

Terms of Reference for a Scoping Study

Africa-Britain-China (ABC) Agricultural Technology Research Collaborations for International Development

Purpose

The scoping study will provide BBSRC, Defra, DFID and RCUK-China with information, analysis, evidence and options to develop a programme to support Africa-Britain-China agricultural technology research collaborations. The Africa-Britain-China (ABC) programme aims to mobilise joint expertise, both academic and private sector expertise, in the development of new, and adaptation of existing agricultural technology, innovation and knowledge exchange which will provide solutions to help meet the future demands and challenges facing African agriculture over the next 20 years.

Recipients and Target Audience

The recipients of the contract and the immediate audience for the outputs of the study are staff in DFID¹, BBSRC², Defra³ and RCUK-China interested in new agricultural technology, innovation and knowledge exchange. However, it is anticipated that there will be a wider audience from other institutions in China (MoA, CAAS, MOFCOM) and Africa (FARA, ASARECA, AU, CAADP etc.) and amongst users of research outputs.

Objectives

The Supplier will be responsible for delivering the following objectives:

1. Catalogue and synthesise lessons from existing Africa-Britain-China initiatives/relationships, and those completed in the past three years, in agricultural technology, innovation and knowledge exchange, including the underpinning science.
2. Analyse the future challenges that will be faced by agriculture in Africa over the next 20 years and explore the capacity of African, British and Chinese academic research and private sector expertise can respond to these challenges.
3. Assess the level of interest and willingness political feasibility in Africa, Britain and China to support and finance a potential new programme for agricultural research and technology development, innovation and knowledge exchange to meet future demands and challenges that African agriculture will face in the next 20 years.
4. Building on emerging lessons from other programmes, develop a preferred option for the design of the new programme, including governance, administrative, funding arrangements and technical priorities/themes.

¹ Agricultural Research Team and DFID China.

² International Team

³ Science Team

Deliverables

The study will be broken into two phases, the first of which will end with the presentation of initial findings of the scoping study. The report of the first phase will cover:

1. Existing/recently concluded collaborative initiatives on agricultural research between Africa, Britain and China; existing relationships/institutional arrangements with the potential to develop in further cooperation (10 pages).
2. The potential research scope for a trilateral research programme, identifying where there is an unmet need which can be addressed by Africa, Britain and China collectively (10 pages).
3. Level of interest and feasibility of the proposed programme, addressing the questions listed in Table 1: Areas for consideration below (20 pages).
4. At least three options for the design of the larger trilateral research programme, including institutional and governance arrangements, research commissioning arrangements (20 pages).

Following review of the report of the first phase, the Commissioning Committee will meet with the Supplier to discuss the report and specifically the options proposed. The Commissioning Committee will make and communicate to the Supplier a decision on their preferred option within one month of receipt of the report. The Supplier will then be required to produce a second report (30 pages) providing a further scoping of the preferred option covering advantages, disadvantages, risks and challenges in addition to institutional and governance arrangements and research commissioning arrangements.

A draft structure of both reports should be discussed and agreed with DFID during month three.

Scope of Work/Methodology

Bidders are encouraged to think creatively about an appropriate methodology to achieve the objectives of the study. The study will run for seven months, starting in July 2015 and an indicative approach could be:

1. A literature review, supplemented with interviews, to assess the future demand in Africa for improved technology to meet the challenges that African agriculture will face in the next 20 years and how Chinese and British research capacity and private sector could address these demands.
2. Identification of complementarity between African, British and Chinese agricultural research.
3. Comprehensive mapping of agricultural research initiatives between Africa, Britain and China (both on-going and completed in the past three years) and lessons learned, through
 - Review of Chinese and African literature both in the public and private sector;
 - Identify geographic overlap of similar investments.⁴
 - Developing case studies of successful delivery and adoption of technologies⁵, in multi-partner settings, with a focus on institutional arrangements and efficient financing mechanisms;

⁴ Both sector and geographic mapping is important. The output can be an Africa map with the indication of areas and sector where Britain and China have investments and African countries/regional bodies have strategic priorities.

⁵ Such case studies could be specific to Africa and/or China, and include a range of different successful delivery and adoption models in terms of approach, scale, geography, and theme?

