THIS IS Africa

A GLOBAL PERSPECTIVE SPECIAL REPORT

JUNE 2013

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African agribusiness

A new growth story

COLLABORATION

Big business builds African supply chains

CERTIFICATION

Putting voluntary standards to the test

COMMENT

Starbucks, Massmart, Standard Bank and General Mills

Sara Clancy

Supporting agribusiness

In Africa, agribusiness – more than any other industry – has the potential to reduce poverty and drive economic growth. Agriculture accounts for nearly half of the continent's GDP, and employs 60 percent of the labour force. The World Bank estimates that by 2030, agriculture could develop into a $1trn industry in sub-Saharan Africa.

Yet, one in four people on the continent goes to bed hungry every night. Smallholder farmers still struggle to make ends meet, despite the productive potential of their land. Weather, pests and crop disease, and market failures make farming an inherently risky enterprise. Bountiful harvests are no guarantee for prosperity if a lack of storage forces farmers to sell when prices are lowest, or if inadequate infrastructure limits where they can sell their crops.

It is time for the international community to do more to help large and small farmers manage these risks and unlock the investment they need to sustain their livelihoods.

For IFC, a member of the World Bank Group, agriculture is a top priority. With $4bn in agribusiness investments worldwide, IFC believes that the private sector plays a crucial role in addressing agriculture's pressing challenges – such as climate change, resource efficiency and clean energy.

As supply chains become more global, companies and consumers are turning to international standards to manage quality as well as environmental and social risks. IFC's Sustainable Business Advisory team works with financial institutions, companies, governments, civil society and farmers themselves to promote practices that benefit local communities, protect the environment and catalyse economic growth. Along with our clients and partners, we are demonstrating how to connect African farmers to international markets.

Take coffee, for example. As one of the world's most heavily traded commodities, demand for high-quality, certified, organic coffee is rising. While certification will fetch higher prices, many farmers lack the wherewithal to attain rigorous international standards.

IFC and ECOM, the world's third largest coffee dealer, have found a solution. We set up farmer training centres for ECOM's subsidiaries in Kenya, Tanzania and Uganda, which offer guidance on agricultural best practices, finance and quality standards. These skills help the farmers get certified, which in turn leads to longer-term supply contracts with ECOM.

Along with training, investments in infrastructure — public and private — can fund the roads, rails, ports, and storage facilities that allow farmers to sell more and waste less. IFC's loan to the Kenya Tea Development Agency, for example, is funding the construction of a 200,000 square foot warehouse to store tea for the 562,000 farmers who are both the company's suppliers and shareholders. A modern warehouse enables the farmers to better conserve and trade their product, thus securing income.

Supporting Africa's smallholders requires working on both the local and international level. Technical and financial support from donors and governments goes a long way. The Global Agriculture and Food Security Programme (GAFSP), for example, is a multilateral fund to help the G20 deliver on its food security commitment and support agricultural development in the poorest countries. The GAFSP private sector window blends donor financing with commercial credit for small farmers.

This year, IFC and GAFSP lent Root Capital, a non-profit social investment fund, $10m. Root Capital's farmers are trusted suppliers to more than 120 international companies like General Mills and Whole Foods Market. The funding will support Root Capital's expansion in Africa and help it reach 300,000 more farmers over the next four years.

With access to the right means and knowledge, even the smallest farmers can move from subsistence farming and contribute to global food supply. Initiatives like ECOM and GAFSP show how we can secure a steady income for farmers while transforming food production. By building on these ideas, we can make major strides in feeding the hungry, and in our ultimate goal of eradicating poverty.

Sara Clancy is manager of IFC's Sustainable Business Advisory department in Africa

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Cover photo: Olam International

Trading fair

Voluntary certification schemes have faced criticism in the past, but a growing body of evidence points to positive impacts

BY ELEANOR WHITEHEAD

Historically, many of the farm labourers working in vineyards in the Du Toitskloof region of South Africa's Western Cape did not receive a regular income. But since 2005, workers employed by over 20 producers in the region receive a guaranteed base price of R590 ($63) for a ton of wine grapes. They have Fairtrade, a voluntary certification scheme which is fast becoming a household brand, to thank.

Fairtrade and other third party standards work on a simple premise: a product receives a stamp once its producers have met various economic, social and environmental criteria aimed to create sustainable livelihoods. Ethically-conscious supermarket shoppers pay a premium to purchase labelled goods, satisfied that their cash is contributing to a good cause. "The differentiation schemes provide one tool – that of the market. They enable consumers to participate in securing sustainability, environmental protection or social development objectives through their purchasing decisions," explains Roger Waite, a spokesperson for the European Commission.

The labourers in South Africa are part of the Du Toitskloof Multi-Estate Co-operative, and shareholders in Fairtrade's Fairhills project – a joint venture with Origin Wine. One of Fairtrade's largest global projects, Fairhills wines are stocked by the likes of Morrisons, the Co-Operative, Tesco, Waitrose and Sainsbury.

Since its inception eight years ago, Fairhills has invested $1.8m of the Fairtrade premium in services for workers, their families and the local community. Today, three brightly-painted crèches provide daycare for over 200 children who would have previously been taken into the vineyards with their parents. Down the road, a primary school equipped with state-of-the-art computer facilities is educating children up to Grade Four, and creating new teaching jobs along the way.

Those investments have had a consolidating effect, drawing supplementary cash from supermarkets including Morrisons and the Co-Op. "A lot of the buyers find it easier and more effective to support projects that are already up and running, which they can tell are working efficiently, rather than try to build CSR programmes from scratch," says Lise Ewins, brand manager at Origin Wine. Next to the school, a new healthcare centre – funded by Morrisons – will service both workers and the local community.

With hundreds of children now in school and healthcare services arriving, Fairhills is a good case study on the impacts of voluntary certification. Fairtrade can cite dozens of others. Take Kenya, it says, where tea farmers have used their premium to build packaging facilities which add value to their business. Or elsewhere on the continent, where coffee producers have developed labs to test the quality of their beans, thus guaranteeing the right price for their produce.

The problem is that best-performer anecdotes like these say little about the wider impacts of the standard. The majority of international certification schemes – Fairtrade or otherwise – recognise these shortcomings, but have lacked the resources to track developments on a sector- or country-wide basis. With today's certification industry comprising over 420 different schemes and worth billions of dollars, the lack of serious data has become a concern.

"There is very little effective, empirical data related to voluntary standards, so what's right and wrong is up in the air," says Daniele Giovannucci, president of the Committee on Sustainability Assessment. "If this problem of sustainability is as serious as we say it is – and it is – why are we not taking a practical, business-like approach to measuring performance? We need to know if we are getting a return on investment or not. The absence of such good data is appalling."

Positive signals

That is beginning to change, though. The Cosa, a non-profit consortium dedicated to filling this knowledge gap, has spent the last three years gathering data on voluntary schemes - and the findings are proving sceptics wrong.

"On the whole, across countries and certifications, we do see that on critical indicators the performance of accredited producers improves relative to non-certified producers," Mr Giovannucci says.

"The level of training that certified farmers receive is substantially greater than the level provided under conventional public systems, and that is often a precursor to building farm capacity. The levels of environmental management tend to be significantly better. Income tends to increase too. Are the effects always positive? Absolutely not.

"The differentiation schemes provide one tool – that of the market. They enable consumers to participate in securing sustainability, environmental protection or social development objectives through their purchasing decisions"
Roger Waite

But on average we are seeing that they are having a benefit."

Sara Clancy, manager of the International Finance Corporation's Sustainable Business Advisory programme in Africa, agrees: "Voluntary standards have been key in improving the social and environmental conditions of many workers and smallholders around the world. Many have given smallholders access to international markets and enabled them to partake in the benefits of trade. Many standards have helped increase the health and safety of workers, improve productivity and improve livelihoods."

In Côte d'Ivoire, the Cosa finds farm incomes and productivity amongst Rainforest Alliance-certified farmers to be higher than their non-certified peers. In 2011, certified farms produced 576kg of cocoa per hectare, compared with 334kg on non-certified farms – and with the same input costs. That, Rainforest Alliance says, is likely due to efficiency gains gleaned from farmer training. Thanks to higher productivity, the certified farmers' net incomes are also four times higher: $403 per hectare versus $113 on non-certified farms. And the producers are investing in their businesses, too: almost two thirds of certified farmers re-planted or renewed their cocoa farms in 2011, versus 27 percent on non-certified farms.

In Tanzania, the results of Rainforest Alliance certification are also "motivating", a separate Cosa report says. "Certified coffee producers in Tanzania tend to have higher levels of net incomes due in part to better productivity and cost-management," it states.

Unsurprisingly success rates vary from country to country, with different certifications exposed to huge disparities in performance. Take the Organic standard. In Costa Rica, Organic-certified coffee farmers are earning 9 percent less than conventional producers. Nearby in Colombia, though, their net incomes are 35 percent higher, while in Tanzania Organic farmers take home 43 percent more than their non-certified peers.

Measuring the cost of those gains is harder. At Fairhills in South Africa, Ms Ewins says that Origin Wine had to make big investments to help their farmers reach the criteria for accreditation. "The outlay is huge, particularly in terms of housing criteria and making sure the farmers' houses are meeting standards," she explains. Origin Wine "probably won't make back that investment, but it's worth it to help reach those basic standards and to get these benefits."

"What we cannot say yet is

whether this can stand alone as a system in terms of cost-to-benefit ratio, because there is a lot of money that we cannot account for coming from donors and the private sector," the Cosa's Mr Giovannucci says.

"The outcomes of voluntary sustainability standards are positive, but would the net return be a negative one economically? We don't know yet."

