Grants).
  - The second stream of research, the Global Climate Model Development for Africa project (hereafter, Global Project) covered in this AO, will involve a single project that will enhance the performance of one or more GCMs for sub-Saharan Africa in generating robust and reliable projections of the characteristics of rainfall and extreme events over medium-term timescales.
- 2.2.2 The Global Project aims to complement the regional projects by tackling the larger-scale errors in GCMs relevant for sub-Saharan African climate prediction over the coming decades. The project will deliver both model evaluation and development activities, based upon high-quality fundamental science to improve understanding of the key Earth system processes controlling climate variability and change.
- 2.2.3 In this call, applications are invited for funding of up to £3M Full Economic Cost (FEC<sup>5</sup>) and it is anticipated that one project will be supported. The project will be funded for a maximum duration of 4 years, with a required start of January 2015. In administration of the grant, standard NERC terms and conditions, with call specific exceptions, will apply.
- 2.2.4 The project will be selected through a single stage review process.

# 2.3 Requirements

2.0 Roquiromonia

- 2.3.1 The focus of this project will be on evaluating and developing the representation of processes affecting pan-African climate on timescales for adaptation (medium-term or 5 to 40 years). This will include improving the understanding and representation of drivers, processes and feedbacks responsible for the greatest uncertainty in model representations of African climate and global processes affecting African climate.
- 2.3.2 Potential aspects for development include those acting at a pan-African scale; for example, teleconnections to global phenomenon (for example, ENSO, IOD, AMO, global and tropical SSTs, AEJ), the representation of convection (for example the meso- to large-scale organisation of convection and diurnal cycles of convection), aerosol forcings and land

<sup>&</sup>lt;sup>5</sup> Full Economic Costing (FEC) information at <u>RCUK Full Economic Costs FAQs.</u>

- atmosphere coupling. This list is not intended to be exhaustive and proposals containing other developments are welcomed.
- 2.3.3 The research should focus on those processes of highest importance for improving GCMs to support medium-term adaptation decisions (i.e. focus on areas of highest relevance to the FCFA programme objectives) and may include a mixture of 'quick wins' and research aiming at longer-term improvements in GCM performance. The applicants should justify their focus in terms of relevance (to climate science and potential users of climate information) and risk and return and explain the justification for such a focus.
- 2.3.4 Global models inevitably require an element of simplification, and it is therefore important to use knowledge of the underlying processes to test that models are 'getting the right answer for the right reason', rather than simply being tuned to reproduce a small number of target metrics. Innovative methods of integrating process-based observational information into evaluations are welcome.
- 2.3.5 Applicants are also expected to suggest initial evaluation criteria for model performance, which may be refined during the course of the project and will be subject to peer-review.
- 2.3.6 It is expected that the successful project will work closely with the FCFA regional consortia and retain a degree of flexibility to ensure that model development is responsive to the findings of the regional consortia. Active dialogue and knowledge sharing is also expected to ensure that the work is complementary and mutually supportive. To help facilitate this collaboration, all PIs are expected to contribute to a Programme Management Unit that is accountable to the Programme Executive Committee. More details of the governance structure will be available in the background paper, which will be available on the FCFA programme webpages in mid-May 2014.
- 2.3.7 To avoid overlaps with the regional projects, the Global Project should not involve the evaluation or development of regional climate models (RCMs) aside from where this research is directly for the purpose of improving GCMs.
- 2.3.8 Proposals are expected to involve partnerships between at least one world-leading GCM development centre (defined as a centre that has contributed a GCM to CMIP5 or will contribute to CMIP6) and at least one academic institution.
- 2.3.9 Proposals that demonstrate meaningful international partnerships are welcomed, particularly where they involve partners based in Africa.
- 2.3.10 Proposals that include scientific capacity development are welcomed. Such proposals should involve science that contributes to the objectives of the Global Project and should target early career researchers based in Africa. This may include, for example, secondments or other professional development opportunities. The Regional Projects will include capacity development initiatives and there may be opportunities to integrate activities during the course of the project.
- 2.3.11 Applicants should lay out a method for drawing on, collaborating with and adding value to other initiatives for the purpose of improving GCMs for Africa.
- 2.3.12 The successful consortia will be expected to contribute to annual reporting (see Annex 5 for a standardised reporting template, FCFA requirements are subject to change) and other cross-programme activities, including the FCFA conference, training workshops, outreach events and publications.
- 2.3.13 The required outputs of the project are:
  - Improved GCM projections of extreme weather and rainfall for Africa over timescales to inform adaptation, as evidenced by performance against the set of predefined evaluation criteria. Evaluation criteria could include, though is not limited to, metrics concerning the representation of current African climate and relevant parameters and processes. This may include criteria specified in conjunction with the usercommunity.

- Scientific advancement of the understanding of African climate variability and change, disseminated through reports, working papers, workshops and articles in peer-reviewed journals.
- Data products (including selected model runs and analytical products) made available to the regional projects and the broader academic community, via an appropriate platform.
- Contributions to cross-programme outputs, including annual reporting, stakeholder events, workshops and publications.

#### 2.4 Summary

#### FCFA Global Climate Model Development for Africa applications must:

- include clear hypotheses and objectives that determine the design of the project, including specifying the need for the research and its relevance (whom it will benefit, relevance vs. risk vs. return);
- include clear rationale for the methods proposed;
- include an initial set of model evaluation criteria to be utilised in the project to measure improvements in models;
- bring together a partnership between at least one world-leading GCM development centre and at least one academic institution and explain how this partnership will operate;
- be clear about how value for money will be achieved in the project, including its internal governance, to ensure the research is flexible and responsive to lessons learnt and delivers the greatest impact;
- fully justify model choice and be clear about how model developments will feed through to improved climate information for users;
- be committed to working with the FCFA regional consortia and FCFA management and coordination to deliver an integrated research programme.

# 3 Focus and Geographic Scope of this Call

#### 3.1 Focus of the Research and its Location

- 3.1.1 FCFA's research should contribute knowledge and evidence to enhance the resilience of African people to climate variability and change and through this help to improve the lives of poor people in Africa.
- 3.1.2 The geographical focus of research for the Global Project is Sub-Saharan Africa, recognising that this may involve study of a broader geographical scope (for example in the case of teleconnections).
- 3.1.3 The programme specifically targets improvements in climate science and prediction to better inform medium-term (around 5 to 40 year) adaptation decisions, such as infrastructure investments, national planning and poverty reduction strategies. Research priorities must be justified on this basis.

#### 3.2 Where can Research be Conducted?

- 3.2.1 It is not essential for project teams to include researchers or research institutions based in the United Kingdom or any other developed country.
- 3.2.2 Proposals with sub-Saharan African participation are encouraged (see Annex 1 for definitions).
- 3.2.3 There are no restrictions on where researchers are located or their nationality. Similarly, there are no geographic restrictions on where research institutions are based, as long as they meet the administrative eligibility requirements for funding (for further information or to check your eligibility, please contact the FCFA Secretariat directly at <a href="fcfa@nerc.ac.uk">fcfa@nerc.ac.uk</a> or see Sections 7-8.)

