



## FCDO-UKRI Senior Research Fellowships 2023

### Fellowship Descriptions

1. [Political Economy of Water in Middle East and North Africa \(ODA\)](#)
2. [Politics and Governance - Technology, Political Settlements, Service Delivery \(ODA\)](#)
3. [Conflict – Future of War, Conflict & Stabilisation \(ODA\)](#)
4. [Economic Development & Infrastructure \(ODA\)](#)
5. [Women and Girls Empowerment - Gender and Adolescence \(ODA\)](#)
6. [Climate Resilient Agriculture and Food Systems \(ODA\)](#)
7. [Global Health Policy & Systems \(ODA\)](#)
8. [Big Data, AI & International Development \(ODA\)](#)
9. [Critical Minerals & Supply Chains \(non-ODA\)](#)
10. [Quantum Technologies \(non-ODA\)](#)

### ODA themes

<b>Fellowship title</b>
Political Economy of Water in Middle East and North Africa
<b>Host team</b>
Middle East and North Africa Research Group (MENARG)
<b>Summary</b>
The fellow will work on political economy of water issues in the Middle East and North Africa, and the implications of those issues for UK policy interests and priorities.
<b>Topic</b>
The fellow will focus on the political economy of water issues, including growing water scarcity and poor quality of water resources resulting from international disputes, climate change and mismanagement in the Middle East and North Africa. Trans-national, inter- and intra- state dynamics should be explored, looking at the implications for development, stability and security for states and communities. This work would support policy-maker priorities on key policy issues like migration; the potential for radicalization as a result of poor governance, resource allocation and lost economic opportunities; and the potential for UK bilateral, multilateral, and programmatic interventions/impact on water issues.

<b>Fellowship structure</b>
Fellowship duration: 2 years Working pattern: 0.4FTE (~2 days per week)
<b>Work arrangements</b>
Security Clearance: All successful applicants will be required to complete Security Check (SC) level clearance. Processing time for this can take 2-3 months.  Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants should be able and willing to travel to an FCDO office at least once per month or more frequently.
<b>Fellowship Opportunity Description</b>
The role will involve: <ul style="list-style-type: none"> <li>• Providing political economy advice on issues related to water resources and security, stability and development in the Middle East and North Africa. This advice may be in the form of input into meetings, papers, submissions and emails. The fellow may also be required to produce concise written political economy analysis or formal oral briefing on these issues.</li> <li>• Providing written and oral updates on key water-related issues, keeping teams abreast of existing issues and horizon-scanning for potential upcoming issues.</li> <li>• Working closely with technical teams within the FCDO both in London and at key posts and wider analytical and academic community to ensure a rigorous evidence base to support political economy analysis.</li> <li>• Examining water issues from climate change and resource mismanagement perspectives, as well as in the context of international disputes, providing policy recommendations which take into account the origin of issues.</li> <li>• Providing teach-ins on key water-related issues in the Middle East and North Africa, and their implications for the UK. Issues of interest here include Iranian, Levant and North African river systems; and Gulf/Yemen water constraints.</li> <li>• Supporting any UK interventions, drawing on an understanding of cross-border water agreements in Middle East and North Africa as well as international agreements and norms on water usage, including treatment of downstream states.</li> </ul>
<b>Person specification - essential</b>
Expertise that the role will require: <ol style="list-style-type: none"> <li>1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community. You should have a PhD in geography, development, political economy or related field with at least 10 years research experience including a strong track record of academic publications focused on political economy of water issues in the Middle East and North Africa.</li> <li>2. You should have a deep understanding of the region's politics and how that relates to water matters or patterns of water usage. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas. This expertise may include: <ol style="list-style-type: none"> <li>a. the pressures on water resources caused by climate change and/or management issues and the political, social and economic issues caused by those pressures. A</li> </ol> </li> </ol>

<p>working knowledge of issues around ground water depletion and salt-water intrusion into aquifers in the Gulf, Yemen and Iraq.</p> <ol style="list-style-type: none"> <li>b. a deep understanding of the environmental and financial pressures and issues associated with desalination and other technological solutions, as well as the environmental implications of large-scale desalination. This should be coupled with knowledge of the political, social and economic implications of these issues.</li> <li>c. cross-border water agreements related to Middle East and North African states (or one of its sub-regions, with an interest in understanding others).</li> <li>d. international agreements and norms on water usage, including treatment of downstream states.</li> </ol> <ol style="list-style-type: none"> <li>3. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.</li> <li>4. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.</li> </ol>
<b>Person specification - desirable</b>
<ol style="list-style-type: none"> <li>1. A working understanding of UK concerns and policy on migration and increased radicalisation within the context of diminishing economic opportunity.</li> <li>2. Demonstrated ability to identify clear policy implications that allow knowledge to be actionable.</li> </ol>