Left out

Success rates look good for those within the system, but there are still debates over the distribution of gains for certification. "The big problem with these certification schemes is that they tend to direct money to farmers who are not the poorest in the world, so consumers who think they are doing good for the poorest may end up actually diverting money to people who are relatively better off," argues Sam Bowman, research director at the Adam Smith Institute.

James Mwai, acting executive director of Fairtrade Africa takes a hard-line response, arguing that the smallest-scale farmers are not capable of servicing global supply chains without upgrades anyway. "You have to be pragmatic about this. If you are going to supply an international supply chain you need to have a certain competence – so the poorest of the poor simply have to go through a series of steps to get to a point where they can meet those standards," he says.

Edward Millard, the Rainforest Alliance's senior manager for sustainable landscapes, agrees: "It's about improving farmer conditions and to do that you must go through a cycle of investment and return. The investments aren't all major, but farmers are required to change a bit in their attitude and approaches," he says. Rainforest Alliance does not set a minimum price, but its products do attract a premium. "Premiums are pretty level between all of the schemes so the farmer gets payback there, and then over the long-term he gets payback on farm performance," he argues.

Fairtrade's Mr Mwai notes that the emergence of markets for sustainable products in Africa – notably South Africa and Kenya – will help more farmers receive certifications. Sales of Fairtrade products in South Africa increased 220 percent between 2011 and 2010, albeit from a low base, to R234m ($25m). "The advantage is that some of the costs that are related to being able to meet export global standards can be less stringent, reflecting the African situation: so we are opening up the space for more African producers to be able to engage," he says.

GROWTH RATES

$60 billion

Global sales of Organic-certified products in 2011

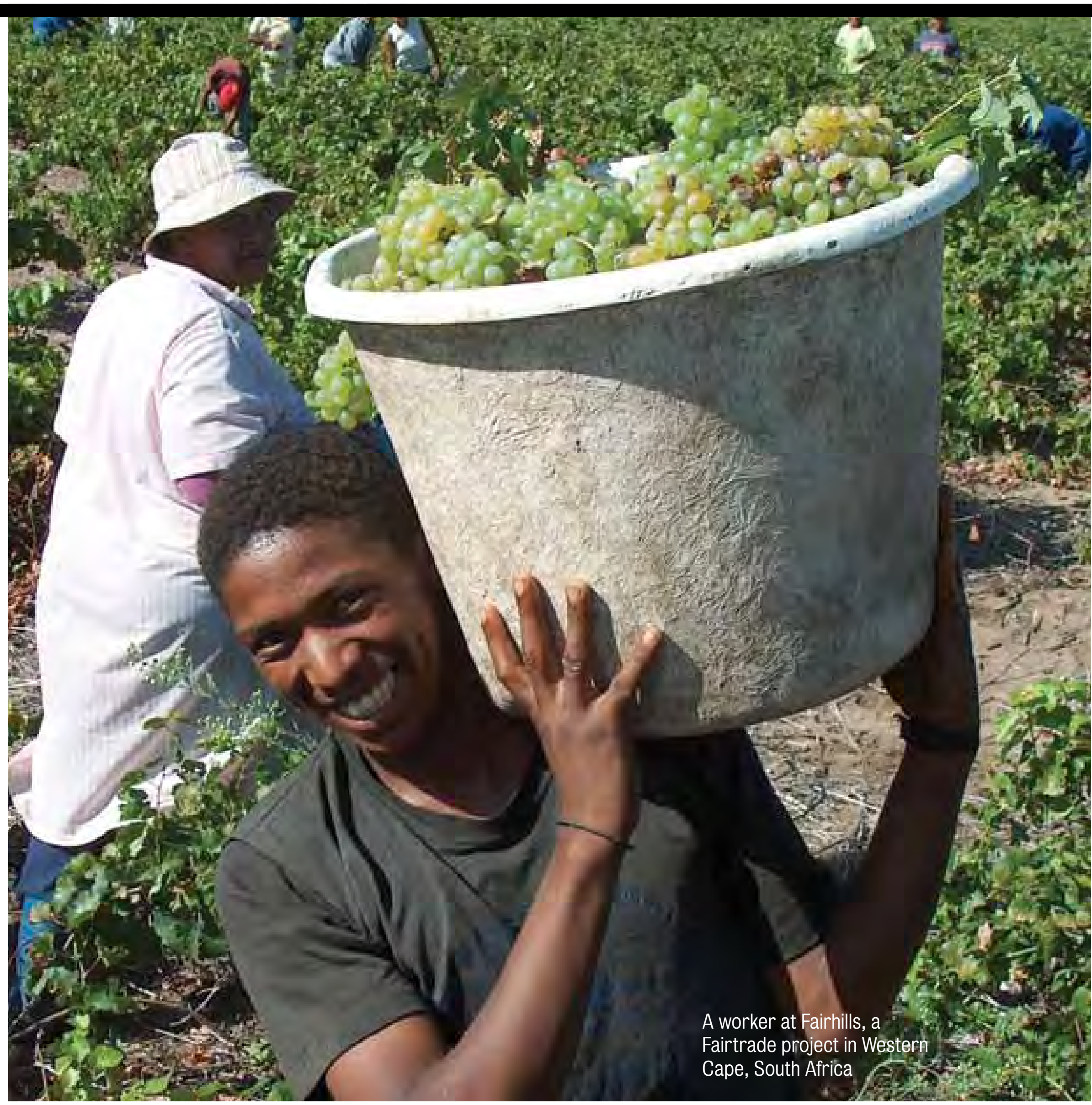
204%

Increase in Rainforest Alliance-certified farmers in 2012, to 770,000

22%

Of global tea exports will be certified by 2015, versus 1 percent in 2007

Source: The Committee on Sustainability Assesment, Rainforest Alliance, The Dutch Sustainable Trade Initiative



A worker at Fairhills, a Fairtrade project in Western Cape, South Africa

PHOTO: FAIRHILLS

Private funding

There are other ways to reduce the cost of certification, but if poorer farmers are to be brought on board then private capital is required – and to this end, more investment is forthcoming than before.

Take Fairhills, where buyers including Morrisons and the Co-Op have invested to help farmers get accredited. They are not alone. Unilever partnered with Rainforest Alliance back in 2007, training and investing in its farmers to increase their productivity. Since then, competitors such as Tata, Tetley and Twinings have followed suit and now purchase certified tea. In fact, the Dutch Sustainable Trade Initiative expects that 22 percent of global tea exports will be certified by 2015, versus just 1 percent in 2007.

In the cocoa sector, Mars announced in 2009 that it would source 100 percent certified cocoa by 2020. Cadbury made their iconic Dairy Milk bar Fairtrade the same year, and Nestlé, the world's largest food company by revenues, soon followed suit, also doubling its commitment to the label last year.

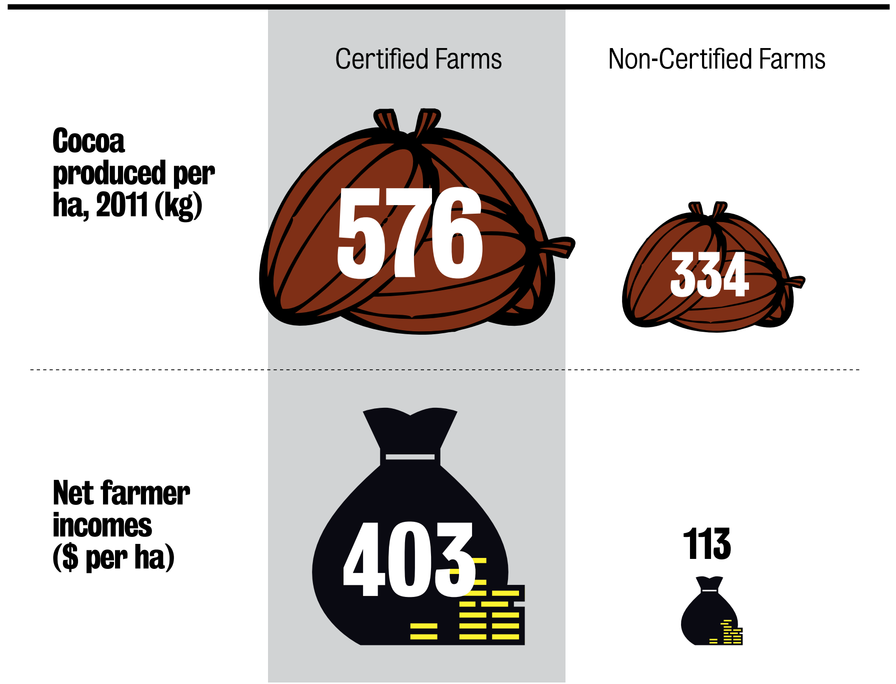
"We see more and more of the companies who are buying Fairtrade produce working to get new producers certified, planting new trees, increasing productivity, holding workshops for training, bringing new producers into their supply chain," says Tim Aldred, head of policy and research at The Fairtrade Foundation in London. "We cannot always invest in that ourselves, so it is important that they do."

The growing interest is partly down to strong consumer demand for ethically sourced produce, which is on the rise despite austerity in key Western markets. But business mentality has also shifted as the world's biggest multinationals come to see responsible sourcing not just as an ethical bonus, but a financial imperative.

"These days the sustainability agenda has developed a strong rationale in terms of supply risk," Rainforest Alliance's Mr Millard says. "Companies are looking to the future and asking where their produce is coming from. They are aware that they are dealing with poverty, climate change, a limited supply of land, and growing pressure on food crops because of expanding populations. These risks are bringing companies to invest in productive farming."

"Agricultural produce, whether tea, tomatoes or palm oil, are commodities which are slowly moving into scarcity," Vikram Agarwal, Unilever's vice president for procurement in Asia and Africa, told *This is Africa* last year. "Rather than just staying in a position where we out-buy everybody else, the long-term commercial option is to get to the grassroots of production and promote increased cultivation and yields."

