

## **Rising Powers in African agriculture: Are China and Brazil bringing new paradigms to agricultural development cooperation?**

### **Introduction**

The growing visibility of the “Rising Powers” in international development cooperation has led to claims that they represent a “challenge to the development paradigm” (Six 2009). These countries’ own statements emphasise the distinctiveness of the horizontality, solidarity, mutual learning and potential for “win-win” partnerships of their development cooperation. They suggest the emergence of a new paradigm, with major implications for traditional aid donors such as the UK.<sup>1</sup> Yet beyond the political rhetoric, it is far from clear whether such a new paradigm is indeed emerging, and if so what it comprises. The shifts in geopolitical and economic power associated with the rise of the BRICS<sup>2</sup> countries, the “paradigm shifts” in their domestic development models (Chibba 2011), the associated shifts in discourses on the nature of international development cooperation and the specific implications for the landscape of “Aidland” (Mosse 2011) are undoubtedly significant. At the macro level, these shifts have increasingly attracted the interest of both policymakers (e.g. Manning 2006, DFID 2011) and researchers (e.g. Arrighi 2005, Humphrey & Messner 2006, Hurrell 2006, Kragelund 2011, Mawdsley 2011). However, to date very little research has explored the links and disconnects between discourses, policies and practices in the actual development cooperation activities of the Rising Powers as they take shape on the ground. There is therefore a critical gap in the evidence required to assess the nature, extent and implications of any emerging “new paradigm” for international development cooperation.

This proposal sets out to address this gap through a focus on the engagements of two of the key Rising Powers, China and Brazil, with one particular continent, Africa, and in a specific sector, agriculture. The focus on China and Brazil reflects the fact that they have emerged as the most influential of the non-traditional donors. The focus on Africa reflects the continent’s pre-eminence as a site of external development intervention, both for established donor countries like the UK whose relationships with the continent are often shaped by legacies of colonialism, and for Rising Powers invoking the legacies of ex- or anti-colonial solidarity, whether International Socialist or Non-Aligned.<sup>3</sup> The focus on agriculture reflects the sector’s symbolic importance for development interventions in the African continent, as well as the sheer volume of international development cooperation resources that it absorbs; and its material importance for millions of African lives and livelihoods as well as the economic significance of current and potential African agricultural exports both for Rising Powers such as China and for European countries such as the UK.<sup>4</sup>

The future of agricultural development cooperation in sub-Saharan Africa is a key issue for the UK, given the importance of agriculture in British aid commitments, the place of aid in the country’s strategy for maintaining global influence as well as delivering global public goods in an interdependent world, and the fact that – along with other established donor countries – the UK shares with the Rising Powers a perception that Africa is an important source of primary resources and growing markets.<sup>5</sup> Following through on the UK government’s new emphasis on engaging with the Rising Powers and its increasingly explicit linking of foreign policy, development and commercial interests in Africa will require a better understanding of the changing aid architecture and the deeper shifts that underlie it.<sup>6</sup>

The fact that China and Brazil are becoming increasingly important players in this field means that aid flows are no longer solely mediated by the institutions of the international agricultural research system (via the Consultative Group for International Agricultural Research and its centres) or technical assistance programmes from countries that are members of the OECD’s Development Assistance Committee (DAC). In the longer term, these new players may reshape the way agricultural development is thought about, financed and implemented across Africa. The outcome of this process will have important implications for the aid programmes of the UK and its OECD partners, as well as others, such as philanthropic organisations (e.g. Gates Foundation) and international NGOs (e.g. Oxfam, Care) with substantial agricultural investments. This in turn has wider implications for the future shape of African agriculture and of the global development cooperation architecture – and for the UK’s role within both.

This research will examine these new relationships in African agriculture, asking what is happening, where and how, and with what wider implications. Responding to issues raised by all themes of the call,<sup>7</sup> the research will examine the links and disjunctures among: (i) discourses at the global level; (ii) the political economy of national-level policy processes within the Rising Powers’ domestic realms and at their interface with beneficiary country institutions; and (iii) the micro-level interactions that emerge around specific development cooperation projects implemented in beneficiary countries.