- Review of other BRIC initiatives with similar scope (e.g. Africa Brazil Agricultural Marketplace).
4. Consultation and engagement with stakeholders in Africa, Britain and China through:
 - Participation in regional events and, where appropriate, organisation of workshops;
 - Mapping of initiatives both sectorally and geographically.
 - Joint scoping exercises.
 5. Assessing the willingness of the research base and private sector in Africa, Britain and China to engage in a trilateral research programme meet future demands and challenges that African agriculture will face in the next 20 year.
 6. Assessing the appetite/interest of regional bodies in Africa (African Union, CAADP, East African Community, ECOWAS, SADC, ASARECA, CORAF/WECARD, FARA, CARDESA etc). This should include Farmers Organisations where feasible.
 7. Developing options for the design for Phase 2 of this programme, including programme governance structure, implementation mechanisms; through for example:
 - Liaison with counterpart Ministries and funders in China and Africa;
 - Workshops.

The study team will need to conduct literature reviews, expert interviews and consultations with relevant stakeholders. Specific efforts should be made to ensure equal participation by African, British and Chinese stakeholders. The choice of stakeholders should be finalised in consultation with the DFID advisers/policy leads and may include government officials, research institutions, experienced consultants, academics and leaders of well-known civil society groups. The report should build on existing reports, literature reviews and scoping exercises, notably those for the Sustainable Agriculture Intensification Network (SAIN)⁶ and DFID's AgriTT Programme⁷, and not duplicate these. The successful bidder will be provided with relevant documents.

The scoping will also need to consider social development issues, including targeting of research to different groups including women, beneficiary engagement, research uptake and stakeholder engagement.

⁶ www.sainonline.org/english.html

⁷ www.agritt.org

Key Issues

Initial consultations on the potential for the proposed tri-lateral collaboration have identified six areas/ where further research/thinking is needed in developing the programme. The reports should include answers to the questions below, potential options for dealing with related issues and a feasibility assessment of each option.

Table 1: Areas for consideration

Area	Questions
Technical	<p>What are the key demands and challenges that African agriculture will face in the next 20 year?</p> <p>What are the technical areas/themes where interests of African, Chinese and British research institutions overlap and could address the challenges identified?</p> <p>How can a trilateral approach help address specific issues of technology transfer in an African context?</p> <p>What technical areas/themes should be covered/addressed by the research fund?</p> <p>Should the research be themed and/or focus on specific countries or regional priorities?</p>
Political	<p>What is the level of political engagement/interest in Africa, Britain and China?</p> <p>What countries/regions should be targeted in Africa?</p>
Governance	<p>Who would be the institutional partners in China and Africa, with respect to both funding and research?</p> <p>How would legitimacy and transparency been assured?</p>
Financial	<p>Where will funding come from?</p> <p>Will it be tied in any form?</p> <p>Are Chinese/Africa institutions able and willing to fund? (cf Newton Fund)</p> <p>What current financial models/structures are used to fund bilateral or trilateral research?</p> <p>How should research be commissioned and funded?</p>
Private Sector Engagement	<p>What demands does the private sector have and how can it become more involved in agri-tech innovation?</p> <p>What evidence exists of successful private sector led, agri-tech innovation in Africa, outside the large scale commercial agriculture sector?</p> <p>At what level should the private sector be involved in potential agricultural technology, innovation and knowledge exchange?</p>
Administrative	<p>What practical issues are likely to arise in a trilateral research programme and how could they be resolved? E.g. money transfer, language, administrative/system constraints</p>

Timeframe

The proposed work will be for a period of seven months. Within the first month the Supplier must submit a detailed work-plan outlining methodology, key events, travel plans and delivery schedule.

	Months after contract signature
Submission of work-plan	1
Submission of reports structure	3
Submission of draft report	5
Submission of final report – two weeks after draft	5
Decision made by Commissioning Committee	6
Submission of design option	7

Profile

The Supplier must be able to demonstrate that the proposed team fulfils the requirements listed.

Essential

1. Demonstrate knowledge of agricultural research, both crops and livestock, particularly in technological innovation and knowledge exchange and the existing research landscape in Africa, Britain and China.
2. Demonstrate experience in conducting research on private sector engagement in agriculture, particularly agricultural innovation.
3. Demonstrate existing capacity of analysis of relevant relationships, at all levels, between Africa, Britain and China, through publication of articles, books, and other activities.
4. Demonstrate expertise in institutional analysis and programme design.
5. Form a team with an excellent knowledge of China's institutions, policies and development experience as relevant to international development and agricultural technology. They must also have an excellent working knowledge of Africa.
6. There is a strong preference that the team includes Chinese and Africa partners who have a good understanding of the local political and social context.