CÔTE D'IVOIRE – COCOA PRODUCTION AND FARMER INCOMES



Source: The Committee on Sustainability Assesment

Growing market

Unsurprisingly, then, the voluntary certification sector is growing fast. Fairtrade's 2011 sales were up 12 percent on 2010, while Organic's global sales topped $60bn – more than triple their value the decade before. Rainforest Alliance, meanwhile, doubled the total area of certified farmland to 2.2m hectares last year, increasing its number of certified producers by an astounding 204 percent to 770,000 over the year.

Others are setting up their own initiatives: Starbucks aims to source all of its coffee ethically by 2015 primarily through its Coffee and Farmer Equity (CAFE) Practices standard, although it also signed up to Fairtrade back in 2000. Last year, 93 percent of its coffee had met those ethical standards, says Kelly Goodejohn, the group's director of ethical sourcing.

Unlike many other voluntary sustainability standards, CAFE Practices includes a quality component: "CAFE Practices standards ensure that we have the highest quality produce for our customers, and that farmers are growing coffee in the most sustainable way," Ms Goodejohn explains. "The motive was not to check the box on ethical sourcing simply to satisfy consumers. It is more of a supply chain solution to create resilient farmers and ensure that we have the most sustainable supply chain possible."

If that growth is to be sustained the voluntary sustainability standards will have to answer questions on their own bureaucracy. In 2011 Fairtrade, for instance, paid $83m in fair trade premium - 1 percent of its $6.3bn sales. "Third party certification is quite expensive, and inspectors often have to be flown in from the EU if the scheme has no local operation, adding to the expense," says the European Commission's Mr Waite.

Back at Fairhills in South Africa, Ms Ewins has seen the effects of those costs: "There has been some pushback in terms of demand from the supermarkets because they say that the [Fairtrade] corporate body takes too much of the premium," she says, looking back at the school.

"But without the certification none of this would have been here."

Partner up

Africa's smallholder organisations are teaming up with businesses and NGOs as they strive to professionalise and improve productivity

BY WENDY ATKINS

As interest in African agriculture grows, governments, NGOs and multinationals are working with agribusinesses to link farmers with consumers. Food giants including General Mills and Nestlé have initiated projects aimed at improving productivity and providing farmers with greater market access, training and technology.

"We're addressing a more systemic need by helping companies in Africa improve food processing operations while producing high quality, nutritious and safe food at affordable prices," says Ken Powell, chairman and chief executive officer of General Mills.

It is in everyone's interests for the continent's smallholders to have more access to better tools and skills, as a recent World Bank report points out. *Growing Africa: Unlocking the Potential of Agribusiness* says Africa's farmers and agribusinesses could create a trillion dollar food market by 2030 if they can expand their access to capital, electricity, technology and irrigation to grow high-value nutritious foods.

Jeff Dykstra, CEO of Partners in Food Solutions, a non-profit set up by General Mills, says his organisation has built on its founder's R&D capacity. He explains: "We've taken advantage of that core knowledge and shared it with the small and growing food processors. We believe they will be an engine for driving more reliable demand from farmers, as well as the engine to put healthier, better, more formal products into the marketplace."

Aggregation

Mr Dykstra can see the improvements as smallholders come together. "In Zambia, I used to buy peanut butter that came from South Africa across two inefficient borders at $8 a gallon for fuel. Yet 2km from where I shopped there was a peanut farm, but that ability to locally process wasn't there," he says. "One of the companies we worked with in Zambia now produces peanut butter using locally sourced groundnuts, and sells those through Spar, Shoprite and other retail outlets. It sources from about 45,000 smallholder farmers, and it's an example of how everyday knowledge that multinational companies have can be passed on to these companies and really drive improvements and new product development."

The Syngenta Foundation for Sustainable Agriculture is also helping smallholders work together. It has helped establish outgrower schemes for rice production in three locations in West Africa, and is set to launch a similar scheme for vegetables and potatoes in Kenya.

"We organise farmers in groups, link them with buyers, and help them to increase their rice production," says Fritz Brugger, Syngenta's head of agricultural support services. "We bring together the different players, bring in technology for the right agronomy, and bring in our Farmforce mobile business solution – which is designed to manage outgrower schemes with smallholder farmers – to make it all work."

Supply chain

The next problem is market access. Poor infrastructure and communications often make it hard for rural smallholders to connect with markets, providing one of the biggest bottlenecks to their development – but various interventions are being trialled. The trade and institutions division of the International Food Policy Research Institute is focused on two areas: improving contract farming (where production is carried out through an agreement between buyers and farmers) and reducing bottlenecks for collective marketing. Its 'Contracting Out of Poverty' project is already up and running in several developing countries, including Tanzania. The aim is to provide smallholders with access to dynamic markets through efficient contract farming arrangements.

Eduardo Maruyama, research coordinator for the markets, trade and institutions division at IFPRI, explains: "In Tanzania, the project studied the contractual relationship between the Maasai women in the Morogoro region and a local milk processing firm. Milk in the country comes mainly from indigenous cattle and production is highly seasonal. The firm found that farmers could not get a consistent supply of milk and that they often sold to informal traders who offered high prices during the dry season. The project tested whether adding a clause that rewarded farmers for sticking to their contract would increase the consistency and amount of milk produced. Farmers were randomly selected to receive a reward for delivering milk regularly. They were also given an increasing payment per additional litre, to reward both loyalty and production. Results show that the incentives reduced reneging and that the total supply of milk to the firm increased."

The organisation has also set up the 'Working Together for Market Access' project to improve the lives of smallholders. It aims to build market access for the members of rural producer organisations in Senegal and Uganda.

"In Senegal, we designed a field experiment implemented in collaboration with farmer groups involved in the joint commercialisation of their agricultural product," explains Mr Maruyama. "We invited selected members of these groups to attend a collective marketing training event, varying which and how many members of each group attended. Our results indicate that the training has a strong and positive effect on the famers' willingness to risk their production through collective marketing."

ICT and mobile money

ICT and mobile money are also playing an increasingly important role in connecting smallholder producers to buyers. "Mobile technology enables access to vital information, such as authentic market prices for crops, daily weather reports and agricultural advice and news," says Jawahar Kanjilal, vice president and global head of Nokia Life. "All this can help reduce dependence on middlemen, by helping farmers make better, more informed choices."

ICT has made a real difference to the work carried out by Partners in Food Solutions. "The big breakthrough for us was being able to do 95 percent of our work remotely. This has enabled us to think about ultimately working with hundreds of companies across the continent to improve their capacity and ability to build their businesses," Mr Dykstra says. "Connectivity means we get pictures from food processors that are 100 miles from a paved road showing us a particular problem or challenge – and that simply wouldn't have been possible even five years ago."

Developments in the sector are also helping farmers improve the quality of their produce. "One of the challenges is that it can be difficult to control production through smallholder farms and ensure they

MARKET POTENTIAL

Africa's farmers and agribusinesses could create a trillion dollar food market by 2030

Source: World Bank

"We're addressing a more systemic need by helping companies in Africa improve food processing operations, and in turn produce high-quality, nutritious and safe food at affordable prices"
Ken Powell

PHOTOS: GETTY

comply with standards," says Mr Brugger. "Syngenta's Farmforce technology enables aggregators to have real-time information about what is going on in the field. And that can increase internal control systems and allow much better management of schemes."

Beyond the bottom line

Donors are also helping local farmers to improve their environmental and social performance. As Cynthia Donovan, deputy director of the Feed the Future Legume Innovation Lab, points out: "Donors can play a crucial role in ensuring that information and analysis is available to private companies, especially in new environments. Donors can continue to fund research that offers options and highlights win-win situations...Cost-effective solutions to water and air quality problems can be sought as private and public interests work together."

She adds: "Donors have invested – and continue to invest – in farmer organisations. They are providing assistance such as literacy, nutrition and productivity training to enhance the well-being of farming families, while improving the potential for companies to work with farmers at lower cost. This relationship between donors, NGOs, private companies and farm families takes time and resources, but it also contributes to long-lasting change."

Access to finance is still a challenge for smallholders. "As yet, it is still difficult for smallholders to access credit in many countries," says Ms Donovan. "In Mozambique, for instance, outgrower schemes in which credit for inputs is tied to commodity sales at harvest are still one of the most common ways for farmers to get access to credit, but that is only viable for a few selected cash crops. Small farmers do not have the collateral required for traditional bank loans, and without crop insurance, using land or other assets if they do have them is very risky."

ICT and mobile money are becoming valuable solutions in this area. "Mobile money is the next key enabler for farmers in the supply chain. It can help farmers bank easily and right from the place of trade. It brings them within reach of governments who can provide financial support via direct disbursements," says Nokia's Mr Kanjilal.

"ICT may provide some low-cost options, leapfrogging traditional bricks and mortar banks. The use of mobile wallets may be one way for rural farmers to establish financial savings programmes in the absence of banks and other financial institutions," Ms Donovan agrees. "In Kenya, M-Pesa gives rural farmers the possibility of receiving funds for inputs from their urban relatives via mobile phones, without the physical presence of a financial institution. These types of innovations may be the way forward for rural finance in Africa, at least for smallholders."

Social investment is also an interesting source of funding. For example, Root Capital began investing in Rwanda's Dukundekawa coffee cooperative, also known as Musasa, in 2005. Since being set up in 2004, Musasa's membership has grown from 300 to more than 1,800. In 2005, based on Musasa's contracts with leading speciality coffee buyers, Root Capital lent the cooperative $90,000 to purchase raw beans from its members. When the processed beans were shipped and buyers had sent their payment, a portion of the proceeds paid off the Root Capital loan. Since then, Root Capital has provided Musasa with more than $1m in financing.