# 4 Summary of the Application Process

#### 4.1 Overview

- 4.1.1 This call has a single stage, which comprises the submission of a Full Proposal through the Je-S Online application platform. The project will be selected through a single stage review process.
- 4.1.2 The full proposals will be sent for external peer review and applicants will have the opportunity to respond to the reviewer comments. The proposals, reviews and responses will be considered by an independent moderating panel comprised of experts who make funding recommendations to the FCFA Programme Executive Committee (PEC). Members of the project teams may be invited to interview at the moderating panel stage.

# 5 Full Proposal Stage

#### 5.1 Overview

- 5.1.1 The FCFA 2014 Global Climate Model Development for Africa call will provide funding of up to £3M Full Economic Cost (FEC).
- 5.1.2 This call has been allocated a total available budget of £3M, which may be revised subject to the discretion of the Programme Executive Committee (PEC).
- 5.1.3 Projects will be funded for a maximum duration of 4 years, with an expected start date of January 2015. **Projects will not be eligible to delay their start from this date.** In administration of the grants, standard <u>NERC terms and conditions</u>, with call specific exceptions, will apply.
- 5.1.4 Potential applicants are required to submit a notification of intent to apply (<a href="http://www.nerc.ac.uk/research/funded/programmes/fcfa/news/ao-global/noi-form.docx">http://www.nerc.ac.uk/research/funded/programmes/fcfa/news/ao-global/noi-form.docx</a>) by June 2<sup>nd</sup> 2014 to <a href="mailto:fcfa@nerc.ac.uk">fcfa@nerc.ac.uk</a>, which should contain the details of all known named researchers on the proposal. This is to enable us to facilitate Je-S registration and plan for the peer review process. Failure to submit this document may result in the rejection of your application.
- 5.1.5 Full proposals will need to be submitted through the Joint Electronic Submission system (<a href="https://je-s.rcuk.ac.uk">https://je-s.rcuk.ac.uk</a>) by 5th August 2014 16:00 (4pm) UK Local Time (BST / GMT +1 / UTC +1). Full guidance on submitting applications through Je-S can be found in Annex 4.
- 5.1.6 Applicants can begin submission of their applications on the Je-S System from **6**<sup>th</sup> **June 2014**; prior to this date, the call will not appear on the Je-S System.
- 5.1.7 In order to be named on a proposal, all applicants must register for an account on Je-S.
- 5.1.8 Applicants may submit their proposals as a single Je-S application, or a joint application; submissions of joint applications should be 'linked' on Je-S by using the unique reference number given to you (contact <a href="mailto:fcfa@nerc.ac.uk">fcfa@nerc.ac.uk</a> or the Je-S helpdesk for further advice).
- 5.1.9 FCFA will award funds to the lead institution named on each application, which will then be responsible for disbursing funds to other institutions/organisations named on that application.
- 5.1.10 UK based organisations cannot be named on an application that is led by a non-UK organisation and, in this case, it will be necessary to submit a joint application.

# 5.2 Summary of Required Documents

5.2.1 The application has several elements, some of these must be completed online (for example the pro-forma), while others can be completed offline before being uploaded as attachments to the Je-S form. See Annex 4 for further information.

- 5.2.2 The pro-forma is an online form comprising a number of structured boxes for key information. It is common to all applications, and for joint applications this will need to be completed by **all** of the components.
- 5.2.3 The elements described below should be completed off-line and uploaded as attachments to the Je-S form. They are described in more detail in Sections 5.3 to 5.10 and are summarised below:
  - The Case for Support is comprised of two parts:
    - i. Previous Track Record of organisations up to 3 sides A4 for each component application submitted. This section includes brief information and assurances of the organisational and fiduciary competencies, if applicable (see Section 5.5.2). (Submitted by each individual application).
    - ii. Description of proposed research up to 16 sides A4. (Common to all proposals in a joint application submitted by lead only).
  - Data Management Plan 1 page A4. This section includes information about how the project will manage data produced and submit this to the relevant centres. (*Common to all proposals in a joint application submitted by lead only*).
  - Justification of Resources requested up to 4 sides A4 (see Section 5.7). (Common to all proposals in a joint application- submitted by lead only).
  - Pathways to Impact attachment up to 2 sides A4 (see Section 5.8). (Common to all proposals in a joint application submitted by lead only).
  - CVs for all named research staff: Pls, Co-ls, Researcher Co-ls, named Researchers and Visiting Researchers (up to 2 sides A4 for each CV, and should include current and previous positions, key publications and research funding obtained). It is recommended that CVs use a consistent template within projects.
  - Letters of support from any named Project Partners up to 2 sides A4 each (see Section 5.10). (Common to all proposals in a joint application -submitted by lead only).
  - Application forms for any NERC Facility/Ship-time requested (only applicable for organisations normally eligible for Research Council funding).
  - A business case for any single items of equipment costing more than the OJEU threshold - up to 2 sides A4. This should be accompanied by three equipment quotations. The current OJEU thresholds can be found at http://www.ojeu.eu/Thresholds.aspx.
- 5.2.4 Please note that on submission ALL non PDF documents are converted to PDF and the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document. Additionally where non-standard fonts are present, and even if the converted PDF document may look unaffected in the Je-S System, when it is imported into the Research Councils Grants System some information may be removed. We therefore recommend that where a document contains any non-standard fonts (for example scientific notation or diagrams), the document should be converted to PDF prior to attaching it to the proposal.

All applications must be submitted in English and costed in pounds sterling (£/GBP).

All additional documents should be submitted using single-spaced typescript, minimum font size 11 point (Arial font), with margins of at least 2cm.

Page limit restrictions apply and should be adhered to.

Failure to adhere to these guidelines may result in rejection of your application.

## 5.3 Je-S pro forma

- 5.3.1 In order to prepare a Je-S proposal submission, the person preparing the proposal has to log onto Je-S and create a new proposal. Note that this person must have previously created an individual Je-S account for themselves. This can be done at any time, and should be done well in advance of the application deadline as there may be some delay in the approval of an individual's Je-S account.
- 5.3.2 Full step-by-step guidance on how to complete a Je-S application form can be found on the Je-S website or in Annex 4.
- 5.3.3 On logging into Je-S, there are two procedures you can follow:
  - (A) Click on 'Documents', then create a 'New Document'
    - Click on 'Call Search' and enter 'FCFA'.
    - This will bring up the link to the current FCFA call.
  - (B) Select the Research Council NERC.
    - Select Document type 'Standard Proposal'
    - Select Scheme 'Directed International'.
    - Select call 'FCFA Global AUG14'
- 5.3.4 Please note that applications submitted to the wrong call cannot be considered. Please ensure that you have selected the current FCFA call, entitled 'FCFA Global AUG14'.
- 5.3.5 The following information should be common to all application pro-formas in a joint project proposal:
  - Title of proposal
  - Objectives
  - Summary
  - Academic Beneficiaries
- 5.3.6 Some information is common to the whole project but if you submit a joint proposal, the following should **only** be included in the lead Research Organisation application pro forma and submitted as attachments to the **lead Research Organisation application only.** These are:
  - 1. Nominated referees
  - 2. Project Partners
  - 3. Letters of support from Project Partners
  - 4. Description of Proposed Research (Part 2 of the Case for Support, up to 16 sides A4).
  - 5. Data Management Plan
  - 6. Pathways to Impact (up to 1 side A4).
  - 7. Justification of resources
- 5.3.7 The attachments named in 5.3.6 must <u>not</u> be attached to any component application. Where such an attachment is a mandatory requirement of the Je-S system, a dummy attachment must be submitted. This document should be annotated with "Refer to Lead Research Organisation Application".
- 5.3.8 For each other component application (if submitting a joint proposal), we require as separate attachments, or in the relevant pro forma, the following.
  - CVs for named research staff (including PIs, Co-Is and Researcher Co-Investigators) and Visiting Researchers named on that component application (up to 2 sides A4 for each CV). These should be attached to the relevant component Research Organisation application.
  - A separate Previous Track Record for each component application (Part 1 of the Case for Support), and include details of the PI and Co-I organisations named on that component. This should not exceed 2 sides A4 for each component application. This should be classified as "Case for Support" when submitting via Je-S.

