

Chinese agriculture goes global: food security for all?

China's agricultural aid, trade and investments around the world are increasing. This trend is well documented, yet its nature and significance is hotly debated. Media reports cast China as a leader in the 'global land grab' and Chinese engagements with Africa have drawn particular, but often inaccurate, media criticism. This policy brief puts some of the 'myths' into perspective, considers the implications of Chinese agricultural engagements for OECD-style development work (especially work on food security), and argues that better understanding could help both Chinese and other development actors support more environmentally sustainable and equitable development outcomes; and help national governments develop their own policies for Chinese involvement in agricultural development and food security.

Policy pointers

■ Conflated reports of Chinese

'land grabbing' mask the diversity of Chinese agricultural engagements, saying little about why they happen, or what policy responses could ensure more environmental and developmental benefits.

■ Chinese agriculture

engagements are redefining the landscape of 'aid' from development assistance to a paradigm of development cooperation mixed with development investment.

■ China's agricultural

cooperation is guided by a strong belief in technocratic modernisation and optimism about global agriculture's potential to provide food security for the world.

■ Development actors must

understand and engage with Chinese visions if they are to ensure local food security, environmental sustainability and inclusive agrarian development.

Grabbing Africa?

Global agribusiness is keen to invest in developing-country farmland, bombarding investment offices in Africa, Asia and Latin America with requests for land. China's alleged leadership in the 'global land grab' — the rush for land leases in poorer countries for export-oriented production and profit — has attracted much concern, particularly over Africa.

China's engagement with Africa is often portrayed as threatening development, attempting to oust both Western and African control over land and politics, and as an exploitative grab to ensure its own food security. Media reports variously accuse China of "secretly working to turn the entire continent into a new colony",¹ engaging in an "unchecked 'land grab' not seen since the 19th century",² and a "global shopping spree" in which its "voracious commodity appetite is unlikely to abate."³

But rigorous fact checking repeatedly finds much smaller land investments than claimed, with most food crop production not exported.⁴ Researchers at the International Institute for Sustainable Development (IISD) recently verified only 54 Chinese agricultural projects covering 4.9 million hectares of land worldwide, from reports of 86 large agriculture projects covering 9 million hectares (ha).⁵ Of those 54 projects worldwide, only 32 (covering

1.4 million ha) are operational and only 463,792 ha (nine per cent) are in Africa⁵ (Figure 1).

The study listed three Chinese investments in Africa that reach 100,000 ha. But one of these — for biofuels in the Democratic Republic of Congo — is on hold; another for maize and sorghum in Zimbabwe is not yet operational; and the third — for hybrid rice and wheat in Mali — is actually a Libyan investment employing Chinese workers and production technologies.

The next largest investment, 60,000 hectares of export-oriented sesame production in Senegal, is an outgrower scheme offering farmers' groups Chinese seeds and fertilisers, while the Senegal government offers training, technical guidance and credit guarantees. In its first year (2009), the scheme engaged 200,000 smallholder farmers over 35,000 hectares of land. It aims for 60,000 hectares by 2013, but ongoing difficulties suggest it may not reach this target.⁶

Only three other Chinese agriculture investments in Africa break 20,000 ha. These are in Ethiopia, Madagascar and Mali, growing sugarcane and biofuels for local and export markets, including regional and EU markets. IIED research suggests the Ethiopian project (25,000 ha for export-oriented sugarcane) may have been cancelled.

Grabs elsewhere to feed China?

So is China ‘grabbing’ land elsewhere? The IISD calculations suggest Chinese agricultural investments across Asia, Central Asia, Latin America and the Caribbean total 4.9 million ha — less than some report, but still significant.

Globally, the IISD inventory lists five large projects (over 100,000 ha) in operation, including 530,000 ha of maize in the Philippines for local markets. The others are

oil palm in Indonesia for biofuel export, cooking oil biodiesel and soy lecithin in Brazil for local and export markets, rice and maize in the Philippines for both local and export markets, and a sugarcane and cassava outgrower scheme in Laos.

While large-scale investments do exist, the 4.9 million ha figure lumps private investments with government demonstration farms; food and non-food production; export-oriented with local-oriented production; and a variety of investment approaches including land leases, outgrower schemes, and even projects owned by third parties that employ Chinese (as in the Mali example).