Given the centrality of culture, history, knowledge and experience to these development cooperation interactions, we conceptualise them as “knowledge encounters”, shaped by cultural frameworks and imaginaries, as well as technical understandings and political and economic interests. Our conceptual framework (see below) therefore articulates underlying ideologies and discursive models of development and agriculture with the broad approaches and styles of technical and scientific cooperation adopted by Chinese and Brazilian actors, and the specific practices at the interface between them and African actors and realities. While the core of the research will be an examination of Chinese and Brazilian official or officially-sponsored technical assistance activities that fit the conventional definition of “aid”, it will also explore trade initiatives and commercial investments that are linked to these activities, as the Rising Powers themselves often refuse to recognise strict dividing lines between aid and commerce (Humphrey 2010; Mawdsley 2011). This will allow a more complete analysis of the different actors and interests involved in Chinese and Brazilian development cooperation engagements with African agriculture.

### **Development cooperation relationships in agriculture in Africa: new knowledge encounters**

In the last five years, and particularly since the launch of the G8 L'Aquila Food Security Initiative of 2009, agriculture has risen up the aid agenda and aid flows to the sector are growing quickly. It is a top priority for research funding by the UK's Department for International Development (DFID), and has been highlighted by the World Bank, the UN FAO, USAID, the DAC and NGOs such as Oxfam, among many others, in recent years as a key area for investment, and one that had been neglected.<sup>8</sup>

Investments in food and agriculture in Africa, due to historically high commodity prices compounded by global shortages of land and water, are seen as a high priority by national governments and private companies alike, driving a particular style of agricultural development (Borras et al. 2011; Hall 2011). In this regard, the larger debate about ‘land investments’ or ‘grabs’ in Africa is clearly pertinent (Deininger et al 2011; Hall 2011), as well as the more technical discussions about what suitable forms of agriculture should exist in supposedly under-developed areas such as the ‘Guinea savannah’ (Binswanger et al 2009; Scoones 2010).

Brazil and China also see agriculture as a core priority for their investments (see below), but from very different angles. The two countries often focus on particular themes, such as large-scale mechanised agriculture for Brazil or smallholder-based production for China, although their programmes are increasingly diverse. Both are expanding bilateral aid programmes, including technical cooperation and support through university, research institute and other linkages, as well as direct investments from the private sector (often backed with state financing). While styles of support from many OECD countries can be traced back to the colonial era, with often continuous support to particular institutions through policy advice, technical support and training over many years, the encounters between African institutions and Brazilian and Chinese expertise are relatively new. Today an African country's research or extension system, for example, may be receiving multiple sources of advice and support, with diverse training efforts, underpinned by very different visions of what agriculture is and what it should be for. A focus on “knowledge encounters” will provide important insights into the contrasting framings of development cooperation, and their underlying politics. Comparing Brazilian and Chinese cooperation with the traditional support from OECD countries (and especially the UK) will help to build a more thorough understanding of these new aid-technical assistance relationships, and the potential synergies, as well as conflicts and tensions, with existing aid programmes.

Through a series of phases, the study will ask:

1. What Brazilian and Chinese investments are occurring in agricultural production in Africa? What scale are these? Are these public (aid), private or mixed investments? Are they focused on technical assistance, training, technology transfer, infrastructure development or value chain enhancement? How do patterns of Brazilian and Chinese investments in the case study countries compare/contrast with those of established donor countries, and particularly those programmes in which the UK has an important stake?
2. For Brazil and China, is there a single coherent model underpinning technical cooperation in agriculture, framed by a particular vision of development, or is the reality a more nuanced picture in which various discourses and internal policy disputes are being exported to Africa in the shape of multiple models promoted by different constellations of actors? What are the explicit and implicit rationales for the model(s) that underpin technical cooperation in agriculture, the drivers of these model(s) and the relationships that are being forged in Brazil/China and in recipient countries? What narratives are being deployed to justify interventions and by whom? What underlying patterns of geo-political and economic interests are at play and how do they converge or conflict with individual and institutional ideologies, interests and incentives?