<b>Fellowship title</b>
Politics and Governance - Technology, Political Settlements, Service Delivery
<b>Host team</b>
Politics, Conflict and Humanitarian Team
<b>Summary</b>
The SRF will help shape FCDO's global politics and governance R&D portfolio, including a potential focus on the politics of emerging technology, political settlements and/or the governance of service delivery.
<b>Topic</b>
<p>The SRF will help shape FCDO's global politics and governance R&amp;D portfolio, including a potential focus on the politics of emerging technology, political settlements and/or the governance of service delivery. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas, including:</p> <ol style="list-style-type: none"> <li>1. The politics of emerging technology, and implications of emerging technology for international development challenges, including political settlements, gender dynamics, democracy and elite and criminal capture; growing authoritarian trends; openings for violent and criminal actors; and the impact of new technologies on climate and energy use.</li> <li>2. Political settlements, elite bargains and development bargains approaches, including the interaction between political systems, political space and development.</li> <li>3. The politics of and governance of service delivery (including education, health and justice) and the role of institutions; the role of increased transparency and accountability to help citizens hold service providers to account; and wider government effectiveness.</li> </ol>
<b>Fellowship structure</b>

<p>Fellowship duration: 2 years Working pattern: 0.4FTE (~2 days per week)</p>
<p><b>Work arrangements</b></p> <p>Security Clearance: All successful applicants will be required to complete Security Check (SC) level and may be required to undertake Developed Vetting (DV) level clearance after joining. Processing time for this can take 4-8 months.</p> <p>Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants should be able and willing to travel to an FCDO office at least once per month or more frequently.</p>
<p><b>Fellowship Opportunity Description</b></p> <p>In the International Development Strategy, the UK sets out a need to “target long-lasting political settlements, tackle new threats including disinformation and cyber-attacks, as well as enduring ones ... increasing cooperation on building security and countering transnational threats and challenges...”. It argues that development progress depends on strong economic and social foundations underpinned by effective, open and accountable institutions. This is set within the context of the Integrated Review which highlights some of the political, foreign policy and governance challenges we face, including: geopolitical and geoeconomic shifts; intensified competition and a growing contest over international rules and norms; rapid technological change which is reshaping societies, economies and relationships and transnational challenges as climate change, global health risks, illicit finance, SOC and terrorism.</p> <p>In addition, technology is transforming our political, economic, and social landscapes, delivering radical new ways to provide and consume services, manage crises, communicate, gather, and utilise data. These new tools, technologies and approaches could help leapfrog development challenges; bring greater transparency, accountability and effectiveness to how governments manage resources, provide services and make decisions. But alongside the opportunities, digital and frontier technologies bring new challenges and threats. Technology helps governments and companies to surveil people and populations, allowing for rapid spread of disinformation, facilitating online abuse and inciting ethnic and political violence. States worldwide are failing to keep up with the pace of technological change.</p> <p>Over twenty years of RED-funded world leading research and policy has shown us that politics and governance underpin many of the changes we see. It sits at the nexus of diplomacy and development in FCDO and is relevant across every area in which we work.</p> <p>The SRF will help us to scope new potential research investments around the politics and governance of emerging technology, political settlements and the politics of service delivery. While familiarity with a broad range of governance research and evidence is important, we recognise that one SRF is not likely to specialise in all these areas. The range of possible politics and governance themes and priorities will be determined in collaboration with the postholder and FCDO teams, including responding to their ideas.</p> <p>The SRF will work closely with FCDO teams, academia, and others. They will work closely with other SRFs, Research Analysts, DG Geopolitics and International Security and the National Security Directorate, DG Humanitarian and Development including open societies sector governance and departments leading on education, health and justice, and British Investment Partnerships.</p>
<p><b>Person specification - essential</b></p>

<ol style="list-style-type: none"> <li>1. You should be a professional level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community. You should have a PhD in political science related field with at least 10 years research experience including a strong track record of publications in high impact academic journals.</li> <li>2. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.</li> <li>3. Deep expert in understanding of the role of research, knowledge translation and social science in shaping strategies, policies and programmes.</li> <li>4. Knowledge and deep expert in a wide range of qualitative and quantitative research methods used regularly in interdisciplinary research bridging political science, data science and technology.</li> <li>5. An understanding of strategies for improving equity, access and inclusion in research.</li> <li>6. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.</li> </ol>
<b>Person specification - desirable</b>
<ol style="list-style-type: none"> <li>1. Experience of engagement with Government, national and/or international research and/or policy advisory bodies.</li> <li>2. Strong understanding of the state of current research and political economy of technology debates, particularly around issues connecting technology, inclusion/exclusion and inequalities, including for women, gender and marginalised communities.</li> <li>3. Well evidenced expertise and analysis around political settlements, elite bargains approaches.</li> <li>4. Understanding of the politics of service delivery.</li> <li>5. Experience in working with technology organisations, the private sector and civil society, including in the Global South.</li> <li>6. Substantial evidence of recognition within external research community.</li> </ol>

<b>Fellowship title</b>
Conflict – Future of War, Conflict & Stabilisation
<b>Host team</b>
Politics, Conflict and Humanitarian Team
<b>Summary</b>
The SRF will help shape FCDO’s global conflict R&D portfolio, with an initial focus on the changing nature of war, security and stabilisation activities as a result of rising geopolitical tensions in the context of the continued evolution of inter-state, intra-state and local conflicts, and the changing nature and levels of violence.
<b>Topic</b>
The SRF will help shape FCDO’s global conflict R&D portfolio, with an initial focus on the changing nature of war, security and stabilisation activities as a result of rising geopolitical tensions in the context of the continued evolution of inter-state, intra-state and local conflicts, and the changing nature and levels of violence. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas, including:

<ul style="list-style-type: none"> <li>• Changing nature of warfare and the implications for FCDO's diplomatic, development and security-related work on conflict.</li> <li>• Rethinking stabilisation in the contemporary environment of deliberate escalating and de-escalating use of violence and other means to create instability.</li> <li>• Understanding the changing nature of politically driven violence and what it means for conflict prevention, mitigation and resolution and development.</li> </ul>
<b>Fellowship structure</b>
<p>Fellowship duration: 2 years  Working pattern: 0.4FTE (~2 days per week)</p>
<b>Work arrangements</b>
<p>Security Clearance: All successful applicants will be required to complete Security Check (SC) level and may be required to undertake Developed Vetting (DV) level clearance after joining. Processing time for this can take 4-8 months.</p> <p>Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants should be able and willing to travel to an FCDO office at least once per month or more frequently.</p>
<b>Fellowship Opportunity Description</b>
<p>In the context of rising geopolitical competition, the opportunistic actions of states such as Russia and Iran are resulting in widespread instability and deteriorating security, in part designed to both challenge and weaken the international order. These states work in combination with non-state actors, private military companies, organised crime and terrorist organisations, using violence, coercion, disinformation, political interference, corruption and cyber operations in a hybrid manner, escalating and deescalating as opportunities present themselves. While a small number of protracted conflicts account for most war-related deaths, political and criminal violence is dramatically on the rise in all regions around the world, with implications for our need to consider where future threats may emerge as well as what this means for FCDO's current diplomacy, development and security-related work.</p> <p>The SRF will help us to scope new potential research investments around the changing nature of war, conflict and stabilisation and the ways in which the UK might better detect, assess, and respond to this growing instability and weakening of security, as part of our conflict R&amp;D portfolio. Synthesis and evaluation of existing bodies of evidence will also enhance our capacity to respond to demands for evidence-based advice in country and policy teams by keeping abreast of new developments in the field and improving our influence and impact.</p> <p>They will work closely with FCDO teams, academia, and others, helping to link teams to evidence and external expertise in this area, as well as providing strategic advice and challenge within the organisation and HMG more broadly. They will work closely with other SRFs in the Politics, Conflict &amp; Humanitarian (PCH) research commissioning team as well as those in other teams in Research &amp; Evidence Directorate focusing on other related areas of interest.</p>
<b>Person specification - essential</b>
<ol style="list-style-type: none"> <li>1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community.</li> </ol>

<p>You should have a PhD in conflict, warfare or related field with at least 10 years research experience including a strong track record of publications in high impact academic journals.</p> <ol style="list-style-type: none"> <li>2. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.</li> <li>3. Deep expert in of the role of research, knowledge translation and social science in shaping strategies, policies and programmes.</li> <li>4. Knowledge and understanding of different research methods appropriate for analysing war, conflict and stabilisation in conflict-affected settings.</li> <li>5. An understanding of strategies for improving equity, access and inclusion in research and development.</li> <li>6. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.</li> </ol>
<p><b>Person specification - desirable</b></p> <ol style="list-style-type: none"> <li>1. Experience of engagement with Government, national and/or international research and/or policy advisory bodies.</li> <li>2. Experience in working with military and civilian organisations focused on different aspects of war, conflict, stabilisation and violence.</li> <li>3. Substantial evidence of recognition within external research community.</li> <li>4. Experience in working in partnership with research institutions in conflict-affected areas.</li> </ol>

<p><b>Fellowship title</b></p>
<p>Economic Development &amp; Infrastructure</p>
<p><b>Host team</b></p>
<p>Economic Growth Research Team</p>
<p><b>Summary</b></p>
<p>To support delivery of UK priorities in economic growth and investment by providing deep research expertise, ensuring that FCDO stays at the cutting edge of evidence and analysis needed to drive inclusive, sustainable growth &amp; structural transformation in developing countries.</p>
<p><b>Topic</b></p>
<p>The SRF role will be to support delivery of UK priorities in economic growth and investment by providing deep research expertise, ensuring that FCDO stays at the cutting edge of evidence and analysis needed to drive inclusive, sustainable growth &amp; structural transformation in developing countries. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas, including:</p> <ul style="list-style-type: none"> <li>• Mechanisms for and barriers to investment in developing countries, including DFI &amp; private sector finance and development.</li> <li>• The role of infrastructure for sustainable economic development in developing countries – including green transport, large-scale energy transition and state capacity, institutions &amp; regulation needed for green infrastructure and market integration.</li> <li>• Macro and microeconomic foundations of economic growth and development in Low &amp; Lower-middle income country contexts.</li> </ul>
<p><b>Fellowship structure</b></p>