Kenya's Wilmar Flowers, which supplies flowers grown by small- and medium-sized farms, has developed thanks to funding supplied by the African Agriculture Capital Fund. The funds pumped into Wilmar Flowers mean it has been able to double its supply and increase profitability by boosting the number of smallholders from which it sources produce. USAID has also supported the company through its Kenya Horticulture Competitiveness Program, which works to strengthen the cut flower value chain, linking smallholders with reliable markets.

Speaking in 2012, Wilmar managing director Wilfred Kamami, said: "USAID's horticulture programme has helped us to develop an outgrower scheme that can be reliably scaled up. The programme has helped us to train the farmers we have under contract to supply a variety of flowers that meet the highest phytosanitary and quality standards. USAID facilitated credit through Equity Bank so that our smallholder partners could get loans to buy improved technologies such as shade nets, drip irrigation systems, soil analysis, improved varieties, and other farm inputs that enable them to supply flowers that meet the markets' demands."

Wilmar's experience is a testimony to the benefits African producers are beginning to enjoy as they look to a broader range of support networks and partners.

PHOTO: XXXXXXXX
PHOTOS: GETTY

Bill Vorley

Going global: The best way for smallholders?

"Unless business models are radically redesigned, the chances of successfully including the poorest farmers and local suppliers is small"

The concept of connecting big business to small-scale producers has become hugely popular in this era of 'trade not aid' and market-based development. While the logic of connecting some of the world's poorest rural people to food multinationals seems flawless, bridging these worlds is a huge challenge. Big business wants regular supplies of consistent quality with assured credentials for safety and sustainability. Small-scale farmers, on the other hand, are scattered across wide areas, and their production is subject to the vagaries of climate. Farmers must juggle cash crops with food production for their households, and the costs of compliance with industry standards can be prohibitive.

One way of linking these worlds is to introduce a new breed of middlemen into supply chains who can iron out the complexity of aggregating and grading smallholder produce so that multinational buyers do not have to adjust their core business model. But adding specialised intermediaries adds cost, and goes against the current business imperative to shorten rather than lengthen supply chains. The alternative – trading directly with farmer groups – can be very difficult to take to scale and may therefore languish at the CSR margins of the business.

An initiative led by the International Institute for Environment and Development took a rather different tack: it employed a team of agents to help connect Kenyan smallholders to UK and US supermarkets. The product in this case was flowers grown by smallholders as cash crops within their farm rotations. The agents worked the whole value chain to build capacity and iron out problems so that the business models of farmers, suppliers and retailers could eventually be aligned. At that point, the agents could gradually step back, rather than add permanent costs. The model was ultimately successful, and provides a useful template for scalable and commercial inclusion of smallholder farmers.

But even successful approaches must come with a warning. As often happens in the faddish world of development, the new consensus on 'inclusive business' has been reached before a strong body of evidence is in place as to the numbers of smallholders that can be involved, or its impact on reducing poverty and food insecurity. There are celebrated case studies of success, but studies of failure are rarely recorded.

The idea of ticking all boxes – poverty reduction, food security, and new supplies for business – is consistently overstated. Unless business models are radically redesigned, the chances of successfully including the poorest farmers and local suppliers is small. In the Kenyan flowers example, the link was made with a successful Kenyan SME that operated an outstanding smallholder outgrower scheme and had already cut its commercial teeth in the Dutch wholesale trade. But even under those favourable conditions, it was difficult to meet the exacting demands of the retail trade for consistency and quality of supplies.

Supplying food multinationals can turn out not to be as high value as the hype suggests, once all the costs are factored in. Alternatives closer to home may be a better bet for smallholders. Domestic and informal markets are often dynamic thanks to urbanisation and economic growth. And wholesale markets, where suppliers can sell what they have, can be a better fit for the realities of smallholder production, as opposed to the retail trade where farmers have to supply what is demanded. Multinational companies and NGOs should not be too surprised when small-scale farmers – through their own agency – choose those markets instead.

'Inclusive business' is an excellent idea, but it presents a more fundamental challenge to the business models of large companies than we have yet dared to admit.

Bill Vorley is principal researcher for the Sustainable Markets Group at the International Institute for Environment and Development

Marc Engel

Local sourcing is the future

"Partnerships have enabled us to achieve more and reach further"

Unilever is one of a group of companies supporting the Grow Africa initiative, an international partnership that aims to accelerate agricultural investment in Africa. While our commitments include developing a high quality export tea industry in East Africa, one of our core reasons for joining the initiative is to develop new local sourcing opportunities to meet the demands of our growing African business.

We have 13 factories in Africa that use products like soft oils, tomatoes or starch-based compounds on a daily basis. But much of this is imported, wasting foreign exchange and increasing our carbon footprint. We own the largest soap factory in Africa but we have to bring in palm oil from Asia to keep it running. Sorbitol, a product that can be made from local cassava, is imported from China for our growing oral care business in Nigeria.

Developing sustainable local value chains will help us in our aim to double our business in Africa and fulfil the sustainability commitments we set out in our Sustainable Living Plan. Given the high dependence of African agriculture on smallholders, many of whom are women, it is also an opportunity to directly improve the livelihoods of some of the poorest members of society.

This is why, at the recent World Economic Forum in Cape Town, we confirmed that we are actively looking at new local sourcing opportunities in countries such as Nigeria, Tanzania, Ethiopia, Ghana, Malawi and Rwanda. We will do so again at the G8 New Alliance for Food Security and Nutrition discussion in June.

But we are not naive about the challenges. Helping African farmers become true entrepreneurs and restoring Africa to the position it once held as a source of quality and globally competitive agricultural products will not happen overnight. We will need to draw on all of our experience globally and build partnerships with others to drive change on this scale.

We believe we have much to offer, and we already source a third of our agricultural raw materials sustainably. We can leverage this experience across our global supply chain which includes directly relevant work, such as training 450,000 Kenyan tea farmers in sustainable practices.

Africa will also need to develop and use modern supply management tools, such as traceability. Here too we bring experience, for example in South Africa where we partnered with our supplier Ceoco to understand how to improve traceability in soft oils. By working with a farming community in Limpopo using a mix of good practice, financial incentives and high yield seeds, we have developed a system that traces oil seeds right back to individual farms.

Critically, we cannot do it alone. Our Sustainable Living journey has strengthened our belief in collaboration. Partnerships have enabled us to achieve more and reach further. Our value chains already include different private operators, large and small. Governments will need to bring in regulatory reforms. Donor finance can develop infrastructure and impact investors can help build smallholder-owned businesses. Civil society can also help us monitor and improve our impact on local livelihoods, such as through our recent independent assessment of the impact Rainforest Alliance certification had on smallholders and their farm workers in our tea supply chain in Kenya.

This is an ambitious journey, but it has begun. We hope our commitment to sustainable local sourcing will leverage investments measured in hundreds of millions of dollars, help integrate many thousands of small farmers into our supply chain, and create better livelihoods and more employment right down the value chain. We believe that we can succeed in this vision and ensure African agriculture will play a key role in helping Unilever develop globally diverse and secure supply chains while driving down the costs of consumer products in Africa.

Marc Engel is chief procurement officer at Unilever

Perspectives

Julie Greene

Transforming subsistence farming into commercial enterprise

"One cannot underestimate the value of having conversations and building relationships to make change happen. If we do not start this dialogue on behalf of farmers, their voices will not always be heard"

Olam's business requires a consistent supply of high quality agricultural products, such as cotton and cocoa. To secure those products, the practices and livelihoods of the 3.4 million African smallholders from whom we source must be improved. Given the significant infrastructural, political, economic and social issues that stand in the way, doing this effectively means starting from the ground up, community by community.

For Olam's cotton operations in Côte d'Ivoire, the focus is on producing the required volumes of cotton each year, which means ensuring that farmers have the right motivation, skills and means to grow it. This includes helping them to increase their profitability, conducting training in the field and providing access to credit for fertilisers, seeds and insecticides.

To achieve this, it is essential to position the business as a reliable and trusted partner. This requires overseeing that farmers receive quality seeds and inputs on time, that cotton is collected promptly from the field after harvest and that farmers are paid quickly. These underlying principles are fundamental to any enterprise working with smallholder communities.

Each month I drive 1,500 to 2,000 miles to undertake field visits to farmer collection centres. Although I can't meet all 12,000 farmers, these visits are essential to understanding how our relationships are progressing. We ask ourselves: Is our training helping? Are our farmers satisfied with their inputs? Are we paying them quickly? Ultimately, we establish whether these measures are making improvements to yields and increasing farmer incomes.

One of our team's main challenges is to change farmers' mindsets away from short-term 'survival' mode – for example, selling fertilisers to make money quickly rather than using them on the soil. Communicating how this lowers yields, lowers revenues and loses the company's trust is important. Under the Olam Livelihood Charter – a framework of initiatives aimed at the long-term improvement of smallholders' well-being – communities are starting to see the bigger picture. In five years, farmer profits have nearly tripled to about $1,200 per family, even accounting for adjustments in price changes.

In addition to managing the practical aspects of these operations, we build partnerships on social projects with local government officials, authorities and farmer groups. One cannot underestimate the value of having conversations and building relationships to make change happen. If we do not start this dialogue on behalf of farmers, their voices will not always be heard.

Eradicating corruption is a priority. Some cooperatives exploit their farmers, usually through their illiteracy – for example, by writing a receipt stating that farmers received 10 bags of fertiliser when they were given seven, and selling the difference. We took a strict approach to this and such activities are minimal now. We have to show that by working well and honestly, all parties benefit. One solution is working with partners to teach literacy and numeracy skills. Three hundred villagers have already been helped in this way.