- Business case and equipment quotations for items costing more than the OJEU threshold.
- 5.3.9 Applicants should include information of Project Partners listed individually within their proforma, and any in kind and or leveraged support that has been secured for the proposal through the attachment of a letter from the Project Partner.

### 5.4 Project Finances

- 5.4.1 The financial cost of the proposed project should be identified through the following components:
  - Je-S pro-forma
  - justification of resources document
- 5.4.2 All applicants should enter the 100% full economic costs of the proposed research into the budget sections of the Je-S form. **All costs should be in pounds sterling (£).**
- 5.4.3 The budget limits on grant applications under this scheme refer to the total cost of the project known as the **full economic cost (FEC)**. All of the UK Research Councils research grant applications are awarded on a full economic cost (FEC) basis. This will apply to FCFA.
- 5.4.4 For Projects which choose to submit a joint application (i.e. more than one component application into Je-S), the Full Economic Cost of all submitted applications comprising the project **combined** must not exceed the maximum budget of £3M. Note, for example, that if each of three component applications claims £1M in costs on their application, this would show on our system as the project bidding for £3M.
- 5.4.5 Research grant funds are provided to meet the costs incurred by the specific research project. Funds may not be used to meet costs on any other project or activity. All costs associated with the project must be itemised and fully justified (This should be done in the 'Justification of Resources' document (see Section 5.7).
- 5.4.6 Requested funds will be scrutinised during the assessment process and, if recommended for funding, NERC, on behalf of the FCFA Programme Executive Committee (PEC), will request adequate evidence of the costing basis for all direct and indirect costs. Note that budgets may be reduced if considered excessive.
- 5.4.7 Successful projects, along with proposing excellent science research that fits the objectives and scope of this call, are expected to also provide excellent value for money. This includes fully justified and reasonable financial requests, appropriate time commitments of all research participants, and clear plans which aim to provide the maximum output of science excellence and impact from the monies requested.
- 5.4.8 FCFA funding is available for eligible UK and non-UK organisations, if they are to receive funding directly.
- 5.4.9 The UK Research Councils, which includes NERC, are able to provide funding for UK organisations that are recognised as eligible to receive UK Research Council funding, including UK Higher Education Institutes (HEIs) and other recognised UK Research Organisations (ROs). For a list of organisations that are eligible to receive Research Council funding see <a href="http://www.rcuk.ac.uk/funding/eligibilityforrcs/">http://www.rcuk.ac.uk/funding/eligibilityforrcs/</a>.
- 5.4.10 Organisations that are currently ineligible to receive funding directly from UK Research Councils may still be eligible to apply for and receive funding from FCFA, if they meet the organisation eligibility criteria in Section 7. This funding will be covered by DFID's contribution to FCFA.
- 5.4.11 CGIAR Research Centres<sup>6</sup> are eligible to apply for funding and be involved in projects. However, under DFID funding rules they should not apply as developing country partners

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<sup>&</sup>lt;sup>6</sup> http://www.cgiar.org/cgiar-consortium/research-centers/

since they have competitive international terms and conditions and are able to recruit internationally. Full cost recovery should be based on the CGIAR system wide guidance on cost (set out in Financial Guidance No5<sup>7</sup>, and it is expected that the 2% system wide cost levy is to be absorbed within all their projects). It is also expected that a clear position with regards to alignment of all research projects with the 15 CGIAR Research Programmes (the CRPs) is provided, since the Fund Council expect all CGIAR research to fall within the CRPs in due course regardless of funding modality.

- 5.4.12 Further information regarding the financial conditions applicable to these grants can be found in Annex 2.
- 5.4.13 Further Guidance on fund headings are provided in Annex 2.

#### 5.4.14 UK Organisation Budgets

- UK organisations will receive 80% of the full economic cost (FEC) of the project, as per standard Research Council funding rules.
- UK universities are required to calculate the FEC using the "TRAC" (Transparent Approach to Costing) methodology. Other recognised UK research organisations (ROs) use an equivalent methodology, which has been validated by the Research Councils. For more information, please go to the RCs' Dual Support Reform web page, which includes guidance notes and FAQs (RCUK FEC FAQs). Other organisations will be required to explain their methodology for calculating any estates and indirect costs, if they are successful.
- Overseas travel and expenses costs incurred by members of UK institutions will be paid at 80% and must be included as costs related to that UK institution (not included as costs relating to an overseas organisation).
- All applicants should enter the full economic costs of the proposed research into the budget sections of the Je-S form, as per normal Research Council applications. All costs should be in pounds sterling (£).

#### **5.4.15 Non-UK Organisation Budgets**

- Non-UK organisations are expected to be able to comply with full and transparent costing for budget elements.
- Non-UK organisations will be supported at **100% FEC for the direct costs** of the research.
- In addition, indirect costs (including estates costs) may be charged on staff salary and other staff-related costs (i.e. statutory contributions analogous to UK National Insurance or Superannuation contributions).
- Overheads may not be charged on non-staff related direct costs, for example, equipment, travel and subsistence, consultancies, conferences, etc.
- The following rates for indirect costs should be applied:
- for applicants from **low and middle-income** countries, the rate is **50%** (Annex 1);
- for applicants from **high-income** countries, the rate is **20%**.
- For further guidance on what overhead budgets can be used for please see Annex
   2.
- Non-UK organisations should **not** enter any costs in the 'Estates' section of Je-S.
   All overheads should be entered as an 'Other Directly Incurred cost' on Je-S.

http://library.cgiar.org/bitstream/handle/10947/5548/finguide5\_2009.pdf?sequence=1

- In order to mark costs as payable at 100%, applicants should tick the 'Exceptions' box under the relevant category in Je-S.
- If an application involves costs from both UK and non-UK organisations, they should be entered as separate items. For example T&S costs for field work should be entered as two separate lines, i.e. that related to UK organisations payable at 80%, and that related to non-UK organisations, which will be payable at 100% by ticking the 'exceptions' box within the Je-S form.
- All applicants are advised to consult their institutional finance officers when completing the financial parts of the application.