Purely export-oriented leases for food crops — the root of popular concern — cover far smaller areas. Figure 2 compares IISD’s numbers for confirmed, operational and export-oriented engagements. Of 32 confirmed operational projects, only 15 target export markets (741,880 ha). Of those, only half (376,613 ha) export to China. They are the Senegal sesame outgrower scheme, two projects in Asia producing rubber; two in Russia producing rice, wheat, barley, soy and maize;

and two in Brazil producing soybeans and rice for animal feed, biodiesel and cooking oil. Thus, of the 54 ‘confirmed’ Chinese agriculture ‘investments’, only four appear to be operational commercial land leases focusing a portion of production on food crops for export to China.

Focusing on numbers and aggregate size masks the diversity of Chinese agricultural engagements, fosters misunderstanding and misses opportunities for environmental and developmental benefits. Journalists, researchers and policymakers must all move from questioning what ‘China’ is doing, to asking what different Chinese actors are doing. And rather than assuming motivations, we need to start actually asking what those motivations are.

Aid as development investment

China has had overseas agriculture aid and exchange programmes for over 40 years. At first they were largely to build ‘soft power’ and global recognition. China distinguished itself from colonial powers, asserting friendship and solidarity. In return, countries had to adhere to the ‘One China’ policy, recognising Taiwan as part of the People’s Republic of China. These relationships helped China secure a UN seat (and the One China policy still exists today).

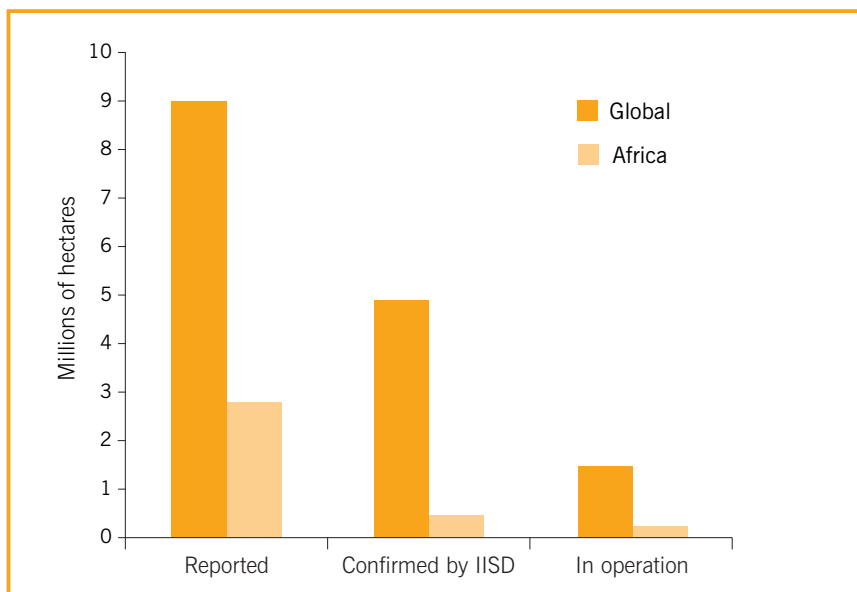
Since launching its ‘Go Out’ policy and joining the World Trade Organization in 2001, China has promoted itself as an active member of the global community, encouraging agricultural trade and overseas direct investments. Chinese leaders still see the global community as unfairly dominated by a handful of countries. They frame their overseas agricultural engagement as ‘South-South’ collaboration to overcome persistent and unjust food insecurity and market instability in developing countries.⁷ A senior economist at China EximBank explained in an interview, “Traditional development actors are really out of touch.... So we decided to do something radically different and very quickly — to be a catalyst for changes and reforms... a paradigm revolution.”

China believes it is countering unfair trade regimes and low agricultural investment; and bettering the OECD’s conditional development aid through sharing China’s own development experience. Agriculture was central to China’s economic development. Technological improvements, a tradition of labour intensive farming guaranteeing high yield, a strong State with policy and financial management capacity, and a gradually strengthening market system boosted by foreign direct investment have all been important to Chinese agriculture.