<p>Fellowship duration: 2 years Working pattern: 0.4FTE (~2 days per week)</p>
<p><b>Work arrangements</b></p>
<p>Security Clearance: All successful applicants will be required to complete Security Check (SC) level clearance. Processing time for this can take 2-3 months.</p> <p>Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants should be able and willing to travel to an FCDO office at least once per month or more frequently.</p>
<p><b>Fellowship Opportunity Description</b></p>
<p>Economic growth (or the lack of it) is the main factor behind the poverty reduction trajectory for developing countries. Countries that thrive will be those who drive investment, transform the structure of their economies, take advantage of global markets and maximise the potential of all of their citizens. The UK has committed to build British Investment Partnerships that help countries get the investment they need to grow secure, open, thriving economies. Investment in clean infrastructure to drive green growth is a particular focus, e.g. through British International Investment (BII) and the "Just Energy Transition Partnerships". This SRF role will:</p> <ul style="list-style-type: none"> <li>• Bring deep, technical expertise into these policy debates and will draw on their academic networks to build linkages between FCDO policy teams (especially in the British Investment Partnerships Directorate), implementing bodies and relevant academic economists.</li> <li>• Contribute to strategic directions and portfolio design of existing and future Economic Growth research platforms and programmes, in particular regarding technical research content.</li> <li>• Take stock and mapping out possible gaps, directions and opportunities for future research.</li> <li>• Provide a strategic evidence challenge function to the new FCDO economic development Centres of Expertise. This will ensure that the Centres use the latest evidence in their support to the FCDO country network.</li> <li>• Work with the FCDO Chief Economist to bring academic rigor and strategic evidence input into key economic debates and products identified by Economics and Evaluation Directorate.</li> </ul>
<p><b>Person specification - essential</b></p>
<ol style="list-style-type: none"> <li>1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community. You should have a PhD in development economics or a related field, with at least 10 years of research experience (equivalent of Associate Professor of higher).</li> <li>2. Several publications in leading academic journals in any of the above fields, related to or relevant to development economics.</li> <li>3. Familiarity with up-to-date econometric techniques for advanced applied economic analysis.</li> <li>4. Experience engaging with leading senior academics in development economics.</li> <li>5. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.</li> <li>6. Adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to engage people across a range of different roles/technical backgrounds.</li> </ol>



7. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.
<b>Person specification - desirable</b>
1. Experience engaging with developing country research networks.
2. Experience leading international research projects and teams with activities in developing countries.
3. Experience engaging with International Financial Institutions.

<b>Fellowship title</b>
Women and Girls Empowerment - Gender and adolescence
<b>Host team</b>
Education, Gender, and Inclusion Research Team
<b>Summary</b>
The Education, Gender, and Inclusion Research team (EGIR) in FCDO's Research and Evidence Division (RED) seeks to recruit a Senior Research Fellow to provide deep expertise on gender and inclusion to help us to develop new research programmes and to influence and strengthen these areas across the FCDO's existing research portfolio.
<b>Topic</b>
The SRF role will be to: <ul style="list-style-type: none"> <li>• Advise on how to strengthen gender and inclusion across the FCDO's broader research portfolio as required.</li> <li>• Identify priority issues and gaps (thematic, geographic, or particular groups among women and girls) in the global evidence base, and potential ways to address them (either redirecting existing research programmes or writing concept notes and business cases for new programmes).</li> <li>• Identify and work with audiences and opportunities, within and beyond FCDO, to communicate these findings and evidence-based recommendations in order to shape better policy and programming.</li> </ul>
<b>Fellowship structure</b>
Fellowship duration: 2 years Working pattern: 0.4FTE (~2 days per week)
<b>Work arrangements</b>
Security Clearance: All successful applicants will be required to complete Security Check (SC) level clearance. Processing time for this can take 2-3 months.  Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants should be able and willing to travel to an FCDO Office at least once per month or more frequently.
<b>Fellowship Opportunity Description</b>
This agenda is a priority for the FCDO, with a commitment to "provide women and girls with the freedom they need to succeed" as one of the four priorities of the UK Government's 2022 International Development Strategy (IDS). The FCDO's Women and Girls Strategy 2022-2030 takes stock of global patterns and trends in gender equality, noting significant progress but also some major reversals over the last decade. Both strategies identify three key, inter-connected issues for achieving global gender equality: namely, ensuring girls' access to quality education, empowerment (including,

but not limited to, economic and political empowerment for women, sexual and reproductive rights and health) and ending gender-based violence. Working with the Director of RED and FCDO Chief Scientific Advisor (Prof Charlotte Watts), the Education, Gender and inclusion Research Team Leader (EGIR) and the Social Development Advisors in the EGIR Team, and other advisors and SRFs in RED, the SRF will provide strategic direction to the RED portfolio of research which addresses gender equality; targeted support to EGIR on new programme direction and influencing opportunities; and advice to Gender and Equalities Policy Department.

**Person specification - essential**

1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community. You should have a PhD in gender relations or related field, in an international context, with at least 10 years research experience including a strong track record of publications in high impact academic journals.
2. You should have deep specialist expertise in one or more of the FCDO priority areas; educating girls, and adolescence; empowerment women and girls (social, political and economic empowerment; SRHR); ending violence against women and girls; including issues associated with fragile and conflict affected and humanitarian contexts and the international policy debates on women, peace and security.
3. Strong expertise in quantitative as well as qualitative research methods (including impact evaluation and systematic reviews); Knowledge / experience of rigorous trials; good understanding of the key sources of existing socio-economic data in low- and middle-income countries (e.g. DHS, LSMS, MICS); and the practicalities of conducting primary research in a variety of LMIC contexts (urban, rural, FCAS).
4. A track record of impact or experience of engaging with a range of policy actors and stakeholders (e.g. Low and Middle Income Country governments, the UN system, the IFIs, other foreign ministries and bilateral aid agencies, regional inter-governmental fora, NGOs and foundations, women's movements) who can be expected to use research findings.
5. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.
6. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.