### 5.5 Case for Support

5.5.1 The Case for Support should include the following **two** components: Track Record and Description of Proposed Research. These components should be uploaded as a single attachment on Je-S by the lead applicant. Any joint components should upload their individual Track record separately onto their respective Je-S form.

#### 5.5.2 Track record

- The Track record should be a maximum of 2 sides of A4 for each component application submitted.
- This section should include a brief outline of the organisations involved in the consortium, as named on the component applications, and address the following aspects.
- It should include details on the nature of the organisations named (i.e. university, research institute, NGO, etc).
- Importantly, the track record should concentrate on the key named individuals/researchers, their role in the project and details of relevant experience and how they are best suited to conduct the research proposed. You may also wish to include details of any external funding held for key individuals and their organisations, and details of any relevant past collaborative work with other beneficiaries should also be given.
- For non-UK organisations or UK organisations not normally eligible for Research Council funding (see <a href="http://www.rcuk.ac.uk/funding/eligibilityforrcs/">http://www.rcuk.ac.uk/funding/eligibilityforrcs/</a> for guidance), the track record should also include brief information and assurances of the organisational and fiduciary competencies of the organisation.
- Indicate where your previous work has contributed to progressing the field of research, and/or providing impact, evidenced by including the top 3 – 5 relevant publications per PI, Co-PI and Co-I.
- Outline the specific expertise available for the research at the host organisation and that of any associated organisations and beneficiaries.

#### 5.5.3 The Description of Proposed Research

- The Description of Proposed Research should be a maximum of 16 sides of A4.
- The Description of Proposed Research included in the Case for Support contains
  the substance of the research application. It is essential that a coherent exposition
  of the proposed project is presented, addressing the intellectual and academic
  case and potential for impact on the FCFA research agenda.
- As well as meeting the core criteria of the call (Sections 2 and 3), The Description
  of Proposed research should address the following points:
- Underlying rationale, scientific, technological, social and developmental issues to be addressed. This should cover the research question and objectives and

- highlight the overarching policy questions/evidence challenges that will be addressed.
- Specific objectives, hypotheses and research questions of the project, including their potential relevance to international research work in the field, relevance to the FCFA aims, and anticipated achievements and outputs, including datasets.
- Methodology and approach; this should include methods and location of data collection (as appropriate), and details on the use and manipulation of data.
- Programme and/or plan of research.
- Management of both project and resources, identifying the training and career development opportunities for personnel working on the project and the management structure within the project team.
- Any associated collaborations, partnerships or co-funding (either proposed or secured) that may be used in the project.
- For proposals requiring access to data from elsewhere applicants are asked to provide evidence in their proposal of agreed access.
- Applicants are advised that they should pay attention to the environmental implications of their research. The FCFA Programme Executive Committee (PEC) will consider funding the cost of low-carbon approaches to collaboration (including, where appropriate, the costs of technology or of less economic, but more environmentally friendly means of transport). Note that FCFA will apply the Research Council policy on carbon offsetting which currently states that projects may not claim the cost of offsetting carbon emissions arising from travel associated with research grants. Institutions may choose to use their own resources to cover such costs if required by their environmental policy. Where the project has control documents, reports and paper outputs, these should be printed on paper made from sustainably managed forests and/or recycled paper.

# 5.6 Data Management Plan

- The Data Management Plan should not exceed **1 side A4** and should be submitted by the lead applicant only.
- The Data Management Plan should include a detailed description of the proposed data management structures, plans and responsibilities.
- Four issues should be addressed in the Outline Data Management Plan:
- 1. Data management procedures to be followed during the lifetime of the grant. Consider issues like:
  - metadata will you document discovery (what, where, when, why, who) and descriptive (how collected, how processed, how stored, how linked) metadata?
  - data storage have you access to enough storage and backup? Will you need specialist help with database design?
  - data quality will there be an earmarked data manager within the team, what data quality checks will be used, will student data be integrated in the data plan?
  - ethical and access issues are there special data security or licencing issues and how will you address these?
- 2. Existing datasets to be used by the project (comment on any restrictions on reuse)
- 3. Datasets likely to be created by the project which will be made available to the Funder's Data Centre(s) at the end of the grant; Projects will need to speak to the FCFA Programme Management Unit once funded as they will help projects with their data management processes.

- 4. Planned release dates of the data (data should normally be deposited within a data centre within 2 years of creation), and identification of the possible user types who may want to use the data you produce.
  - Please note, the entire Case for Support for successful proposals will be made available to the NERC Environmental Data Centres (see <a href="http://www.nerc.ac.uk/research/sites/data/">http://www.nerc.ac.uk/research/sites/data/</a>) and, where appropriate, used by them to draft, in collaboration with the Principal Investigator, a full Data Management Plan (DMP). This full DMP should be mutually agreed between the Data Centre and the Principal Investigator within three months of the start date of the grant. At the end of an award Investigators are required to offer the appropriate Data Centre a copy of any dataset generated, so that the data can be made available for other researchers to use.
  - Applicants should refer to the NERC data policy (<a href="http://www.nerc.ac.uk/research/sites/data/policy/data-policy.pdf">http://www.nerc.ac.uk/research/sites/data/policy/data-policy.pdf</a>) for information on open access to data.

#### 5.7 Justification of Resources

- 5.7.1 The Justification of Resources should not exceed **4 sides A4** for all Research Organisations in the proposed grant. This document is submitted by **the lead Research Organisation** application only on Je-S.
- 5.7.2 The Justification of Resources must be uploaded on Je-S as part of the application.
- 5.7.3 This should state the full cost of the project and explain why the requested resources are needed, including identifying why the proposal presents value for money. It should include justification for all Directly Incurred Costs, Investigator effort, use of pool staff resources and any access to shared facilities and equipment being sought.
- 5.7.4 No justification of Directly Allocated Estates and Indirect Costs is required.
- 5.7.5 It is not sufficient merely to list what is being requested. Where you do not provide sufficient justification for any item, it may be cut from any award made. In short, **you must demonstrate why you are requesting the funds** you are, and how they will be used to deliver the cutting edge research with impact that you are proposing.
- 5.7.6 Please note that if successful, the amount awarded to a project is limited to the amount requested at the time of application, and the final award amount agreed by the funders. This will not be increased at any time. Therefore applicants should set out how they will deal with any changing currency fluctuations that may occur during the duration of their project and the possible impact this may have on the plan of work.
- 5.7.7 An example of a well-written Justification of Resources can be found on the NERC website at <a href="http://www.nerc.ac.uk/funding/application/howtoapply/justification\_eg.pdf">http://www.nerc.ac.uk/funding/application/howtoapply/justification\_eg.pdf</a>. Guidance on what should be included is also available in the Je-S helptext at <a href="http://je-s.rcuk.ac.uk/Handbook/index.htm">http://je-s.rcuk.ac.uk/Handbook/index.htm</a>.
- 5.7.8 For all items of equipment costing between £10,000 (including VAT) and the OJEU threshold, but excluding that to be used for instrument development, the Research Organisation will need to provide evidence of an evaluation of the use of existing relevant capital assets. The Justification of Resources should be used to:
  - Confirm that the piece of equipment is not readily available for use within the host institution, or any other accessible location (for instance by making reference to any asset registers consulted);
  - Provide evidence that all other reasonable options have been considered;
  - Explain, if the equipment requested will replace existing equipment, what will happen to the existing equipment;