Comparing agricultural development in China and Africa, researchers at the China Agriculture University argue that when copying China’s agriculture extension

Development actors must understand and engage with Chinese visions

Figure 1. Area covered by Chinese land investments in Africa and globally.⁵



model to Africa “it is clear that these institutions cannot survive through reliance on local government administrative capacity: these centres, managed by Chinese universities, agricultural academies and enterprises, will have to be managed as enterprises.”⁷ China sees its deliberate integration of agriculture aid, trade and investment as crucial to ensuring aid projects continue beyond grant funding. Although concerns about the social and environmental responsibility of this aid approach are legitimate, it is important to engage with this logic, rather than assume corporate involvement is necessarily purely motivated by profit.

In 2012, Chinese leaders set formal targets for Chinese agriculture engagement in Africa⁸ proposing cooperation “at multiple levels, through multiple channels and in various forms”. China’s current pledges to Africa are listed in Table 1. The aim is to improve production and strengthen Africa’s food security through technical exchanges, training, machinery and processing, and also “corporate cooperation” backed by Chinese financing. The focus is on development capacity, and on solving Africa’s food security through “fully explor[ing] and utiliz[ing] each other’s comparative advantages, expand[ing] mutually beneficial economic cooperation and balanced trade.”⁹

Food security for all?

Chinese leaders look at global food security challenges and the failings of global aid through the same lens. Though China has successfully fed more than 20 per cent of the world’s people with only nine per cent of global arable land, its leaders are not optimistic about its food security, foreseeing shrinking or deteriorating arable land resources, water shortages, frequent disasters and challenges from climate change that combine with population increases, shifting consumption patterns and rising demand for feed grain and food processing inputs.

Even as it opens its markets and rapidly increases global agricultural trade and investments, China has been strengthening its own food self-sufficiency policy. ‘China has remained mostly self-sufficient in basic food needs by boosting production. But in recent years, it has had to limit exports of staple grains such as rice, wheat and maize.

It is this double squeeze — from both domestic and global demand — that makes contributing to increasing global food production so attractive. Chinese policymakers think better food self-sufficiency will reduce others’ dependence on international agricultural markets, and thereby also ease China’s own situation.⁷

Observing the challenging domestic landscape, Chinese leaders see much potential for applying their proven agricultural science and technology inputs elsewhere. While changing consumption patterns and increasing

Figure 2. Area covered by Chinese land investments of confirmed, in operation, and export projects.⁵



Table 1. Formal agenda of China-Africa agriculture cooperation as stated in the Beijing Action Plan (2012–2015)⁸

Sections	Pledged actions by China
4.1.3	Support CAADP (Comprehensive Africa Agriculture Development Programme) for a ‘growth-oriented’ agricultural agenda for Africa
4.1.4	Send teams to train African agricultural technicians
4.1.4	Support agricultural vocational education system and send teachers
4.1.4, 5.2.1	Build more agriculture demonstration centres
4.1.4	Provide technical support for grain planting, storage, processing and circulation
4.1.4, 4.5.6	Encourage Chinese financial institutions to support corporate cooperation in planting, processing, animal husbandry, fisheries and aquaculture
4.1.4	Support the UN Food and Agriculture Organization’s ‘Special Program for Food Security’
4.1.4, 4.1.6	Facilitate access for African agricultural products to the Chinese market
4.5.2	US\$ 20 billion credit line for infrastructure, agriculture, manufacturing and African small and medium enterprises.
6.3.6	Publish and translate agricultural technology materials; joint participation in book fairs in China and Africa

pressure on domestic resources are certainly guiding Chinese engagement in global agriculture, this reality does not automatically translate into Chinese firms buying land in other countries ‘to feed itself’.

Although China is importing increasing quantities of carefully selected agricultural goods (for example for animal feed, food processing and energy production), most investments in overseas staple grain crops have focused on local consumption or export to regional

markets. The aim is to maximise global production efficiency through Chinese agriculture methods — whether through direct land leases, outgrower schemes or technical training programmes.

Proactive engagement

Behind the push for Chinese investment in global agriculture is the assumption that food self-sufficiency is achievable everywhere; that primary gains are to be made in developing countries; and that Chinese actors should offer their experience. Understanding and engaging with these assumptions is important for three key reasons.