The value of working directly within farmer communities cannot be underestimated. Effective innovation cannot be based on guesswork. Developing focused solutions to address the range and diversity of these farming systems can only be achieved through firsthand knowledge and hands-on collaboration. This is a long game but the mutual value that is unlocked for shareholders and customers, as well as smallholders, is unquestionable.

Julie Greene is business head of Integrated Cotton at Olam International, Côte d'Ivoire

Lessons from the South

African countries can learn from other emerging markets, as well as their own histories, for best practice policies

BY ADAM ROBERT GREEN

The developing world has taken a major share of global agricultural trade in recent decades, with plenty of success stories for Africa to learn from. The impressive export performance of Brazil, China, Argentina, Thailand, Malaysia, Indonesia, India, Chile and Vietnam provide proof that developing countries can secure their place on the world stage.

Some lessons can be deduced from the shared experience of this group, while others are case-specific. Deliberate government policy has been essential, not so much in production and pricing but through the creation of catalytic public goods, from infrastructure to public research. OECD data shows that public spending on research, extension and education services in Brazil, China and Chile registered an average rate of increase of 3 percent (1995-2005), 16 percent (1993-2005) and 10 percent (1990-2005), respectively.

Governments have also intervened to enable the emergence of processing zones, helping countries climb the value chain. Malaysia's Export Processing Zones (EPZs) provide investor incentives to attract FDI in the palm oil industry, and revenues obtained from taxes levied on exports are reinvested into targeted R&D. Today, palm oil accounts for over one-third of total value-added in the agricultural sector. Such experiences are pertinent to Africa's least developed and landlocked countries – including Ethiopia, Burundi, Central African Republic, Niger and Malawi. These countries depend on the export of primary or commodity products, with more than 75 percent of exports consisting of unprocessed goods.

In middle-income Africa, such approaches are already bearing fruit, notably through the 'food technopoles' which seek to mimic successes in Malaysia and elsewhere. These include the maize-soy-poultry complex driving rising poultry exports from Thailand and Brazil; the sugarcane cluster in Brazil, which supplies the ethanol industry; and Pakistan's textile exports.

Egypt's agribusiness investment zones have attracted investment from the likes of Heinz, Tetrapak, Unilever, Cadbury, Danone and Coca-Cola. Lower-income countries are also experimenting with these models with some success. Côte d'Ivoire, thanks to a differential export tax favouring processed cocoa exports and other incentives, now processes about one-third of its cocoa output locally. These zones are useful for bringing together a critical mass of skills, infrastructure and services.

Successful public interventions have tended to be market-enhancing, rather than market-fixing. The withdrawal of the government from agriculture – reducing export taxes and abandoning overvalued exchange rates – helped engineer an agricultural turnaround in Brazil, China and Vietnam. It is notable that five of the biggest emerging market players in agriculture – China, India, Indonesia, Brazil and Russia – all pursued increased trade openness, with Russia the latest to accede to the World Trade Organisation.

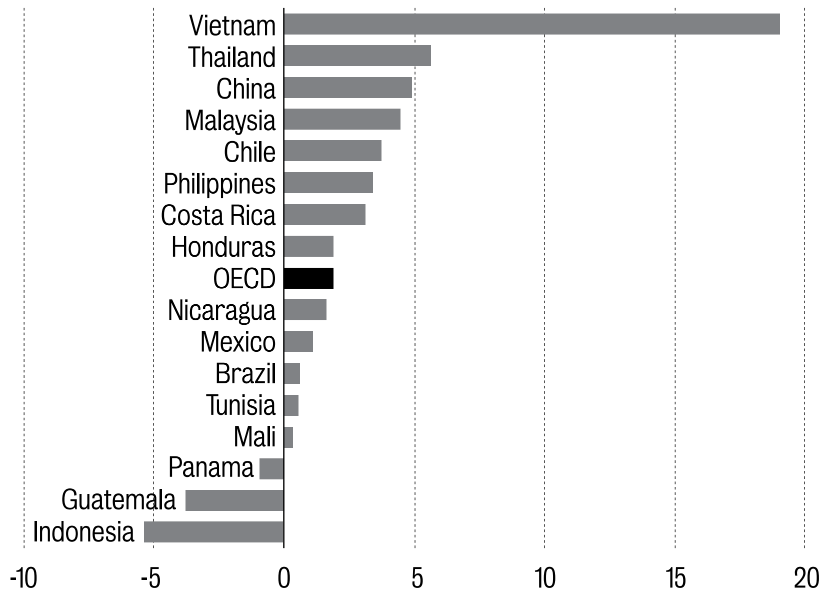
Smallholders' trucks loaded with palm oil fruit in Besout, Malaysia

PHOTO: GETTY

Tariff cuts, reductions in non-tariff trade barriers and growing liberalisation of the investment climate have all been key to driving productivity growth in these countries. Africa's trade liberalisation remains some way behind, with most countries still weakly integrated into global trade, especially in agriculture. Chile's proactive approach to signing trade agreements has helped boost exports for products such as fruit and vegetables, says Maximo Torero at the International Food Policy Research Institute, helped by significant efforts to improve sanitary and phytosanitary standards and thus access new markets. And Ghana, one of Africa's most successful agricultural models, showed the highest annual change in trade openness (measured as a percentage of GDP between 1980 and 2005) in one OECD survey of 25 developing countries.

That does not suggest that rapid or careless liberalisation should be embraced for its own sake. Agricultural production can be supported by a delicate combination of easing business for local players, while adding technology transfer requirements onto foreign firms. In Poapongsakorn, central Thailand, a strong agro-processing sector has emerged as a result of the establishment of one-stop services, support measures for SME networking to raise bargaining capacity, and technology transfer aided by foreign investment conditions. Tax concessions and the provision of finance also help. Now, paddy, sugar and cassava surpluses have generated the creation of thousands of rice and sugar mills and cassava brokers, as well as ancillary businesses in construction, metalwork and agricultural equipment manufacture.

Growth in public expenditure on agricultural R&D, 1981-2005*



*average percentage measure, year ranges vary
Source: OECD, IFPRI

Climate peers

More advanced developing countries are not only good examples to follow – they often share similar natural conditions and climates with many low-income countries. Brazil's agricultural engagement in southern Africa, for instance, is not just driven by the Lusophone connection but also the similar latitude. Because of this, Brazil has relevant experiences to bear.

The country's agricultural performance speaks for itself. Brazil is now one of the leading exporters of ethanol, sugar, meat, coffee, and soy; the world's second leading exporter of chicken; and the fourth largest exporter of pork. Over three decades, it has moved from being a net cotton importer to the world's fifth largest exporter.

Brazil's cooperation with Africa is coordinated through the Agência Brasileira de Cooperação (ABC), housed in the Palácio Itamaraty, home to the Ministério das Relações Exteriores (MRE). Embrapa, the Brazilian agricultural research corporation, is currently tasked with executing requests from recipient countries for technical cooperation. Foreign policy objectives are key drivers of this engagement as the country builds on a charm offensive initiated by previous president 'Lula' da Silva.

Brazil now has technical cooperation agreements with 24 African countries and programmes in Lusophone Africa, as well as in the 'Cotton 4' group (Benin, Burkina Faso, Chad and Mali). Embrapa is helping Mozambique adapt soybeans, rice and other crops for local conditions. There is private interest – Brazilian companies including Pinesso Group and sugar cane producer Tereos are present in Mozambique. Mozambique's attempt to develop underused savannah in the Nacala Corridor, in the north, is inspired by Brazil's own Cerrado – a region of once infertile tropical high plains which was, over time, converted into highly productive farmland.

"The Brazilian experience in both technical cooperation and policy terms can be very helpful in informing the paths that countries choose to take as they grow and develop in Africa," says Ammad Bahalim, programme officer on agriculture at the International Centre for Trade and Sustainable Development (ICTSD).

Brazil has faced similar political and social challenges as Africa does today – especially in terms of the risks of rising private investment, which can displace domestic competitors. The market share of multinational corporations in Brazil's domestic food market reached 30 percent in 2000. As a result of growing unrest from small farmers, the government pursued a range of social programmes, including a family farming scheme which provided credit to low-income smallholders, as well as food assistance programmes established as part of a 'Zero Hunger' project.

Mais Alimentos, or 'More Food', and the Programa de Aquisição de Alimentos (PAA), or the Programme for Food Acquisition, are two examples. Mais Alimentos aims to boost smallholder farmer productivity by sharing improved techniques. PAA involves buying food, mostly fruits and vegetables, from smallholder farmers. These are used to provide nutritionally balanced school lunches and in subsidised kitchens intended to feed the food insecure. "In agriculture, Brazil has a unique policy structure that is divided between small and large farmers. The programmes directed towards small farmers can help deliver on food security objectives while success in Brazilian large scale agribusiness may be replicated to earn export dollars in Africa," says Mr Bahalim.

"As emerging economies, and others, spend increasingly more on agriculture it is essential that we look for and put to use programmes that provide the greatest benefit for public funds. The PAA is a useful example for any other country that is looking to expand spending on agriculture. Moreover, since the PAA is addressed to low-income and resource-poor farmers, it remains compatible with WTO rules and may be a constructive way to address environmental, social and economic objectives in smallholder farming," he adds.

Brazil also provides a useful model for increasing mechanisation. Africa's average of 13 tractors per 100km^2 of arable land compares unfavourably both with the global average (200/100km^2) and with the average for other developing regions such as South Asia (129/100km^2). Brazil has added 50,000 tractors per annum, compared to 20,000 across the whole African continent. When factoring in population size, that means Brazil has 3,000 Brazilians per tractor, compared to 70,000 Africans.