- Set out what contribution the Research Organisation will be making towards the
  cost of the equipment. Contributions of the order of 50% from the Research
  Organisation will be expected.
- Whilst it is not expected that FCFA projects should require large items of equipment, for requests for all single items of equipment costing more than the OJEU threshold (excluding that to be used for instrument development) Research Organisations must complete a business case outlining why NERC should invest in this item of equipment. Further guidance on the detail required in the business case and the rules pertaining to application for items of equipment can be found on the RCUK website at: http://www.rcuk.ac.uk/RCUKprod/assets/documents/publications/Equipment Guidance.pdf. The business case will be subject to peer review and separate consideration for funding. The business case should be no more than 2 sides A4 and is additional to the Justification of Resources and the Case for Support. There may be duplication between the Case for Support and the business case but it is important that the business case is a standalone document and contains sufficient information to allow separate peer review assessment. A separate justification must be provided for every capital item of equipment over the OJEU threshold. These should be submitted by the lead Research Organisation in any joint applications. All applicants intending to include a business case for equipment in a research grant application must contact the FCFA Secretariat (fcfa@nerc.ac.uk) to discuss the request well in advance of any proposal submission.
- 5.7.10 RCUK and DFID have recently adopted new policies on open access publication. It is now required that all publications be open access. FCFA expects that all academic journal publications be open access (gold or green), and where possible this should include book and book chapters. Further information is available from the <a href="RCUK Open Access Policy">RCUK Open Access Policy</a> and the DFID Research Open and Enhanced Access Policy.
- 5.7.11 Costs associated with open access should be considered a legitimate research expense and included in the overall research budget as long as:
  - The costs are proportionate, reasonable and represent value for money. The
    funders would expect that most costs are likely to be Article Processing Charges
    ('APCs', 'author fees' or 'publication fees'). The price of an APC varies widely, but
    the Government Finch Report<sup>8</sup> suggested a current average APC price of
    £1450+VAT.
  - Existing arrangements and resources at the host institution are used first when available and appropriate. UK institutions covered by the block grant from RCUK for open access costs cannot claim the costs, but other UK organisations can. Where open access is sought for publications from multiple organisations, some of which receive the RCUK block grant and some which do not, it is the responsibility of the organisation of the first author to lead on any costs.
- 5.8 Demonstrating the Pathways to Impact
- 5.8.1 The Pathways to Impact attachment should not exceed 2 sides of A4.
- 5.8.2 All applicants are required to include a 'Pathways to Impact' attachment as part of their research proposal that describes how the proposed work will achieve impact and build capacity.
- 5.8.3 In addition, the Pathways to Impact section should address the following:
  - **Who** are the intended beneficiaries of the research? These should include at least a description of the intended ultimate beneficiaries of poor people in Low and Lower-Middle Income Countries as well as the intermediate direct users of research and models (including, for example, the FCFA Regional Consortia).

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<sup>&</sup>lt;sup>8</sup> http://www.researchinfonet.org/publish/finch/

- Who will use FCFA's research and new knowledge? Identifying and, wherever possible, involving these people at an early stage of the design and implementation of the research is essential for impact of the research. It is expected that the Global Project may have a lesser focus on engaging with 'endusers', such as adaptation practitioners, given the nature of the research. Relevant stakeholders for the Global Project may include, for example, the FCFA Regional Consortia (and through them their end-users), regional climate modellers, climate impact modellers and adaptation researchers, and other initiatives (such as CMIP6). During later stages of projects it may be appropriate to also consider other groups who may act to help implement and put research into use.
- How will FCFA's new knowledge be used? Determining, early in the process, how
  the different stakeholders are likely to use the research is important. Working with
  direct users of research and other beneficiaries ensures that research results can
  be presented in ways and formats that are tailored to meet their needs.
- 5.8.4 Capacity development activities may also be considered in The Pathways to Impact.
- 5.8.5 It is important that applicants also consider tracking of their impacts and outcomes with the appropriate metrics as part of the Pathways to Impact plan. This will feed into the programme reporting and is not optional. Without contributions to this reporting there is a risk that the funding source to the programme will be cut. More information will be available at the FCFA programme launch workshop in early 2015. A template of the reporting format (subject to change) is available in Annex 5.
- 5.8.6 The Global Project consortium is expected to contribute to cross-programme activities coordinated by the CCKE Unit and this may be recognised within the Pathways to Impact plan. There are no additional funds for this work and all associated costs, including staff time, must be built into the overall cost for the programme of work. There will also be the expectation that projects contribute to the FCFA website. Applicants should be aware that they may need to remain flexible for this element of activity and they should build contingency in their funds.
- 5.8.7 In addition to the Pathways to Impact activities developed by individual projects, it should also be noted that FCFA may wish to sponsor additional outreach activities involving one or more projects in order to increase the impact of their research outcomes. All grant holders will be expected to cooperate with the Programme Executive Committee (PEC) in contributing to the wider FCFA programme of knowledge sharing, uptake and communication activities. They will also be expected to represent the scheme and their project through involvement, where appropriate, in third-party events.

#### 5.9 CVs

- 5.9.1 CVs are required for all named research staff; PIs, Co-Is, Researcher Co-Is, named Researchers and Visiting Researchers.
- 5.9.2 Up to 2 sides A4 are allowed for each CV, and should include current and previous positions, key publications and research funding obtained.
- 5.9.3 It is recommended that CVs use a consistent template within each project.

# 5.10 Letters of Support

- 5.10.1 Each Project Partner must provide a detailed signed letter of support of up to 2 sides of A4.
- 5.10.2 The letter of support should confirm the organisation's commitment to the proposed project, identify the value, relevance and possible benefits of the proposed work to the partner, the period of support, the full nature of the collaboration and how the partner will be involved in the project and provide added value.
- 5.10.3 Partner contributions, whether in cash or in kind, should be explained in detail in the case for support, including the equivalent value of any in-kind contributions.

5.10.4	The letter shows to the project.	uld be	written	when	the	proposal	is bei	ng prepare	d and	targeted	specifically

# 6 Je-S Registration

# 6.1 Registering an organisation on Je-S

6.1.1 If your organisation is already registered on the Je-S system, you do not need to re-register. However, if this is your first application for funding, you should follow the steps in Annex 3 to ensure that your organisation is registered on Je-S.

### 6.2 Registering as an Individual on Je-S

- 6.2.1 All individuals that will be named on an application (with the exception of Project Partners and sub-contractors) must create an individual Je-S account for themselves in order to be added to an application. See online Je-S helptext guidance (<a href="https://je-s.rcuk.ac.uk/Handbook/">https://je-s.rcuk.ac.uk/Handbook/</a>) on how to register on Je-S. It is necessary for an individual's organisation to have been registered before they can register themselves.
- 6.2.2 If you have registered as an individual with Je-S through a previous call, you will not need to do so again.