Desirable

1. Demonstrate excellent understanding of international agricultural development by Britain and China;
2. Demonstrate strong understanding of the comparative advantage of Britain and China in agriculture technology, institutions and policy.
3. Form a team composed of members with at least 10 years of experience working in agriculture sector development, preferably in low-income countries;
4. Demonstrate strong writing and presentation skills in both English, and Chinese. Fluency in French and Portuguese is an advantage.
5. Familiarity with DFID policies and systems;

Consortium bids are encouraged as DFID acknowledges that it is unlikely that one organisation will meet this profile.

The successful contractor under this tender process will not be excluded from bidding on the potential, larger tri-lateral research programme. However, all outputs produced under the contract (e.g. reports, analysis, presentations) will be made available to all potential bidders for the larger

programme as part of the Invitation to Tender (ITT) Process. The bidder is required to detail what steps they will take to mitigate any potential competitive advantage.

Input and Management

A steering committee will be formed by representatives from Defra, DFID (UK and Africa), DFID China, BBSRC, RCUK-China. This committee will provide guidance for the activities based on their existing networks and relationships in China and Africa. The committee will meet with the Supplier on a monthly basis.

Background/Context

At the 2006 Beijing Summit of the Forum on China and Africa Cooperation (FOCAC), China confirmed its long-term commitment to a “new type of strategic partnership” with Africa in the 21st century, “featuring political equality and mutual trust, economic win-win cooperation”. Agriculture, rural development and poverty reduction in developing countries are priorities for Chinese foreign aid.

A partnership between Britain and China was sealed by William Hague in 2011 with the signature of a MoU together with Chen Deming, Chinese Minister of Commerce (MOFCOM). This MOU formally agrees the principle that Britain and China can collaborate on development issues. At the time, no other country had an agreement of this nature with China. As of 2013 DFID has capitalised on the MoU and has developed joint initiatives with MOFCOM in a number of areas including agriculture, disaster management and global health.

The research communities in Britain and China have distinct and complementary expertise in many areas of agricultural technology, including advanced genomics, animal, plant and crop sciences, phenomics and agri-systems modelling at a range of scales. The Britain and China have the potential to be a source of evidence and lessons on sustainable intensification and agricultural technology development in Sub-Saharan Africa (Africa). China has a long history of innovation in boosting agricultural productivity to increase food supplies. Over the past decade a significant body of knowledge, experience and relationships have been built between Africa-Britain-China through a wide range of initiatives led by DFID, Defra, BBSRC and RCUK-China. There is now an opportunity to build on the potential demonstrated by these initiatives through a more coordinated Britain-wide approach to address some of the challenges facing agricultural development in Africa over the next 20 years.

There is also increasing awareness and evidence of the importance of the private sector both in funding agricultural technology development and innovation and in ensuring the commercialisation of innovation in the sector. The UK Government has shown its support for collaborative work with the private sector to drive scientific innovation into practical application in the field through the Agri Tech Strategy (2013). At the most recent SAIN Governing Board (2013), both Britain and China agreed to do more through SAIN to engage the private sector in the network.

Duty of Care

The Supplier is responsible for the safety and well-being of their Personnel (as defined in Section 2 of the Contract) and Third Parties affected by their activities under this contract, including appropriate security arrangements. They will also be responsible for the provision of suitable security arrangements for their domestic and business property.

DFID will share available information with the Supplier on security status and developments in-country where appropriate.

The Supplier is responsible for ensuring appropriate safety and security briefings for all of their Personnel working under this contract. Travel advice is also available on the FCO website and the Supplier must ensure they (and their Personnel) are up to date with the latest position.

This Procurement may require the Supplier to operate in a seismically active zone considered at high risk of earthquakes. Earthquakes are impossible to predict and can result in major devastation and loss of life. There are several websites focusing on earthquakes, including <http://geology.about.com/library/bl/maps/blworldindex.htm>. The Supplier should be comfortable working in such an environment and should be capable of deploying to any areas required within the region in order to deliver the Contract (subject to travel clearance being granted).