First, Chinese agriculture engagements are redefining the 'aid' landscape, moving from a paradigm of development assistance to one of development cooperation mixed with investment. Chinese researchers and policymakers acknowledge that using agribusiness investments as development aid comes with risks and uncertainties. Even though an enterprise approach can make agriculture projects more financially secure, integrating the non-profit and profit making functions remains a challenge.⁷ There is room for dialogue around this approach, and a need for tools enabling Chinese companies to share benefits with local communities.

Second, a more nuanced understanding of Chinese agriculture motivations overseas can build a more realistic understanding of the strengths and weaknesses of China's own agriculture models. Chinese companies may not be land grabbing, but they are influencing global agriculture in myriad ways. For example, Chinese agronomists are introducing new foods and new growing techniques through agriculture technology demonstration centres and through outgrowing schemes. Their focus on increasing production efficiency through technocratic

modernisation ignores the environmental costs of that production (which have been significant in China). More importantly, it ignores issues of power and distribution, equity and control of land use and food production. These issues — not absolute quantity of production — are at the heart of global food security challenges. Development professionals must engage critically with the Chinese agriculture development model if it is to contribute to equitable, sustainable land use globally.

Third, Chinese assumptions about achievable food self sufficiency in developing countries shape China's policy framework for global agriculture aid, trade and investments. Understanding the underlying motivations can spur local countries to develop their own vision for global food security and their place in it, and to determine how best to engage Chinese actors to achieve these goals. Whether or not global Chinese agriculture activities alleviate food security challenges, they are certain to alter production and consumption patterns of local farming communities around the world. Without constructive and active engagement, 'mutual-benefits' will likely remain confined to the Chinese and local elites — at the expense of the local environment and farming communities. Development actors (both local and global), researchers and NGOs all have a role to play in developing visions and policies for global food security and sustainable agrarian futures, and placing China's increasing global engagement within this framework.

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Notes

■ ¹ Malone, A. 18 July 2008. How China's taking over Africa, and why the West should be VERY worried. Daily Mail Online. www.dailymail.co.uk/news/article-1036105/How-Chinas-taking-Africa-West-VERY-worried.html. ■ ² Smith, D.3 July 2009. The food rush: rising demand in China and West spark African land grab. The Guardian Online. www.guardian.co.uk/environment/2009/jul/03/africa-land-grab ■ ³ Moyo, D. 2012. *Winner take all: China's race for resources*. Allen Lane, London. ■ ⁴ Deborah Bräutigam actively factchecks reports of Chinese engagements with Africa, and explains the Chinese policy framework governing them. For a history, see Bräutigam, D., Tang, X. 2009. China's engagement in African agriculture: "down to the countryside". *The China Quarterly*, 199, 689–706. For policy framework, see Bräutigam, D. 2011. Aid 'with Chinese characteristics': Chinese foreign aid and development finance meet the OECD-DAC aid regime. *Journal of International Development* 23 (5). See also: Cotula, L. *et al.* 2009. *Land grab or development opportunity? Agricultural investment and international land deals in Africa*. IIED, London; and Large, D., Alden, C. Oliveira, R.S.D. 2008. *China returns To Africa: A rising power and a continent embrace*. Hurst, London. ■ ⁵ Smaller, C. *et al.* 2012. *Farmland and water: China invests abroad*. IISD, Canada. See: www.iisd.org/publications/pub.aspx?id=1687 ■ ⁶ The author spoke with informants connected with the sesame outgrower scheme during fieldwork in Senegal in 2010. For a description of its challenges see: www.reuters.com/article/2009/02/11/ozatp-china-africa-agriculture-idAFJ0E51AOKJ20090211?sp=true. For further details on the arrangement (only available in Mandarin) see: www.ccpit-ccft.org/newsread.asp?id=313&type=3 ■ ⁷ Li, X. *et al.* 2012. *Agricultural development in China and Africa: A comparative analysis*. Routledge, Abingdon, UK. ■ ⁸ FOCAC. 2012. Beijing Action Plan (2013–2015) of the the fifth ministerial conference of the Forum on China-Africa Cooperation. Forum on China Africa Cooperation. See: www.focac.org/eng/zxxx/t954620.htm ■ ⁹ FMPRC. 2012. Beijing declaration of the fifth ministerial conference of the forum on China-Africa cooperation. Ministry of Foreign Affairs of the People's Republic of China. See: www.fmprc.gov.cn/eng/zxxx/t953958.htm.



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