# 7 Organisation Eligibility

#### 7.1 Overview

- 7.1.1 To apply for the FCFA Global Climate Model Development for Africa grant, Research Organisations must be registered as users of the Research Councils' Joint Electronic Submission system (full details of the system are available at: <a href="https://jes.rcuk.ac.uk/Jes2WebLoginSite/login.aspx">https://jes.rcuk.ac.uk/Jes2WebLoginSite/login.aspx</a>) and have had their costing methodology validated.
- 7.1.2 FCFA will fund UK and non-UK organisations where these are found to be eligible.
- 7.1.3 Most UK higher education institutions and some other independent UK research organisations are already eligible to apply for, and hold, UK Research Council grants. Details on which UK organisations are currently eligible for Research Council funding can be found at <a href="http://www.rcuk.ac.uk/funding/eligibilityforrcs/">http://www.rcuk.ac.uk/funding/eligibilityforrcs/</a>.
- 7.1.4 Non-UK organisations (and other UK organisations not currently eligible to receive Research Council funding) that are interested in applying will only be eligible to directly receive FCFA funding (i.e. be named as PI) if they satisfy all of the following conditions:
  - 1. The organisation must be a legal entity.
  - 2. The organisation must be able to demonstrate an independent in-house capability to undertake and lead research and training in the field or discipline in which it wishes to be funded. This would normally involve employment of at least three permanent or long term staff, each of whom have 4-6 years postdoctoral research experience or equivalent 10 and recognised research publications at national and at international level; they must also be capable of leading innovative research projects, directing post-doctoral researchers, and providing necessary supervision at this level. Note that it is not essential to have post-doctoral experience, equivalent research experience, such as demonstrated long term professional and specialist experience will also be recognised.
  - 3. The organisation must meet the accountability and audit requirements of the FCFA funders. This requires your organisation to provide, on request, full documentation to give assurance of the:
    - Institutional governance and accountability structures;
    - Audit and accountability procedures;
    - Sources of core funding and other funding;
    - CGIAR Research Centres are eligible to apply, but must follow the funding conditions set out in Section 5.4.11.
- 7.1.5 Organisations that do not meet these requirements may not act as the lead organisation (i.e. as a PI) and will not directly receive funds from the awarding body. However, they may be named as a Co-I, Project Partner or sub-contractor organisation (and receive funds through the lead organisation) that is, they can serve as one of the FCFA Grant institutions, but not be the lead institution on an application. All organisations receiving funding from FCFA (i.e. including where subcontracted) will need to meet minimum management and financial due diligence standards; further details will be provided in due course.
- 7.1.6 If the proposal is successful and offered FCFA funding, the lead organisation (i.e. the organisation of the PI) on any grant application, will be required to undergo eligibility checks

Equivalent experience which may take a number of forms, such as good track record of long term in depth professional experience ir a relevant field of work.

Research Organisations normally ineligible to receive funding from the UK Research Councils (RC) may be eligible under this call for proposals. Note that funding for these organisations will come from DFID and not the Research Councils. These organisations will not be eligible for any other RC funding, unless specifically stated by an individual Council.
 Equivalent experience which may take a number of forms, such as good track record of long term in depth professional experience in

before any funding will be confirmed. This process will not apply to organisations that are already recognised to receive UK Research Council funding (principally UK HEIs and eligible ROs). See <a href="http://www.rcuk.ac.uk/funding/eligibilityforrcs/">http://www.rcuk.ac.uk/funding/eligibilityforrcs/</a>.

# 8 Research Roles and Eligibility

#### 8.1 Overview

- 8.1.1 Research applicants must ensure that they accurately define their roles within the grant so that there is no later confusion.
- 8.1.2 With the exception of project partners and 'staff' such as researchers and technicians, individuals may be named on a **maximum of two** FCFA Grants submitted for each call (i.e. two Global Project proposals and two Regional Project proposals in total), and may be named as a **lead Principal Investigator (PI) on only one**. The total time commitment across the applications with which they are involved should not exceed 100%. If individuals are named on more than two submitted proposals then they will be asked to retract their involvement from the additional proposals, which may be to the detriment of both the individual and projects concerned.

# 8.2 Role Descriptions and Eligibility

#### **Principal Investigators (PI)**

- 8.2.1 Each application submitted as part of the FCFA proposal will have one named PI. If you are submitting a joint proposal, then the PI named on the lead application will act as the lead Principal Investigator for the project as a whole. The PI on the lead application will direct the research and the management of the project; for example, the lead PI is responsible for overall project reporting requirements.
- 8.2.2 Pls and their respective organisations will be responsible for ensuring that the terms and conditions for their grant are met.
- 8.2.3 Principal Investigators may be from any type of organisation that meets the eligibility criteria. UK Principal Investigators from Research Council eligible organisations are required to meet the standard NERC eligibility criteria stated in the <a href="NERC Grants">NERC Grants</a> Handbook.
- 8.2.4 Non-UK Principal Investigators and PIs from organisations not normally eligible for UK Research Council Funding, should meet the following criteria:
  - have at least three years of relevant post-doctoral experience, or an appropriate equivalent level of research experience<sup>11</sup>;
  - be employed—at the time of application—by the Research Organisation submitting
    the proposal, or if not employed (i) have an existing formal arrangement with the
    organisation that enables him or her to carry out research there and receive all
    necessary management and infrastructure support from the organisation or (ii) be
    scheduled to move to the submitting organisation before the proposed start date of
    the grant in such a way that would ensure that the criterion stated above is met by
    the time the grant starts;
  - have an assurance from the submitting organisation—at the time of application—that should the proposal be successful, the contract of employment, or formal commitment, to provide support if not employed, will extend at least three months beyond the end date of the grant.

#### **Co-Principal Investigator (Co-PI)**

- 8.2.5 A Co-PI will be the lead investigator on a component application.
- 8.2.6 The budget applied for on each component will be paid directly to the organisation of the PI or Co-PI.
- 8.2.7 The eligibility requirements for a Co-PI are the same as those for a PI.

Equivalent experience which may take a number of forms, such as good track record of long term in depth professional experience in a relevant field of work. 8.2.8 Co-PIs on component parts of joint applications will work with the PI on the lead application to deliver the research, management and leadership of the project.

#### Co-Investigator (Co-I)

- 8.2.9 A Co-Investigator assists the PI in the research, management and/or leadership of the project. They may be expected to take over the leadership of their part of the project if the PI is unable to continue in their role, except where their organisation is ineligible to directly receive funds from the awarding body (i.e. it does not meet the organisation eligibility criteria in Section 7).
- 8.2.10 Co-Investigators from an organisation that is not the same as the PI's organisation will receive any requested funds through the PI's organisation and not directly from the awarding body (NERC on behalf of FCFA funding partners).
- 8.2.11 Co-Investigators may be from any organisation, including those that do not meet the eligibility criteria to directly receive funds from the awarding body because their organisation will not be receiving money directly. However, such organisations will be expected to meet minimum financial and management due diligence criteria<sup>12</sup>.
- 8.2.12 UK based Co-Investigators from Research Council eligible organisations are required to meet the standard NERC eligibility criteria stated in the <u>NERC Grants Handbook</u>.
- 8.2.13 Non-UK based Co-Investigators and Co-Is from organisations not normally eligible for UK Research Council Funding should meet the following criteria:
  - have at least three years of relevant post-doctoral experience, or an appropriate equivalent level of research experience<sup>13</sup>;
  - be employed—at the time of application—by the Research Organisation submitting
    the proposal, or if not employed (i) have an existing formal arrangement with the
    organisation that enables him or her to carry out research there and receive all
    necessary management and infrastructure support from the organisation or (ii) be
    scheduled to move to the submitting organisation before the proposed start date of
    the grant in such a way that would ensure that the criterion stated above is met by
    the time the grant starts;
  - have an assurance from the submitting organisation—at the time of application—that, if the proposal is successful, the contract of employment, or formal commitment, to provide support if not employed, will extend at least three months beyond the end date of the grant.