**Person specification - desirable**

1. Experience of engagement with international/national research advisory bodies.
2. Experience of working to mainstream gender and inclusion across wider research programmes, as well as developing targeted research or gender and inclusion.

<b>Fellowship title</b>
Climate Resilient Agriculture and Food Systems
<b>Host team</b>
Food & Agriculture Research Team
<b>Summary</b>
To support delivery of UK priorities in food security and climate by providing deep research expertise, ensuring that FCDO stays at the cutting edge of emerging technology and evidence needed to drive

food systems transformation, advancing productivity, delivering food and nutrition security whilst reducing GHG emissions and protecting nature.
<b>Topic</b>
<p>The SRF role is to support delivery of UK priorities in food security and climate by providing deep research expertise, ensuring that FCDO stays at the cutting edge of emerging technology and evidence needed to drive food systems transformation, advancing productivity, delivering food and nutrition security whilst reducing GHG emissions and protecting nature. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas, including:</p> <ul style="list-style-type: none"> <li>• Technologies and approaches to increase agricultural yields without adverse environmental impact and without the conversion of additional non-agricultural land; and development of novel metrics and methods to manage trade-offs and measure adaptation.</li> <li>• Trends, applications and impacts of emerging technologies in agriculture and food (including development and applications of genomics; gene-editing; synthetic biology; digital and AI/machine learning; IoT, remote sensors and drones; precision technology and big data; vertical farming etc).</li> <li>• Development and application of novel fertilisers for improving yields and nutritional quality of crops; determination of better fertiliser recommendations; improving phosphorus and nitrogen use efficiency and recycling in agriculture.</li> </ul>
<b>Fellowship structure</b>
<p>Fellowship duration: 2 years  Working pattern: 0.4FTE (~2 days per week)</p>
<b>Work arrangements</b>
<p>Security Clearance: All successful applicants will be required to complete Security Check (SC) level clearance. Processing time for this can take 2-3 months.</p> <p>Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants should be able and willing to travel to an FCDO office at least once per month or more frequently.</p>
<b>Fellowship Opportunity Description</b>
<p>The world is experiencing severe food insecurity. Climate change and conflict, as well as economic disruption, are threatening food production and access to nutritious food. At the same time, some farming practices are driving climate change and biodiversity loss. The refresh to the UK's Integrated Review of Security, Defence, Development and Foreign Policy sets out how the UK will work to address vulnerabilities in our food system. The UK is committed to international development leadership in improving global food security and nutrition, including by driving the shift to climate resilient food systems, and making greater use of science and R&amp;D.</p> <p>This SRF will provide support to the delivery of UK's 2030 Strategic Framework for Climate and Nature, including deep expert advice relevant to our work on climate resilient food systems, and will strengthen further the expert, evidence synthesis and advice offer via our responsive programmes. The SRF will boost our offer to LMICs by providing the capability for commissioning of new high-quality research or the synthesis and curation of existing evidence to fill evidence gaps identified by Posts, regional depts and policy teams. Geographic focus is primarily in Africa, South Asia, and Indo Pacific, including fragile, conflict affected states and marginal /dryland areas of MENAD.</p>

FCDO requires deep expertise to advance our thinking in critical areas, allowing us to keep abreast of a rapidly evolving field, and deepen our international impact and influence and credibility. This deep, technical expertise will enable us to engage with top scientists in the field and to be able to identify gaps at the research frontier that would fit with FCDO's policy interests and directions. It will enable us to support the generation of regular evidence syntheses products and evidence-based approaches that support food and nutrition security, whilst responding to climate change and protecting and restoring nature.

#### **Person specification - essential**

1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community. You should have a PhD in agriculture science or a related field, with at least 10 years research expertise in food security and/or food systems, including a strong track record of publications in leading academic journals in fields relating to role of agriculture in accelerating sustainable growth and reducing poverty in LMICS; agriculture technologies and barriers to adoption; food systems transformation.
2. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas, including:
  - a. Promoting and developing pathways that tackle climate and nature through food and agriculture.
  - b. Technologies and approaches to increase yields without adverse environmental impact and without the conversion of agricultural land; metrics and methods to analyse trade-offs.
  - c. Opportunities and barriers to applications of emerging technologies in agriculture and food (including genomics, gene editing, AI/ML, sensors, precision technologies etc)
3. Strong track record in crafting and communicating succinct policy relevant advice based on rigorous reviews of evidence.
4. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.
5. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.

#### **Person specification - desirable**

1. Substantial evidence of and credibility in engaging with stakeholders in the international food and agriculture community, including researchers and policy makers at national and international levels.
2. Experience leading international research projects and teams with activities in Low and Middle Income Countries (LMICs); and in partnering with researchers in LMICs.
3. Experience engaging with private sector entities in agriculture and the food system.