3. For each of the project-level cases, what are the visions of African agriculture being developed? How is investment/aid understood by the Chinese/Brazilian and African actors involved? What comparative advantages are envisaged, how are these interventions articulated with others, and what is the overall administrative and governance system? What 'social imaginaries', rooted in particular historical/cultural contexts, underlie these interventions? To what extent do these undergo processes of revision or mutation as the interventions progress? Who are the actors and networks involved in each project, how is the engagement structured and with whom, what confusions, dissonances and disputes arise in the process, and how does this shape the outcomes of the intervention?
4. Through cross-country comparative analysis, to what extent do the cases provide evidence for the emergence of a "new paradigm" in development cooperation? What implications does this have for 'conventional' aid donors and technical support agencies?

The research will draw on a conceptual framework for understanding policy processes (Keeley and Scoones 2003) which analyses the intersections of discourses/narratives, actors/stakeholders and politics/interests in development encounters, and has in turn influenced recent developments in political economy analysis that examine the role of discursive framings of policy issues alongside stakeholder interests (Tanner and Allouche 2011). In exploring development policy discourses, we will examine how 'social imaginaries' (Shankland and Constantine 2011; cf. Taylor 2004) of agricultural development and of Africa are articulated in Brazil and China and are in turn mutually (re)constructed in specific African settings in the playing out of projects, as performative and power-laden spaces (Mosse 2004). As science studies tells us, socio-technical interventions are always shaped by the knowledge politics embedded in their creation (MacKenzie and Wajcman 1999), and these processes are always deeply imbued with social and cultural meanings (cf. Wynne, 1996; Leach et al 2005). In linking the global, national and project levels of analysis, the framework will therefore build on perspectives from the anthropology/sociology of development, exploring project 'encounters' or 'interfaces' (cf. Long and Long 1992), as well as the ethnography of aid (Mosse 2011; Grillo & Stirrat 1997, Crewe & Harrison 1998; Gardner & Lewis 1996).

Research methods will be largely qualitative, involving detailed interviews with key stakeholders, ethnographic participant observation of project interactions and review of policy and other documents. Interview transcripts will be recorded (with anonymity assured), while discourse and narrative analysis will be used to explore documents. Tracing of actor networks will use a qualitative mapping approach.<sup>9</sup> Mapping of project interventions will involve entry into a simple database of both descriptive information (including quantitative data on funding volumes, etc. where available) and GPS coordinates to link to a GoogleEarth API map. Project data management protocols (see plan) will allow coordination of data across sites, and the development of a comparative dataset at the country level that can serve as a sampling frame for identifying project-level interventions for the case study phase.

In addition to work in China and Brazil, the research will be carried out in Ethiopia, Ghana, Mozambique and Zimbabwe. These countries were chosen to offer both a broad geographical range across sub-Saharan Africa and a range of different agricultural development approaches. Crucially, they also have both on-going investments from Brazil and China in the agricultural sector and a history of significant UK involvement in agricultural development cooperation. Each country also has distinctive elements in its relationships with Brazil and China, as well as the UK. A common language, for example, binds Brazil and Mozambique, which is an important player in the Lusophone group of recipient countries. A close link between Brazil and Ghana has also been struck linked to Brazil's interest in West Africa and the supposed parallels between the Guinea Savannah region and the Brazilian *Cerrado*.<sup>10</sup> Longer-term relationships with liberation movements, and with post-Independence parties linked to such movements, exist between China and Mozambique (Frelimo), Zimbabwe (ZANU-PF) and Ethiopia (EPRDF). And of course the UK has colonial ties with Ghana and Zimbabwe, and both Ghana and Mozambique are members of the Commonwealth (as was formerly the case for Zimbabwe). Ethiopia is currently the UK's largest aid recipient in Africa, by some margin, as well as the largest recipient of investment from China, which is already Ethiopia's largest trading partner. Thus in each instance a different history informs the interaction between Africa, Brazil, China and the UK, resulting, we hypothesise, not only in a different configuration of actors and interests but also in a different knowledge dynamic at the heart of the development cooperation relationship.