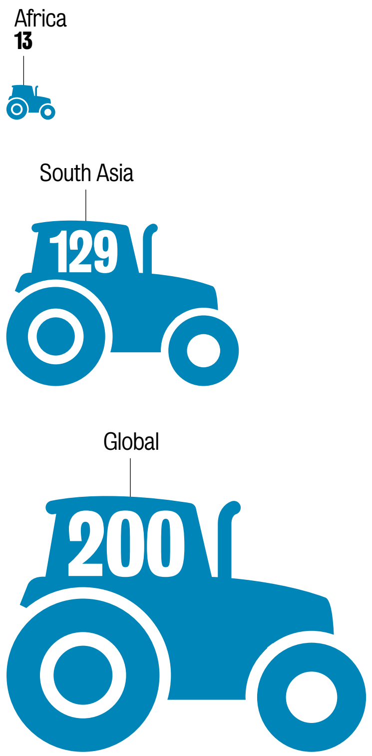
China is the other large emerging economy to offer technical support to Africa. According to IFPRI, Chinese aid teams have constructed agricultural projects, including state farms, irrigation schemes, and demonstration centres for African governments. In 2004, China's Ministry of Commerce (Mofcom) started to encourage country-specific opportunities for Chinese agricultural investment such as cotton in Egypt, fruit and nuts in Nigeria, sisal in Tanzania, tobacco in Zimbabwe, and a variety of crops in Zambia, Ethiopia, Guinea, Benin, the Democratic Republic of the Congo and Cameroon.

"Through their agricultural aid programme, the Chinese are responding to African demands for assistance in agriculture," says Deborah Brautigam, professor and director of the international development program at Johns Hopkins School of Advanced International Studies (SAIS).

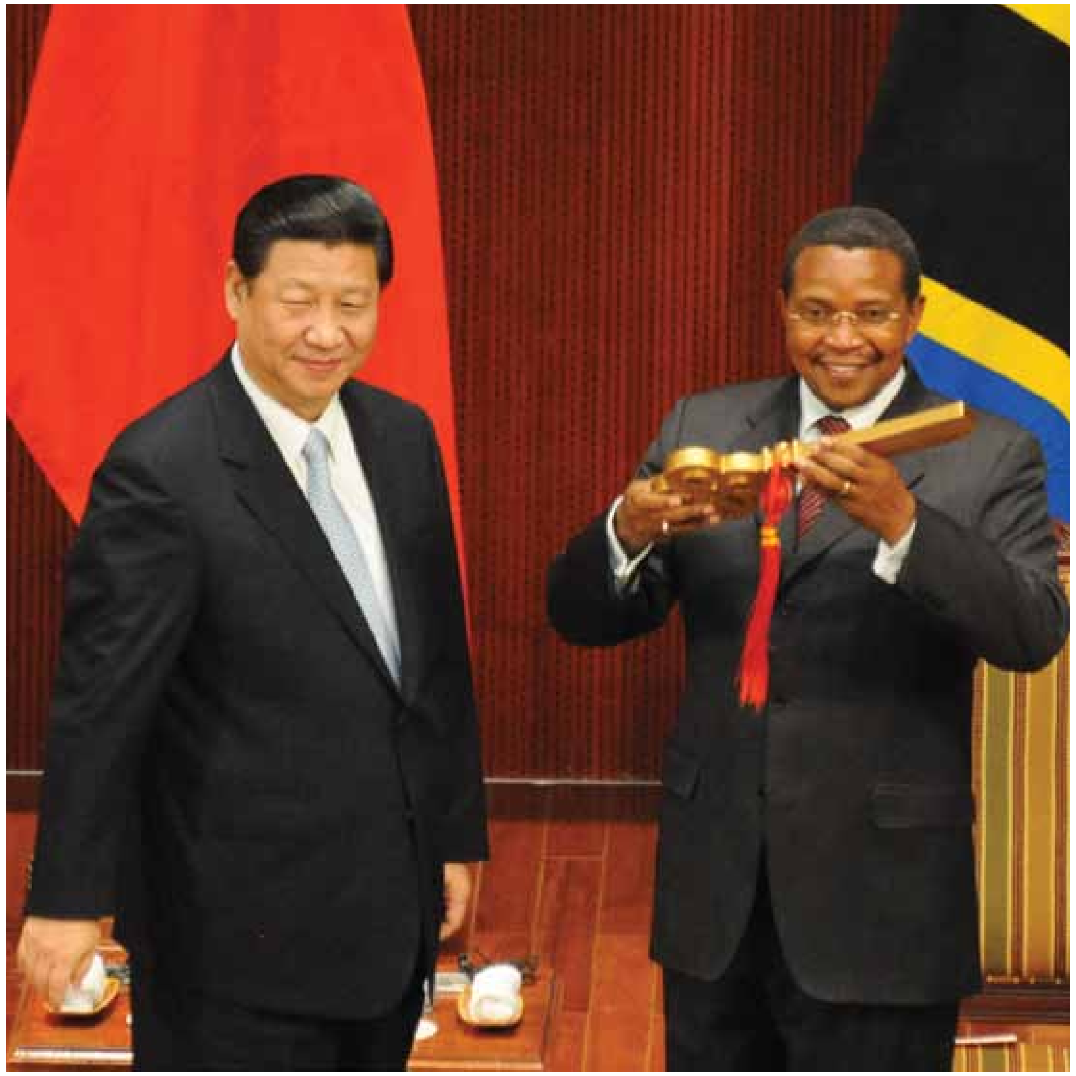
African economies would do well to learn from China's own experience. "Everyone believes that China has something useful to share, since they have managed to drive up yields and feed 1.3 billion people with such limited land. Mofcom is also promoting agriculture as an area for Chinese investment – in some countries, in some crops," says Ms Brautigam. But this area of Sino-African relations is just as susceptible to hyperbole as others. "There is a lot less investment than most people believe, and the investment that has come in over the past decade is driven by the companies, not led by the Chinese government," she says.

Agricultural mechanisation

Average number of tractors per 100km^2 of arable land



Source: UNIDO



Unique features

While lesson sharing among emerging economies has its attractions, it also holds risks if it fails to engage with the unique features of the African agricultural landscape. Of the more than 30 Embrapa projects in Africa, for instance, only three address cassava, probably the most important crop in the region. In the end, while agricultural practitioners can read the lessons of their peers, they will have to conjure some unique answers of their own in order to prosper.

One distinctive feature of Africa is the fragmentation of land – with 85 percent of farms occupying less than two hectares. In Brazil, Germany, and the United States, by contrast, only 11 percent or fewer farms operate on this scale. While this does not necessarily equate to lower productivity, it does provide a challenge on the global trade front.

African exporters face a demanding set of quality standards to access rich markets. "If you want to comply with standards, you need to have economies of scale," says Mr Torero at IFPRI. Greater economies of scale allowed Peru – and especially its coastal producers – to become one of the top exporters of asparagus in the world.

LEFT: President Xi Jinping of China with President Jakaya Kikwete of Tanzania
TOP RIGHT: Women sort peanuts at a Chinese-owned warehouse in the Senegalese village of Dinguiraye
BOTTOM RIGHT: Harvesting soybeans near Tangara da Serra, Brazil

For Africa, land rental systems could allow economies of scale to emerge without dispossessing the poor. Vietnam provides an interesting model. A land reform programme provides 1 hectare of land per household, and farmers can lease their share in concession to a corporation, making them a shareholder. "Land is provided as a share to the corporation and they will bring technology and standards and economies of scale. You do not lose ownership, and you get qualified human capital," says Mr Torero. African economies can also benefit from strengthened farmer associations, which help smallholders achieve the benefits of scale economies that are not being enabled through consolidation in the land markets.

A second distinctive feature of Africa is the lack of infrastructure compared to other emerging regions which are often held up as models. Talk of copying the 'Green Revolution' in India is a case in point. African subsidy schemes, for example, "try to somehow mimic the Green Revolution in Asia, with general subsidies on inputs and labour intensive technology. But Asia and Africa are completely different," says George Rapsomanikis, senior economist at the Food and Agriculture Organisation. "Most of Asian agriculture was irrigated at the time of the Green Revolution. You put fertiliser and water in, you get 100 percent positive results. If you have fertiliser without water, you have drought and you get nothing."

Irrigation remains a major constraint on African agricultural growth, with the expansion of irrigated areas limited compared to other development regions. Only 4m hectares of such land has been added over the last 40 years.

At the time of its Green Revolution, Asia also had stronger infrastructure, he says, "so higher productivity could link farmers to markets and kickstart rural development". Asia has denser populations as well: "Markets popped up in Asia and they may not so easily do so in Africa." And Africa's ecological diversity means technologies successful in one region may not be in others. This is quite different from South Asia, where new varieties of rice could be planted over millions of hectares.

Some of these distinctive traits might change if public policies can be brought to bear. Transaction costs are powerful determinants of the overall commercial landscape, and could be brought more into alignment with Asian norms if trade barriers could be addressed.

Simplifying supply chains

Walmart's Africa expansion strategy requires a lean supply chain. *This is Africa* speaks to its Massmart and Asda subsidiaries about smart domestic procurement

BY ADAM ROBERT GREEN AND ELEANOR WHITEHEAD

African formal food retail is poised for growth as international and local stores meet rising demand

When Walmart submitted its $4.2bn bid for Massmart back in 2010, the group made it clear this was not just a South African play. With operations across 12 countries in sub-Saharan Africa, and a strong position at home, Massmart offered a foothold across the region – and a strong platform to expand through some of the world's fastest growing consumer markets.