#### **Fellowship title**

Global Health Policy & Systems

#### **Host team**

Global Health Team and Research and Evidence Directorate (RED)

<b>Summary</b>
The SRF will help shape FCDO's global health R&D portfolio, with an initial focus on the development and evaluation of accessible and affordable next generation health technologies to improve health outcomes in Low and Middle Income Countries.
<b>Topic</b>
<ul style="list-style-type: none"> <li>• The development, evaluation, and application of next generations of diagnostic, therapeutic, and preventive health technologies, including their potential application across the spectrum of health outcomes of women, babies, children and adolescents.</li> <li>• Impacts of developments and trends in the global health innovation landscape including the role of industry and public-private product development and other partnerships in accelerating equitable and affordable access to promising technologies (including SRHR).</li> <li>• How to address some of the structural barriers to the uptake of new technologies amongst the most vulnerable, including innovations in implementation research and behavior science and health systems and services, including digital innovations.</li> </ul>
<b>Fellowship structure</b>
Fellowship duration: 2 years Working pattern: 0.4FTE (~2 days per week)
<b>Work arrangements</b>
Security Clearance: All successful applicants will be required to complete Security Check (SC) level clearance. Processing time for this can take 2-3 months.  Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants should be able and willing to travel to an FCDO Office at least once per month or more frequently.
<b>Fellowship Opportunity Description</b>
<p>There have been remarkable gains in health, including reductions in maternal and child mortality. Much of this has been driven by increased availability of and access to new and improved technologies such as childhood vaccines, new treatments for malaria, HIV and TB, and voluntary contraception, combined with efforts to improve access to health services and systems. However, progress has stalled in recent years, and many countries have seen a regression in health indicators, due to pressures on health systems including from the COVID-19 pandemic, climate change, and increased conflict and fragility.</p> <p>FCDO's approach to ending the preventable deaths of women, babies, children and adolescents is built around the need for stronger health systems that can deliver quality, affordable health services to all and actions that address wider external determinants of health and increasing instability and fragility such as climate and humanitarian crises.</p> <p>The SRF will help us to evaluate the role and application of emerging technologies and innovations in this rapidly evolving space, especially technologies to improve outcomes women, babies, children and adolescents. They will enhance our capacity to respond to demands for evidence advice in country and policy teams by keeping abreast of new developments in the field and improving our influence and impact.</p> <p>They will work closely with FCDO teams, academia, and others, to help evaluate the role of promising technologies and innovative approaches. They will also support our efforts to ensure equitable access</p>

to new technologies, ensuring the maximum take up amongst the most vulnerable. This will include health systems and knowledge on uptake of SRHR products. Our current areas of geographic focus include Africa, south-east Asia and Indo Pacific including fragile and conflict affected states.

#### **Person specification - essential**

1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community. You should have a PhD in public health or related field with at least 10 years research experience including a strong track record of publications in high impact academic journals in fields related to technology development related to mothers, babies, children and adolescent health.
2. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.
3. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas, including:
  - a. The role of implementation research, knowledge translation and social science in ensuring new technologies are taken up and put into use.
  - b. Different innovation models in global health which draw on industry and the private sector (e.g. product development partnerships).
  - c. Strategies for improving equity, access and inclusion in research and development.
  - d. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.

#### **Person specification - desirable**

1. Experience of engagement with Government, national and/or international research and/or policy advisory bodies.
2. Experience in working with industry.
3. Deep expertise of sexual and reproductive health and rights and the structural drivers of adolescent health.
4. Substantial evidence of recognition within external research community.
5. Experience in working in partnership with research institutions in Low and Middle Income Countries.
6. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.

#### **Fellowship title**

Big Data, Artificial Intelligence and International Development

#### **Host team**

Technology and Innovation Unit

#### **Summary**

The SRF will support FCDO on issues relating to AI ethics in the context of international development, advising on the direction of RED AI investments (opportunities/ risks / developing best practice across the ODA R&D portfolio), on the use of AI in developing countries (key trends, high potential initiatives,

negative consequences for country's development) and how AI development can be targeted at seeking solutions for complex global challenges.

They will work closely with the SRF and research analysts who are the lead experts on the geopolitical and security implications of emerging technologies, and broader FCDO network of data, digital and technology professionals who work on policy, research and development programming relating to technology including AI.

#### **Topic**

This role will advise the Chief Scientific Adviser and research teams on how to strengthen FCDO's R&D and international development investments in AI and machine learning, with a focus on AI ethics and social impact. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas, including:

1. The use of AI in developing countries. Understanding the socio-economic impact AI systems have in different contexts, how people engage, the key trends, opportunities and the risks for developing countries including potential misuses, exclusion, and issues of trustworthiness.
2. Use of AI to tackle global challenges such as climate change, global health, poverty. Advising a broad network across FCDO on which initiatives have the highest potential and guiding approaches to regulation / driving markets to support AI development for global challenges.
3. Looking at the use of AI within FCDO development programmes and providing expert advice (e.g. on products, data, procurement, principles). Spotting the opportunities for innovation, integration and convergence (e.g. where we can integrate complex data systems so AI tools serve multiple uses and users) and mitigating risks (e.g. ethics, bias, privacy, data ownership). Synthesise evidence, identify gaps and develop principles on safe, responsible, inclusive and ethical AI which can be applied to our investments.