### **China and Brazil in African agriculture**

**China's** achievements in agricultural growth, food security and rural development have drawn enormous attention in recent years. Debate has focused on the challenge for China of feeding 20 per cent of

the world's population with only 8 per cent of the world's arable land, and on the implications of China's response to this challenge for African countries, China and the traditional donors. Although China already has a long history of development cooperation with Africa (Strauss 2009), this debate is structuring new, closer relationships between Chinese and African experts and politicians, exemplified in the High Level Africa China Poverty Reduction conference in Addis Ababa and the China-Africa fora in Beijing and in Egypt (Ademola, Bankole and Adewuyi 2009; Brautigam 2010; Gu 2009; Li Xiaoyun 2010; Qi Gubo 2010). Central to this dialogue is the Chinese experience of radical poverty reduction in the last 20 years, connected to the reform of its agricultural sector, the freedom given to farmers to manage their farms as well as the liberalisation of markets for their products. A total of 8.35 million people in China were lifted out of poverty in the five years between 2000 and 2005, a reduction of around 6% per year (Li Anshan 2009; Ravallion and Chen 2007). The implications of Chinese lessons in poverty reduction for Africa have been identified as highly significant by African leaders themselves as well as by Chinese commentators (Liu Hongwu 2009).

China provides substantial technical agricultural assistance to African countries, and investment in agriculture and food production in Africa is seen as a major priority (Li Xiaoyun 2010). The US\$5bn China-Africa Development Fund sets agricultural investment as one of its top priorities. The FAO implemented a US\$30m Trust Fund set up by China supporting agricultural projects in Africa. There is also preferential market access to China for African produce. The 2006 Forum on China-Africa Cooperation saw the announcement of "eight steps" of assistance, including the deployment of 100 agricultural experts to Africa (including in Ethiopia, Ghana and Zimbabwe) and the establishment of 14 agricultural science centres (including in Mozambique, Ethiopia and Ghana). Training provision is a significant component of Chinese agricultural cooperation (Buckley 2011); to strengthen the "new-type Sino-African Strategic partnership", in 2009, Chinese premier Wen Jiabao announced measures including increasing the number of agricultural technology demonstration centres built by China in Africa to 20 and training 2000 agricultural technology personnel in order to strengthen Africa's capacity to ensure food security (FOCAC 2009). China's approach to agricultural development assistance is making a transition to a model that will be led by (public or private) enterprises and facilitated by the government through R&D and technological demonstration centres. China has pledged to help modernise the Mozambican agricultural sector and aims to increase rice production five-fold, from 100,000 to 500,000 tonnes a year (Africol 2009). Investments also include infrastructural development and support for marketing and trade.

With a booming economy underpinned by a highly successful export-oriented agribusiness sector and an ambitious diplomatic agenda, not least gaining a permanent seat at the UN Security Council (Amorim 2005), like China, **Brazil** is rapidly expanding its presence and recalibrating its position abroad. Africa is a growing destination for private investment and trade, an ally in southern diplomatic initiatives such as IBSA<sup>11</sup>, and a focus for Brazilian technical expertise and scientific knowledge. Long historical links and cultural affinities are important in these relationships, including but not limited to connections dating from the slave trade (Dávila 2010; de Alencastro 2007). Portuguese-speaking African countries<sup>12</sup> are amongst the top destinations of Brazilian investment in Africa and are also amongst the top ten recipients of Brazilian technical cooperation worldwide (Cabral and Weinstock 2010).<sup>13</sup> Brazilian development cooperation is often described as an instrument of foreign diplomacy (de Souza 2002, Vigevani and Cepaluni 2007), which, in a country that has rejected models of dominance based on military hegemony, has been strongly influenced by national commercial interests (Soares de Lima and Hirst 2006). Contributions to multilateral organisations apart,<sup>14</sup> Brazilian programmes consist mainly of in-kind technical and scientific cooperation (Cabral and Weinstock 2010). Agriculture is the single largest field of Brazilian technical and scientific cooperation in Africa; projects concentrate mostly on agricultural research, technology transfer and sustainable water and soil use (ABC 2009). Embrapa, the Brazilian Agricultural Research Corporation, is a public enterprise affiliated with the Ministry of Agriculture and the main Brazilian agency involved in cooperation in agriculture<sup>15</sup>, as well as seeking opportunities for Brazilian agribusinesses (Embrapa 2011). In addition to a rapidly-growing array of field stations and project bases, it has an "Embrapa Africa" office in Ghana intended to function as a hub for links across the continent. In Mozambique, for example, its ProSavana project aims to turn subsistence agriculture into a profitable export-oriented horticulture business (Embrapa 2010). Embrapa also hosts large numbers of African agricultural research and extension workers, including from Ethiopia and Zimbabwe, for study visits and training courses in Brazil. While Embrapa's capital-intensive agribusiness model seems dominant, other Brazilian actors are also becoming active. The Ministry of Agrarian Development (MDA), which promotes smallholder agriculture ("family farming") in Brazil, has established an international cooperation unit and recently announced the extension of its *Mais Alimentos* ("More Food") programme to