Since winning regulatory approval for the deal last year, Walmart has been in expansion mode. This year Massmart – which sells general merchandise and home improvement products, and is the biggest retailer of basic goods in the region – announced plans to boost its African footprint by building new distribution centres and regional warehouses, as well as rolling out new IT services to support its supply chain.

For other subsidiaries of the Walmart group, the focus has been on shortening supply chains – lessons which Massmart can learn from. "Our business model is very simple," says Nick Scrase, managing director for International Procurement and Logistics, wholly owned by Asda – a UK-based Walmart subsidiary. "We try to remove middlemen in some very complicated supply chains so we can deliver better profitability to growers and manufacturers."

In part, Asda has achieved this by taking on some simple processing procedures itself – including packaging or repackaging produce, bottling wine or cutting up cooked meats. It has also removed superfluous links in the supply chain.

"The needless complexity is very often in margin-takers in the middle of the chain who sit between the producer and the customer," says Mr Scrase – pointing to exporters, importers and agents in particular. Starting at the buyer end, Asda removes the importer. "We do not want to work with importers. We can fulfil that function adequately ourselves and we can do it more efficiently, and the profit the importer was making we can give to the consumer in the form of lower prices," he explains.

Moving to the country of origin, the agent – who negotiates on behalf of the exporter with the importer – can often be removed from the chain. "We do not need that agent, because we have put our own people in those countries. We have teams in Kenya, Morocco, South Africa and elsewhere. And where we have big growers, we can work directly with that grower so we can take the exporter out of the model as well."

Exporters are a more important part of the supply chain when it comes to smallholders, though. On this side, Asda is working with hundreds of growers in Kenya to produce yellow passion fruit, Mr Scrase says. "That product will be on our shelves in July of this year, and that is a first for our customers. We hope that will provide some learning that we can take to other countries."

By removing needless margin-takers, Mr Scrase explains, value can be pushed to either end of the chain – to customers in the form of lower prices and better quality, and to producers in the shape of a sustainable return that enables them to continue producing. "I've never met a farmer anywhere in the world – whether it is Africa, Lincolnshire, or Arkansas – that does not want to be more closely connected to the customer."

Through an international company like Walmart and its subsidiaries, farmers also get access to a broader range of markets and consumer preferences. Asda sends agronomists to meet farmers, in order to explain to them "what the market needs, what the consumer in the UK or the US needs, or what specification they would require in terms of flavour, taste and texture," Mr Scrase explains. "They also advise on how to get the best out of the crop, so we find ourselves giving advice on yield, ensuring that pesticides are responsibly used and so on."

Technical support

Despite the opportunity afforded to African producers by the more than 200 million customers buying in Walmart stores or online every week, the group's entry into the continent was not greeted with universal fanfare. The company faced fierce opposition from regulators and powerful South African unions, which contested that its international supply chains would undercut local retailers. It took almost two years for the company to win regulatory approval for the deal, albeit it cut back to a $2.4bn acquisition of a 51 percent stake in Massmart.

One of the conditions Walmart agreed was the creation of a R200m ($21m) Supplier Development Fund to improve the competitiveness of local farmers. The fund has positioned smallholder agricultural development as a focus area.

Massmart's Direct Farm Programme, funded by the SDF, first launched in the Limpopo province, with eight farm units and 34 hectares of production, and is focused on high volume, 'high turn' fresh produce including tomatoes, butternuts, carrots and green peppers which are bought in large quantities and sold in retail and wholesale formats.

The Direct Farm Programme consults with the NGO Technoserve and provides a raft of support measures, including a zero interest revolving credit fund with R3.5m ($372,000) available for input credit. Farmers are also helped by commercial farmer mentors as well as regional field coordinators who line up sales. In the first season, the programme provided transport and packing facilities.

"Out of that experience, most of the farmers were in a break-even position and it gave us the momentum we were looking for," says Sherry-Lee Singh, Massmart's supplier development project manager.

The first harvest – of 514 tonnes, with a sales value of R2.6m ($277,000) – was procured over the period from late August 2012 to January 2013, and the benefits are tangible for both producers and buyers, Ms Singh says.

"Smallholder agriculture has been struggling to take off in South Africa," she argues. "From what we've observed in the few short months of implementation, the potential benefits in terms of job creation, additional SME enterprise development around the farm, lower barriers to entry in terms of time taken to raise the crop and then sell it into the market, have been phenomenal. Not only does it make business sense to be engaged in smallholder agriculture in South Africa, it also makes serious development sense in terms of the impact it can have on the rural economy."

The fund has grown from its Limpopo roots to KwaZulu-Natal, Mpumalanga and Gauteng. And it is core to Massmart's business, and not a mere CSR initiative, the group argues. "We are very focused in terms of who we select to include on the [suppliers] list. We are not going to just randomly involve farmers in the programme," says Ms Singh. "We will look at whether a farmer is in the zone where in winter they have vegetables and in summer they have fruits...we will look at a total buying position."

Quality control remains a challenge, but such issues are ironed out prior to growing to minimise farmer – or buyer – risk. Massmart provides Technoserve with its produce specifications – weight, colouring, distribution requirements, food safety, residue and so on. "We then have a commercial farmer mentor the smallholder farmer on an ongoing basis to produce towards specifications," says Ms Singh. Field coordinators conduct ongoing checks on farms to raise any potential issues during growing seasons. "It saves us money and it saves the farmer money in the sense that you have a lower chance of rejection."

PHOTOS: GETTY

Mohit Arora

Head of Agriculture, Standard Bank Africa

"Even if a farmer is small, if he can demonstrate a successful repayment history, has kept track of his production data and financials, banks will be willing to lend"

INTERVIEW BY ADAM ROBERT GREEN

Since first lending to sheep farmers back in 1849, Standard Bank has seen its share of agricultural market trends in Africa. As interest in the continent's agriculture sector grows – among players ranging from sovereign funds, to multinational corporations, to Asian, Brazilian and American farmers setting up their own plots – the banking sector will prove critical.

In the past, many banks – both global and local – shied away from the sector, which was seen as high risk and low return. Not so with Standard Bank, which promises to meet the financing needs of players all along the value chain provided the price is right. Mohit Arora, head of agriculture for Africa at the Johannesburg-based bank, believes that when the sector is explored in full – from the smallest producer up to the processors and mass retailers – it provides ample opportunities for banks to sink their teeth into.

Retail is of particular interest. The first signal came in 2011, with the $2.4bn purchase of South Africa's Massmart – which had operations in over a dozen African countries – by Walmart, the world's largest retailer. South African mega-retailers have been carrying out acquisitions and greenfield investments in several countries, and regional players like Kenya's Uchumi are expanding too.

Driving the investment is an unusually high proportion of retail spending as a proportion of GDP. "Retail spending in Africa is close to 60 percent of GDP, and most of that is on food," Mr Arora explains. This high share is "rather unusual for an emerging market like Africa. Even though savings levels may not be up to [those in] India or China, people like to live a good lifestyle and associate themselves more with Western markets."

Asked how he would characterise the investment flows, Mr Arora describes them as a "big flow of small stuff", if one excludes the Massmart deal. "In terms of ticket size, if you look at M&A activity [in agriculture and food retail] throughout 2010 and 2011, there was something like $5bn spread over 100 deals. When you take out the Massmart deal, the average ticket size is $25m," he explains.

That may be a function of Africa's small and fragmented markets, but the continent cannot be characterised as a wild frontier. In fact, those not looking at Africa might already have missed the boat, Mr Arora says. "When I look at the momentum, in some countries things are already getting expensive and mature – with asset prices increasing and cash flows stabilising or decreasing, reflecting a mature market dynamic. If somebody isn't already there, I would worry for them."

And it is not just corporations. Entrepreneurs and farmers from Brazil, India, the UK and the US are also moving to Africa to try their luck. The biggest markets historically have been Zambia, South Africa and Namibia. Countries now receiving growing attention are Angola, Nigeria, Ghana and – to a lesser extent – Uganda. "There has been quite a lot of investor focus and significant equity flows in these locations over the last couple of years," Mr Arora says.

The full scale of agricultural activity might be missed because too often the definition of the sector is on "NGO-type small farmers, which banks can shy away from," Mr Arora says. "But if you sit down with a bank and ask how many traders, private equity funds and processors they work with, then you get a different picture."

Standard Bank has positioned itself as a universal lender to the agriculture sector. "We would service a wide gamut of client needs – from capital markets support, to M&A transactions, to project finance, to trade and working capital for processors, farms, retailers, and commercial farms. You'll see us dealing with large Western corporations who are excited to get into Africa, and also with small to mid-sized cross-border investors from the US, the UK, India and Dubai."

A common refrain in Africa is that banks are not interested in the agricultural sector, or at least not on the smaller end of the scale. Mr Arora denies this. "We do not confuse size with credit quality," he says. "Even if a farmer is small, if he can demonstrate a successful repayment history, has kept track of his production data and financials, banks will be willing to lend." This holds true for other banks as well, he claims. "When I talk to my peer group of banks, everyone is looking for quality deals."

"When I look at the momentum, in some countries things are already getting expensive and mature – with asset prices increasing and cash flows stabilising or decreasing, reflecting a mature market dynamic. If somebody isn't already there, I would worry for them"

The smallholder farmer continues to occupy a central place in discussions about agriculture in Africa, in part due to the nature of land distribution and the political interest in supporting this important constituency. While some have criticised this focus as too NGO-driven and lacking in scale, Mr Arora believes history suggests otherwise. "It is a myth to associate small farmers with lack of productivity," he says.

"Let's look at America. People often forget that most American farms are fairly small... Then there are examples like Japan, where most farms are two hectares. Japan can still grow food. India is another example. Sixty to 70 percent of the population are in agriculture, and on average across Indian states by law you cannot have more than 10 hectares of land."