#### **Fellowship structure**

Fellowship duration: 2 years

Working pattern: 0.4FTE (~2 days per week)

#### **Work arrangements**

Security Clearance: All successful applicants will be required to complete Security Check (SC) level clearance and may be required to undertake Developed Vetting (DV) level clearance after joining. Processing time for this can take 4-8 months.

Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (east Kilbride), the applicant's employing institution, or at home. Applicants should be able and willing to travel to an FCDO office at least once per month or more frequently.

#### **Fellowship Opportunity Description**

Rapid AI advances have the potential to improve the lives of the poorest and most vulnerable people in the world, if the models are developed and used responsibly. On the other hand, if managed badly or if people are excluded from accessing them, they could contribute to a rise in inequality, undermine human rights or risk personal freedoms.

With trends of exponential growth in data, computing power, the convergence of technologies and increased integration and connectivity of digital tools, AI has the potential to completely alter the structure of industries, politics and production.

These new technologies may enable people in developing countries to access tailored expertise and tools, in local languages, quickly and cheaply. AI can make sense of complex data systems and be tasked to identify solutions and AI is already accelerating the rate of breakthroughs in medical research, supporting engineering biology and agri-tech interventions.

However, the rapid acceleration of AI also comes with risks for developing countries, such as increased inequality, biases, privacy, cyber security threats, mis-information, digital repression, and erosion of trust and governance.

FCDO's Research and Evidence Directorate (RED) has research investments across many applications of AI and data (spanning modelling, geospatial analysis, prediction, cooperative decision-making, humanitarian, climate tech, edtech, health, agritech, fintech, and research on economic implications of AI) but the evidence and learning has largely been contained within their separate sectors. We need to increasingly take a strategic overview of our diverse investments in AI and data, and build a holistic understanding of the evidence base and the evidence gaps that would benefit most from targeted research.

#### **Person specification - essential**

1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community. You should have a PhD in computer science or social sciences related to AI or a related field with at least 10 years research experience including a strong track record of academic publications focused on the ethical and social implications of AI/data science/machine learning including in developing country contexts.
2. Deep expert in current trends and practices relating to the use of AI, machine learning, data and algorithms for global public good and tackling development challenges.
3. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.
4. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.

#### **Person specification - desirable**

1. Experience of engagement with Government, national and/or international research and/or policy advisory bodies.
2. Substantial evidence of recognition within external research community.

### **Non-ODA themes:**

<b>Fellowship title</b>
Critical Minerals & Supply Chains
<b>Host team</b>
National Security Research Group (NSRG)
<b>Summary</b>
This SRF will support the International Technology Department (ITD), National Security Division (NSD) and Research and Evidence Division (RED) deliver on UK policy priorities (as outlined in the Integrated



Review, various national strategies, and the International Technology Strategy); on issues relating to technology supply chains and critical minerals.
<b>Topic</b>
This role will focus on the geopolitical implications of so-called "rare earth minerals"/natural resources critical to the functioning of modern information computing technologies, "green" and battery technologies. This role will also have an understanding of the geopolitical implications of the supply chains relating to these technologies.
<b>Fellowship structure</b>
Fellowship duration: 2 years Working pattern: 0.4FTE (~2 days per week)
<b>Work arrangements</b>
Security Clearance: All successful applicants will be required to complete Security Check (SC) level clearance and may be required to undertake Developed Vetting (DV) level clearance after joining. Processing time for this can take 4-8 months.  Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants will be expected to travel to an FCDO Office (KCS) at least once every two weeks or more frequently.
<b>Fellowship Opportunity Description</b>
This SRF will support the ITD and NSD deliver on UK policy priorities (as outlined in the Integrated Review, various national strategies, and the International Technology Strategy. This includes the provision of novel research into the multilateral and geopolitical implications of these topics, as well as offering deep expert advice relevant to the wider work of these departments and the FCDO. The SRF will strengthen further the expert, evidence synthesis and advice offer via the National Security Research Group and help fill the dearth of deep technology expertise within the wider office. In addition to the strategies mentioned above, this role aligns with four of the five Foreign Secretary agreed core priorities for FCDO work (Promoting Britain and our values – freedom and democracy; building strategic partnerships – economic, security, technology, climate change and the environment, and development; protecting British interests; and providing global insight and analysis.
<b>Person specification - essential</b>
<ol style="list-style-type: none"> <li>1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community.</li> <li>2. This SRF will have an understanding of the geopolitical implications of so-called "rare earth minerals"/natural resources critical to the functioning of modern information computing technologies and green/battery technologies – hereafter referred to as "Critical Minerals".</li> <li>3. Have a functioning knowledge of the UK's approach to these minerals, and our current and likely future position within the global market. They will have a detailed knowledge of the policies and approaches of the UK's state counterparts in this fields. This would also include an understanding of the international and multinational efforts and fora evolving in this domain.</li> <li>4. You should have deep specialist expertise in a specific area within this, but able to apply your expertise across a range of issues in related areas, including: <ol style="list-style-type: none"> <li>a. The environmental, social and governance (ESG) risks and challenges associated with the mining of critical minerals, how these are currently managed and approached by</li> </ol> </li> </ol>