Africa, beginning with approximately US\$200 million worth of credit for Ghana and Zimbabwe to purchase equipment to support their “family farmers”.

Thus agricultural investments by Brazil and China are increasing significantly, potentially reshaping aid and investment relationships with Africa with diverse ramifications for UK trade, investment and foreign aid. Research in the proposed 4 countries in Africa provides an important comparative perspective on this rapidly unfolding process, allowing insights into both the policies and practices of new forms of cooperation.

## **Research plan**

The research will explore the 4 linked clusters of questions highlighted above across 4 overlapping phases. Throughout, as explained above, the focus will be on the contested knowledge politics of the development encounter, situating this within a broad understanding of the political economy of the new relationships being forged by the ‘Rising Powers’ of Brazil and China. This will be linked to the overarching question of the extent to which Chinese and Brazilian engagements with African agriculture provide evidence for the emergence of a “new paradigm” in international development cooperation.

In the **mapping phase**, we will develop a database (geo-referenced using the Google Earth API) based on a classification of aid/investment projects (to be developed via a scoping exercise and agreed at the initial workshop, and designed to cover the full range of activities from training centre construction and secondment of experts to investments in irrigation infrastructure), identifying the type of project, the funds involved (where available), the partnerships, and the stated objectives. This will be Africa-wide, and based on existing databases and reports. A further layer of detail will be developed for the four case study countries, including additional data collected in-country on Brazilian and Chinese projects alongside a complementary mapping of initiatives supported by established donor agencies. This will provide a sampling frame for identifying the in-depth project case studies. In parallel, a detailed examination will be undertaken of the framing of aid/investment relationships – and the associated social and cultural ‘imaginaries’ – through an examination of policy, contract and advisory documents, combined with interviews with key actors in Brazil, China and Africa. This will be complemented by a synthesis (based on a literature review) of the framing of initiatives supported by established donor agencies, to provide a basis for comparison.

In the **case study phase**, we will explore 4 projects in each of 4 African countries, sampling cases so as to get a range of intervention types and relationships (based on the classification developed in the mapping phase). The research will take an ethnographic approach to the ‘knowledge encounters’ that take place on the ‘interfaces’ between Brazilian/Chinese models and African realities, contrasting these with more traditional modes of intervention based on OECD models, particularly those in which there has been significant UK engagement. A particular focus will be on the frames, perceptions and visions of the different participants, and the underlying politics of the ‘knowledge encounter’. A detailed ethnographic examination of the day-to-day encounters between Brazilian/Chinese experts and African counterparts will explore how different actors understand the process, and what disputes, adaptations and negotiations arise.

In the **comparative analysis phase**, the wider institutional and political implications of these emerging aid/investment relationships will be examined and the political economy of each intervention will be analysed in order to assess the extent to which it is shaped by the nature of Brazilian/Chinese technical cooperation policy as an elite project, driven by foreign diplomacy and the interests of globalising agribusiness or, conversely, how its implementation is shaped by the ideological positions and cultural norms of the scientists and technicians operating at the interface with African farming systems. Cross-case (N=16) and country (N=4) comparative analysis will examine the extent to which the cases have provided evidence for the emergence of a “new paradigm” for development cooperation.

In the **policy engagement phase**, which (as discussed in the Pathways to Impact document) in practice will operate from the outset, we will facilitate interactive sharing of the findings, but also an exploration of ways forward. What are the implications of this relationship for more broad based South-South Cooperation, and/or for integration of Brazilian and Chinese aid with existing global and regional efforts? Is there an advantage, from African governments’ standpoints, in having new relationships, separate from the particular framings and conditionalities of older aid partners? And what forms of (geo-) political interest will guide these relationships into the future (under the G20, BRICS and other frameworks)? What implications do these new relationships have for UK policy (within development assistance, trade/investment and foreign policy), and the UK’s links with international efforts such as the DAC and the CGIAR?