This Procurement may require the Supplier to operate in conflict-affected areas and parts of it are highly insecure. Travel to many zones within such regions will be subject to travel clearance from the UK government in advance. In such situations, the security situation may be volatile and subject to change at short notice. The Supplier should be comfortable working in such an environment and should be capable of deploying to any areas required within such regions in order to deliver the Contract (subject to travel clearance being granted).

The Supplier is responsible for ensuring that appropriate arrangements, processes and procedures are in place for their Personnel, taking into account the environment they will be working in and the level of risk involved in delivery of the Contract (such as working in dangerous, fragile and hostile environments etc.). The Supplier must ensure their Personnel receive the required level of training and [where appropriate] complete a UK government approved hostile environment or safety in the field training prior to deployment.

Tenderers must develop their Tender on the basis of being fully responsible for Duty of Care in line with the details provided above and the initial risk assessment matrix provided at Annex 1. They must confirm in their ITT Response that:

- They fully accept responsibility for Security and Duty of Care.
- They have made a full assessment of security requirements.
- They have the capability to provide security and Duty of Care for the duration of the contract.

If you are unwilling or unable to accept responsibility for Security and Duty of Care as detailed above, your Tender will be viewed as non-compliant and excluded from further evaluation.

Acceptance of responsibility must be supported with evidence of Duty of Care capability and DFID reserves the right to clarify any aspect of this evidence. In providing evidence, interested Suppliers should respond in line with the Duty of Care section in the Invitation to Tender (ITT).

Acceptance of responsibility must be supported with evidence of capability (no more than 2 A4 pages and DFID reserves the right to clarify any aspect of this evidence. In providing evidence Tenderers should consider the following questions:

- a) Have you completed an initial assessment of potential risks that demonstrates your knowledge and understanding, and are you satisfied that you understand the risk management implications (not solely relying on information provided by DFID)?
- b) Have you prepared an outline plan that you consider appropriate to manage these risks at this stage (or will you do so if you are awarded the contract) and are you confident/comfortable that you can implement this effectively?
- c) Have you ensured or will you ensure that your staff are appropriately trained (including specialist training where required) before they are deployed and will you ensure that on-going training is provided where necessary?
- d) Have you an appropriate mechanism in place to monitor risk on a live / on-going basis (or will you put one in place if you are awarded the contract)?
- e) Have you ensured or will you ensure that your staff are provided with and have access to suitable equipment and will you ensure that this is reviewed and provided on an on-going basis?
- f) Have you appropriate systems in place to manage an emergency / incident if one arises?

Annex 1: Risk assessment

Country	Security Category	Violent Crime and Civil Disorder	Terrorism
Afghanistan	5	4	5
Bangladesh	3	3	3
Burma	2	2	1
Cambodia	2	2	2
DR Congo	4	5	2
China	2	2	1
Egypt	4	3	4
Ethiopia	3	2	3
Ghana	3	3	1
India	2	2	3
Indonesia	3	3	3
Iraq	5	5	5
Jordan	4	2	4
Kenya	5	5	4
Lebanon	4	3	4
Lesotho	2	2	1
Liberia	4	4	2
Libya	4	3	4
Malawi	3	3	2
Morocco	3	2	3
Mozambique	3	3	2
Nepal	2	2	1
Nigeria	4	4	4
Pakistan	5	3	5
Palestine	3	3	4
Rwanda	2	2	3
Sierra Leone	3	3	2
South Sudan	4	4	4
Somalia	5	4	5
South Africa	4	4	2
Sudan	4	3	4
Syria	4	3	4
Tanzania	3	4	3
Tunisia	3	3	3
Uganda	3	3	3
Yemen	4	3	5
Zambia	2	3	1
Zimbabwe	3	3	1

Annex 2: Acronyms

ASARECA	Association for strengthening Agricultural Research in Eastern and Central Africa
AU	African Union
BBSRC	Biotechnology and Biological Sciences Research Council
BRIC	Brazil, Russia, India, China
CAADP	Comprehensive African Agricultural Development Programme
CAAS	Chinese Academy of Agriculture Science
CORAF/WECARD	West and Central African Council for Agricultural Research and Development
Defra	Department for Environment, Food and Rural Affairs
DFID	Department for International Development
ECOWAS	Economic Community of West African States
FARA	Forum for Agricultural Research in Africa
JeS	Joint Electronic Submission System
MoA	Ministry of Agriculture
MOFCOM	Chinese Ministry of Commerce
MoU	Memorandum of Understanding
RCUK	Research Councils UK
SADC	Southern African Development Community