#### Researcher Co-I

- 8.2.14 A Researcher Co-I is a specifically named post-doctoral research assistant (PDRA), or other suitably experienced staff member, who has at least two years of relevant postdoctoral experience, or an appropriate equivalent level of research experience, but who is not eligible to be a PI or Co-I.
- 8.2.15 They will have made substantial contribution to the formulation and development of the project and will be closely involved in the project (if funded).
- 8.2.16 Researcher Co-Is from an organisation that is not the same as the lead organisation will receive any requested funds through the lead organisation and not directly from the awarding body (NERC on behalf of FCFA funding partners).
- 8.2.17 Researcher Co-Is may be from any organisation, including those that do not meet the eligibility criteria to directly receive funds from the awarding body (see Section 7).
- 8.2.18 A Researcher Co-I will be employed for the duration of their contract by the same Research Organisation as either the PI or one of the Co-Is (but not necessarily at the time of

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Further details will be provided in due course.

Equivalent experience which may take a number of forms, such as a good track record long term in depth professional experience in a relevant field of work.

- application). This contract may be shorter than the length of the grant award, depending on the requirements of the post, and they do not have to be employed by that Research Organisation at the time of application.
- 8.2.19 Researcher Co-ls may not take over from the Principal Investigator, should the PI leave the project.

#### Researchers

- 8.2.20 A researcher is an individual who will work as a research assistant on the project, but who is not eligible to be a PI, Co-I or Researcher Co-I.
- 8.2.21 The researcher must be from the same organisation as the PI, or one of the Co-Is.
- 8.2.22 The researcher should have a suitable level of experience in order to fulfil the requirements of the project. This may include having a PhD, or having several years' relevant research or policy experience, as appropriate to the role.
- 8.2.23 There is no limit to the number of applications a Researcher can be named on, but if successful on more than one grant awarded, an alternative researcher would need to be found if time committed exceeded 100% FTE.
- 8.2.24 A Researcher may be a specifically named individual (in which case they would need to register with Je-S) or be included using a post identifier<sup>14</sup>, where the candidate will be recruited later.

#### **Project partners**

- 8.2.25 Project Partners may be experts who provide invaluable inputs and advice to the project, and will have an integral role in the proposed research.
- 8.2.26 An organisation should only be named as a Project Partner if it is providing **specific unpaid contributions**, either direct or indirect, to the project (for example, time, equipment, etc).
- 8.2.27 Minor costs may be requested to facilitate collaboration, but these should be substantially less than the contribution of the Project Partner organisation to the project. These costs will not come directly from the awarding body (NERC on behalf of FCFA funding partners) but will be distributed by the lead organisation on the proposal.
- 8.2.28 There is no limit to the number of Project Partners you can have on the application, but Project Partners must be from separate Research Organisations to those submitting the proposal.

#### **Sub-contractors**

- 8.2.29 Sub-contractors contribute a specific service to the project, but may not necessarily be involved in the development and design of the project.
- 8.2.30 There is no need to go into much detail on sub-contractors at the outline stage with the exception of mentioning them if they are critical to the project.

#### Visiting researchers

8.2.31 Visiting Researchers may be funded to visit the investigator's institution for up to 12 months, in order to give full time advice and assistance on the research.

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<sup>&</sup>lt;sup>14</sup> For example 'Researcher1'.

# 9 Including Project Studentships on a Proposal

#### 9.1 Overview

9.1.1 Project studentships (either Masters or PhD studentships) **cannot** be added to FCFA grants.

# 10 Submitting your proposal

#### 10.1 Overview

- 10.1.1 Applications must be completed in full before final submission. The Je-S system has a validation procedure which will identify sections that have not been completed. An exception to this is for any 'Other Attachments', so **applicants must ensure for themselves** that any such documents have been included.
- 10.1.2 Changes to the Je-S registration process mean that for certain schemes, such as FCFA, any organisations that are not currently Je-S registered, may self-register their organisation (see Annex 3). For these self-registering organisations there is no need to establish a submitter pool. Therefore these applicants can submit the application directly to the Council (NERC).
- 10.1.3 However, please note that for organisations that are already Je-S registered, your application will be routed through your existing submitter route. Therefore when a researcher submits his or her application, a message will be sent to their host organisation's designated 'submitter', who must then complete the submission process to Council.
- 10.1.4 Thus, there is a further layer of administration between the researcher submitting the application and it being received by the NERC, via Je-S. This layer of administration is at the applicant's host institution, and the NERC cannot accept responsibility for any delays which may occur as a consequence. The process can be shown as:

  Applicant → Submitter (within the applicant's institution) → NERC.
- 10.1.5 Note: each component application comprising a joint proposal will need to go through the same submission process. The PI on the lead application should ensure that all joint application components have submitted their part of the joint proposal.

If all applications are not FULLY submitted by the deadline, i.e. all component parts from all PI/co-PIs, they will not be accepted.

The deadline for all Je-S research applications to this call is 16:00 (4pm) UK Local Time (GMT+1/UCT+1), 5<sup>th</sup> August 2014

- 10.1.6 Applications can only be accepted by electronic submission in the manner indicated on the form and accompanying guidance notes, and it must be clear and unambiguous that full submission took place prior to the deadline.
- 10.1.7 Electronic acknowledgements will be sent to the lead Principal Investigator and submitting organisation from the Je-S system.
- 10.1.8 Applicants must ensure they know whether their application will be routed through a submitter pool. We strongly advise that you check with Je-S whether or not you need your host institution to submit your completed application on your behalf. You can check this in Je-S by opening your Je-S application and selecting 'Document Actions' at the top and then 'Show submission Path'.

- 10.1.9 We strongly advise applicants whose applications will be routed through a submitted pool to secure confirmation from their relevant administrator that the application has been submitted successfully to NERC.
- 10.1.10 The call documentation aims to provide comprehensive instructions to support FCFA proposal preparation and submission via Je-S. However, the FCFA Secretariat is available to support applicants through the process and will act as the first point of contact for queries, which may be referred on to other Research Council teams, for example, the Je-S Helpdesk. The FCFA mailbox is monitored by a team and is the preferred method of initial contact.