## Project management, research team and partnerships

The research will be hosted by the Institute of Development Studies (IDS) and in particular the Future Agricultures Consortium (FAC), a growing network of African and UK research institutions, with the latter including the Overseas Development Institute (ODI) and International Institute for Environment and Development (IIED) as well as IDS (see [www.future-agricultures.org](http://www.future-agricultures.org)). FAC is active in 13 different African countries and involves over 70 researchers. Its aim is to promote dialogue on the future of African agricultural policy. The Consortium is coordinated by IDS, and Ian Scoones is the joint convenor. Professor Scoones will provide a management and coordinating role for this project, as well as some fieldwork inputs into the Zimbabwe study. Three interacting teams will be formed for this project. The **Africa team** will include partners from the Future Agricultures Consortium (Dawit Alemu Bimirew, socio-economist from the Ethiopian Agricultural Research Institute, Addis; Kojo Amanor, anthropologist from the University of Ghana at Legon; Douglas Magunda, development studies expert from the Research for Development Trust in Zimbabwe, currently with the Harare regional office of the UN Food and Agriculture Organisation and Sérgio Chichava, political scientist from IESE in Maputo, Mozambique). The **Brazil team** will include Alex Shankland (anthropologist, IDS), Lidia Cabral (economist, ODI), Alcides Costa Vaz (international relations specialist from the University of Brasilia's Department of Politics and International Relations) and Arilson Favareto (rural development specialist from the Brazilian Centre for Analysis and Planning in São Paulo). The **China team** will include Jing Gu (economist, IDS), Lila Buckley (anthropologist, IIED) and Li Xiaoyun (agronomist and agricultural policy analyst from the Chinese Agricultural University, who has been active in the formulation of Chinese policy engagement in agriculture in Africa and is Director of the China-DAC study group). In addition to Research Assistant support for literature review and database construction during the mapping phase, towards the end of Year 1 two Post-Doctoral Fellows will be recruited to work with the Brazil and China teams in synthesising the findings of the mapping phase, and following up with ethnographic research carried out alongside African colleagues in the case study phase. These teams draw on considerable research and policy experience in China/Brazil as well as in Africa, and bring together cross-disciplinary inputs, as well as language competencies (Portuguese, Mandarin, local African languages). Communications and policy engagement capacity will be supported by the IDS Communications team and the FAC Communications and Networking Officer. Overall the team is truly cross-disciplinary, and the research process will result in mutual capacity strengthening in interdisciplinary research and analysis, allowing exchange between UK, Brazilian, Chinese and African researchers and policymakers. In particular, the inclusion of the Post-Doctoral Fellows is designed to enhance the project's capacity development impact, building on the highly successful experience of the FAC Early Career Fellowships programme.

A Reference Group will be formed to provide advice on research focus and policy uptake, as well as reviewing research outputs and participating in project events. This will include key actors from Brazil (Embrapa, MDA), China (FOCAC Secretariat), the UK (DFID), the international agricultural research and development system (CGIAR), the African Union's CAADP, as well as academic researchers engaged in research on China/Brazil in Africa. As discussed in our submission on 'pathways to impact', fruitful discussions have already taken place with DFID, the CGIAR, Embrapa, the Chinese Agricultural University and senior representatives of the Ethiopian and Zimbabwean governments with mandates in this area, which demonstrate a strong demand for this work, and an interest in being involved in it as it unfolds.

Annex 1 presents a detailed project timeline, while Annex 2 lists all proposed outputs. An inception workshop will define methodologies, a data management plan and an impact and engagement strategy, as well as convene the Reference Group for the first time. Workshops in each country will engage policymakers and a final conference will involve key stakeholders from Brazil, China and African countries (including the African Union, CAADP), as well as the CGIAR, the OECD DAC and other technical agricultural donors (DFID, USAID, JICA etc.). A specific strand of engagement will include the on-going discussions on the role of BRICS countries in aid relationships which will be a key feature of both the UK and Russian presidencies of the G8 in 2013 and 2014 (see section on Pathways to Impact).