<p>governments and industry, and policy options to manage the challenges and harness the benefits of sound ESG standards.</p> <p>b. The geopolitical drivers, trends, risks and opportunities of contemporary and forthcoming supply chain structures for next generations of information computing technologies (ICTs) and green/battery technologies (both consumer grade, and cutting-edge research). Will be able to help demonstrate the differences and similarities between these supply chains, the relative importance of each, and an appreciation of the international dynamics surrounding each.</p> <p>5. Strong track record in crafting and communicating succinct policy relevant advice based on rigorous reviews of evidence.</p> <p>6. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.</p> <p>7. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.</p>
<p><b>Person specification - desirable</b></p> <p>1. The SRF will have expertise on the policy options of governments in Low and Lower-Middle Income Countries – particularly in Sub-Saharan Africa – to leverage their resources to support their economic development. This will include understanding of factors affecting whether it is the right choice to implement policies to capture value through downstream processing. And, where not, other policy options in deal negotiation and financial management to capture value.</p> <p>2. Experience of engagement with Government, national and/or international research and/or policy advisory bodies.</p> <p>3. Experience in working with industry.</p>

<p><b>Fellowship title</b></p> <p>Quantum Technologies</p>
<p><b>Host team</b></p> <p>National Security Research Group (NSRG)</p>
<p><b>Summary</b></p> <p>This SRF will support International Technology Department (ITD), National Security Division (NSD) and Research and Evidence Division (RED) deliver on UK policy priorities (as outlined in the Integrated Review, various national strategies, and the International Technology Strategy); on issues relating to quantum cryptography, sensing and communications/teleportation.</p>
<p><b>Topic</b></p> <p>This role will focus on the geopolitical implications of forthcoming and nascent quantum technologies (excluding quantum computing); for the purposes of developing and informing UK foreign and development policy.</p>
<p><b>Fellowship structure</b></p> <p>Fellowship duration: 2 years Working pattern: 0.4FTE (~2 days per week)</p>
<p><b>Work arrangements</b></p>

Security Clearance: All successful applicants will be required to complete Security Check (SC) level clearance and may be required to undertake Developed Vetting (DV) level clearance after joining. Processing time for this can take 4-8 months.

Location requirement and hybrid working: Applicants may work at either FCDO Office - King Charles Street (KCS) (London), or Abercrombie House (East Kilbride), the applicant's employing institution, or at home. Applicants will be expected to travel to an FCDO Office at least once every two weeks or more frequently.

#### **Fellowship Opportunity Description**

This SRF will support the ITD and NSD deliver on UK policy priorities (as outlined in the Integrated Review, various national strategies (e.g. National Cyber Strategy), and the International Technology Strategy. This includes the provision of novel research into the multilateral and geopolitical implications of these topics, as well as offering deep expert advice relevant to the wider work of these departments and the FCDO. The SRF will strengthen further the expert evidence synthesis and advice offer via the National Security Research Group, and help fill the dearth of deep technology expertise within the wider office. You will also work closely across government with other experts working on this issue, including the cross-government Quantum team based in DSIT.

In addition to the strategies mentioned above, this role aligns with four of the five Foreign Secretary agreed core priorities for FCDO work (Promoting Britain and our values – freedom and democracy; building strategic partnerships – economic, security, technology, climate change and the environment, and development; protecting British interests; and providing global insight and analysis.

#### **Person specification - essential**

1. You should be a professorial level academic with deep specialist expertise and be able to provide long term strategic guidance, rapid insight, independent challenge and thought leadership to FCDO to guide policy and facilitate links into the global research community.
2. This SRF will be a deep expert of the geopolitical implications of quantum cryptography, sensing and communications/teleportation. Have a functioning knowledge of the UK's "quantum" landscape, including research programmes and HMG's policies and approach.
3. Have, or display an aptitude for developing, a detailed knowledge of the policies, approaches and programmes of the UK's state and industry counterparts in these quantum fields. This would also include an understanding of the international and multinational efforts and fora evolving in this domain.
4. Deep expertise of the importance of contemporary and forthcoming generations of computing (both consumer grade, and classical super-computing), and an appreciation of the geostrategic debates surrounding their development (including, but not limited to, federated, decentralised and centralised approaches to computing, semiconductors, next generation lithography, novel computing and the market trends and dynamics associated with these). Have a functioning knowledge of the UK's "compute" landscape – including HMG's reviews, policies and approach.
5. Strong track record in crafting and communicating succinct policy relevant advice based on rigorous reviews of evidence.
6. Strong communicator, adept at drawing on evidence to provide strategic advice at a leadership level to guide policy directions, combined with an ability to convey technical information accurately and clearly to non-technical audiences.
7. Desire to work as part of a cross-cutting team, engaging with other parts of FCDO as well as external partners.

#### **Person specification - desirable**

1. Experience of engagement with Government, national and/or international research and/or policy advisory bodies.
2. Experience in working with industry.