# 11 Summary of Requirements

# 11.1 Full Proposals

# 11.1.1 Summary of Requirements for Single Application

Document Type	Required	As necessary	Number limit
Title of proposal (pro forma)	✓		150 characters
Type of proposal (pro forma)	<b>✓</b>		n/a
Objectives (pro forma)	✓		4000 characters
Summary (pro forma)	<b>✓</b>		4000 characters
Academic Beneficiaries (pro forma)	<b>✓</b>		4000 characters
Impact Summary (pro forma)	<b>✓</b>		4000 characters
Nominated referees (pro forma)		✓	Max 4
Project Partners (pro forma)		✓	No limit
Facility (pro forma)		✓	n/a
Previous Track Record (Part 1 of the Case for Support).	<b>√</b>		Max 3 sides A4
Description of Proposed Research (Part 2 of the Case for Support)	<b>√</b>		Max 16 sides A4
Data Management Plan	✓		Max 1 sides A4
Justification of Resources	<b>√</b>		Max 4 sides A4
Pathways to Impact	<b>√</b>		Max 2 sides A4
Letters of support from Project Partners		✓	Max 2 sides A4 each
CVs for named research staff and Visiting Researchers from all component Research Organisations	<b>✓</b>		Max 2 sides A4 each
CVs for all Principal and Co-I Investigators from all component Research Organisations	<b>✓</b>		Max 2 sides A4 each
Equipment Quotations		✓	n/a
Facility forms (Ship-time/Marine Equipment, Aircraft ASF/FAAM)		✓	n/a

# 11.1.2 Summary of Requirements for Joint Applications

Document Type	Common to all proposals	Submitted by Lead Only	Submitted by Individual components	Number limit
Title of proposal (pro forma)	✓		✓	150 characters
Type of proposal (pro forma)	✓		✓	n/a
Objectives (pro forma)	<b>✓</b>		✓	4000 characters
Summary (pro forma)	✓		✓	4000 characters
Academic Beneficiaries (pro forma)	✓		✓	4000 characters
Impact Summary (pro forma)	<b>√</b>		✓	4000 characters
Nominated referees (pro forma)		✓		Max 4
Project Partners (pro forma)	✓	✓		No limit
Facility (pro forma)			✓	n/a
Previous Track Record for each component (Part 1 of the Case for Support).			✓	Max 3 sides A4
Description of Proposed Research (Part 2 of the Case for Support)	<b>√</b>	✓		Max 16 sides A4
Data Management Plan	✓	✓		Max 1 sides A4
Justification of Resources	✓	✓		Max 4 sides A4
Pathways to Impact	✓	✓		Max 2 sides A4
Letters of support from Project Partners	✓	✓		Max 2 sides A4 each
CVs for named research staff and Visiting Researchers from all component Research Organisations	<b>✓</b>		<b>✓</b>	Max 2 sides A4 each
CVs for all Principal and Co-I Investigators from all component Research Organisations			✓	Max 2 sides A4 each
Equipment Quotations			✓	n/a
Facility forms (Ship-time/Marine Equipment, Aircraft ASF/FAAM)			✓	n/a

# 12 Summary of Requirements and Assessment Criteria

#### 12.1 Overview

- 12.1.1 Applications can only be accepted by electronic submission in the manner indicated on the form and accompanying guidance notes, and it must be clear and unambiguous that **full** submission took place prior to the deadline.
- 12.1.2 Electronic acknowledgements will be sent to the lead Principal Investigator and submitting organisation from the Je-S system.
- 12.1.3 The Full Proposals will be sent out for external peer review. The Secretariat will seek between 3 and 6 reviews for each application.
- 12.1.4 Applicants will have the opportunity to respond to the reviewer comments. All reviews received by the week commencing October 6<sup>th</sup> 2014 (to be confirmed, TBC) will be sent to the lead PI for comment. This must be completed by the week commencing October 13<sup>th</sup> 2014 (TBC). If you do not expect to be available during this period, please contact the FCFA Secretariat (<a href="fcfa@nerc.ac.uk">fcfa@nerc.ac.uk</a>) to notify them of a suitable alternative contact. Reviews received after this date will be sent for comment as soon as they are received.
- 12.1.5 The Proposals, reviews and responses will be considered by an independent panel of experts and will take the following criteria into account:

Research Excellence – incorporates but is not confined to:

- assessment of the problem to be addressed and how novel/exciting/ambitious it is;
- approach for addressing problem and identification and mitigation of risk;
- use of innovative approaches;
- suitable expertise to achieve the aims and objectives.

#### Fit to Call – incorporates:

- potential for significant and sustainable improvements in scientific understanding of African climate relevant to medium-term adaptation and enhanced GCM performance for Africa;
- alignment of the proposed research with FCFA's objectives (see Section 1.3);
- recognised value added to other past and on-going initiatives;
- identification of pathways to development impact;
- breadth and depth of consortium partners, including inclusion of African institutions:
- value for money;
- provision for capacity development.
- 12.1.6 The moderating panel will take into account all of the review information and will award a final grade for both of the criteria outlined above using a 0-10 scale for Research Excellence and a 0-6 scale for Fit to Call. Proposals will be ranked according to these scores, with Research Excellence and Fit to Call scores carrying equal weighting.
- 12.1.7 Project members may be invited to interview at the moderating panel.
- 12.1.8 Pathways to Impact are no longer scored by reviewers and are no longer used as a secondary criterion for ranking proposals. Reviewers will provide comments on Pathways to Impact and the panel will discuss these comments and deem them acceptable/unacceptable. An acceptable Pathways to Impact plan is a condition of funding. Grants will not be allowed to start unless unacceptable Pathways to Impact plans are enhanced to an acceptable level within 2 months of notification of the panel outcome. See the Pathways to Impact policy and guidance for more information.

- 12.1.9 The FCFA PEC will take the recommendations of the panel into account along with the FCFA portfolio and the available budget in making their final decision. The decision of the PEC will be final.
- 12.1.10 Applicants will be given full feedback from the panel outlining the reasons that they were successful/unsuccessful upon request. No further feedback will be available.

# 13 Full Proposal Call Timeline

13.1.1 The table below summarises the proposed timeline, the application requirements, and assessment procedures that will be employed at each stage.

Date	Stage	Applicant responsibilities	Assessment
May 1 <sup>st</sup> 2014	Announcement of Opportunity for the 2014 Global Climate Model Development for Africa Call		
June 2 <sup>nd</sup> 2014	Deadline for notification of intent to submit Full Proposal	Applicant to submit notification of intent form to FCFA Secretariat (fcfa@nerc.ac.uk)	
August 5 <sup>th</sup> 2014	Deadline for submission of Full Proposals	Applicants to submit proposals via the Joint Electronic Submissions (Je-S) System	
Week commencing October 6 <sup>th</sup> 2014 (TBC)	PI invited to respond to reviews	PI to respond to reviewers	
Week commencing October 13 <sup>th</sup> 2014 (TBC)	Deadline for PI response	PI to respond to reviewers	
Week commencing November 3 <sup>rd</sup> 2014 (TBC)	Moderating panel	Project members may be invited to interview at the moderating panel	
December 2014	Consortium Grant Awarded		
January 2015	Consortium Grants Started	Applicants must have returned starting certificates	

NB: Please note that these dates may be subject to change.