Despite this high level of production-side fragmentation, "across commodities India is a top producer at competitive cost," he says. Milk is an example: "Most of the farmers do not have more than a few cows," but the country produces 65 percent more milk than the US at a cost around 50-60 percent lower. Further, Indian milk production is more environmentally sustainable compared to high intensity production environments in the West, he claims.

A risky business

None of this should give a glossy picture of the agriculture sector, which can be an extremely risky business, Mr Arora acknowledges. While many interventions could help – including better infrastructure – access to risk mitigation tools could prove vital in offsetting building challenges.

Contrary to popular opinion, weather is not the primary issue in production or agricultural industries, he says. "When all is said and done, interest rates are the biggest risk in Africa. Country-level inflation figures are a yo-yo and most small to mid-sized agro industries and farms borrow in local currency on a floating rate basis, over five to 10 years. A simple change in interest rates can wipe out most of their equity."

General equity levels in projects across this sector (from food to production) range from 20 to 40 percent. "If you look at interest rate volatility on local currencies, you can lose 10-15 percent of the equity. Then add commodity volatility, which is easily 30 percent. The day you start, even if you bring in 50 percent equity, you are barely covering yourself from a market risk perspective."

Mr Arora believes market risk – comprising currency, commodity and interest rates – counts for around 50 percent of total risk for agricultural producers, with weather changes at around 15, and the remaining risk comprising 'operational' challenges around technology and inputs. Yet despite these considerable challenges, the sector remains attractive to banks and is key to the success of Africa. Greater institutional innovations to iron out those problems could do wonders for the sector's profitability and stability.

Spreading the wealth

A growing body of research shows that agriculture sector growth is a powerful driver of poverty reduction

ADAM ROBERT GREEN AND ADRIENNE KLASA

Agricultural growth is one of the most effective ways to support the livelihoods of the poorest. With the majority of the African population either dependent on agriculture for work, or spending most of their income on food, the productivity of this sector directly shapes welfare outcomes for millions.

Most Africans remain bound to agriculture, with around 60 percent of the workforce engaged in this sector. Roughly the same percentage of the population lives in rural areas, although this reaches up to 70 percent in east Africa. The dependence of the labour force on agriculture is high in the likes of Burkina Faso (92 percent), Rwanda (89), Burundi (88), Niger (80) and Guinea Bissau (80).

A recent seven country study by the International Food Policy Research Institute found that agriculture-led growth consistently led to greater poverty reduction than non-agricultural sector growth. In Rwanda and Kenya, 1 percent of national GDP growth driven by agriculture led to three to four times more poverty reduction than equivalent growth driven by other sectors.

Although export crops deliver profits to some exporters and foreign exchange to countries, in several cases growing food staples is proving even more effective at reducing national poverty, according to IFPRI data. In Rwanda, for instance, growth driven by maize or pulses is 30-60 percent more effective at reducing poverty than export-driven growth. Mozambique shows a similar trend, with growth driven by maize and other cereal crops showing larger impacts on poverty reduction than similar rates of growth in export-oriented crops.

One reason for these outcomes is that yield improvements in staple crops not only benefit households by increasing incomes from production, but also allow farmers to diversify their land allocation towards higher-value crops.

The gender dimension is also salient. Two thirds of economically active women in sub-Saharan Africa work in agriculture, and are disproportionately represented amongst the poor. And aside from generating greater incomes for rural communities, improved agricultural productivity impacts the urban poor by lowering prices for food products.

Changing agriculture, changing livelihoods

No country better exemplifies the agriculture-poverty link than Ghana, whose developmental fortunes have been intimately tied to sectoral reforms. The proportion of the Ghanaian population living below the extreme poverty line declined from 36.5 percent to 18.2 percent between 1991/2 and 2005/6. Agriculture, which accounts for 56 percent of employment and 30 percent of GDP, was a key driver of this change.

"The strategies of the Ghanaian government were based on the notion that the majority of Ghana's working population continues to depend on smallholder farming for their livelihoods and typically they cultivate small acreages," says Ram Bhavanani, Ghana's former agriculture minister.

The cocoa sector has been a particular focus, and reforms to Cocobod – the industry's national regulatory board – have supported the incomes of smallholders and the competitiveness of the sector.

Factors contributing to Ghana's agricultural performance include the "commercialisation of agriculture through financing, irrigation for rice, mango, and cotton farming in the north and improved land administration to promote large scale agriculture," says Mr Bhavnani. High cocoa prices on international markets also helped.

As well as liberalising Cocobod, the government has experimented with interventions to support farmers. To improve access to capital, it introduced the Microfinance and Small Loans Scheme (MASLOC). Infrastructure has been upgraded, particularly road networks: the percentage of roads maintained or rehabilitated grew from 65.4 percent in 2007 to 76.0 percent in 2008 alone.

Global evidence indicating the primacy of agricultural growth for poverty reduction holds true for the Ghanaian case. Each percentage point increase in per capita GDP led by growth in agriculture corresponds to "a 1.71 percent reduction in the national poverty rate, compared to a poverty-to-growth elasticity of -1.16 for manufacturing-led growth and -1.30 for private service-led growth," according to IFPRI.

Ghana's productivity has also increased. Total domestic production of major staples increased from 21,044,000 megatonnes in 2006 to 24,097,000 megatonnes in 2008. Estimated national consumption showed food sufficiency for all relevant commodities year round, despite the 2008 global food crisis. Access to food markets also improved, with the number of districts facing access difficulties dropping from 14 in 2005 to 10 in 2008.

Getting it wrong

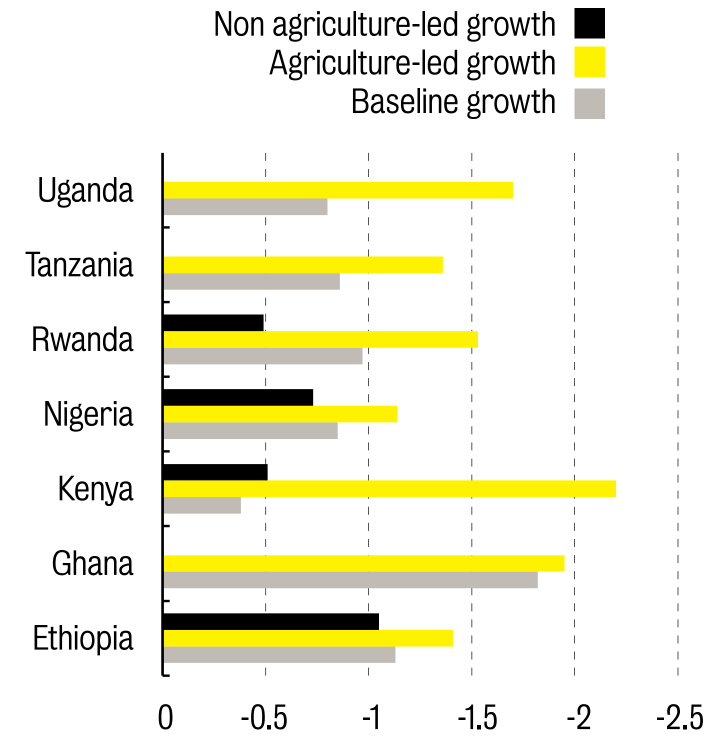
If Ghana shows the benefits of supporting agriculture, the Horn of Africa and the Sahel are examples of the potential consequences of neglecting it. Here, ecological stress, climate change, and poor agricultural productivity have placed great strain on populations, displacing communities and catalysing conflict.

Jeffrey Sachs, director of the Earth Institute at Columbia University, identifies a close link between ecological strain and the kinds of conflict which have erupted across Africa's most water-stressed zones. "These are drylands that are always on the edge of survival. When the rains fail, violence breaks out. This is a very clear, stark and statistically proven pattern."

PHOTO: GETTY

Local farmers gather dried cocoa beans in a village outside Kumasi, Ghana

Poverty reduction and agricultural growth*



*Percentage change in national poverty rate resulting from a 1 percent increase in total GDP growth rate, 2012
Source: IFPRI

PHOTO: GETTY

Mr Sachs wants Western governments to pay more attention to these regions and provide assistance for boosting rural development. Recalling a trip to Mali in 2005, he says: "President Touré said to me: 'This country is in a lot of distress, especially the north. Help me address the 166 poorest communes of this country.' And we worked together with the government on a programme focused on practical agriculture, animal husbandry, health and education for the poorest communes."

But Mr Sachs had difficulty securing buy-in from the international community. "The response was: 'Mali? Who cares?' It proved hard to get even two people to a meeting on the subject," he recalls. Then came the violence, the coup and the bifurcation of Mali by rebels last year. "There was a meeting on the Sahel at the UN with hundreds of people attending, including foreign ministers and heads of state from Western countries. They were paying attention. But why? Not because of the poverty, that had been going on forever, but because of the violence. And what was their main focus? Military. Strategic. We have to learn to look a little bit below the surface to understand the deeper roots of some of these crises and not just wait until the worst has hit."

State action

In Africa, governments have always intervened in agriculture – with divergent records of success. Omotunde Johnson, Sierra Leone country director for the International Growth Centre at the London School of Economics and a former IMF official, believes the state needs to provide a complex range of public goods to enable the serious commercialisation of agriculture.

"You should develop and implement strategies to diversify the economy, by emphasising education – literacy, mathematics, science, engineering; infrastructure development; skills training to facilitate industrialisation and export diversification; and sophisticated services and service delivery by private enterprises."

One of the most profound investments governments can make to support agriculture is in the area of infrastructure. According to IFPRI, only one fifth of the rural population of sub-Saharan Africa lives within one hour of a market centre, while more than one third are five hours or more away. This number rises to more than half in countries such as Congo, Ethiopia and Rwanda. High transport costs are well-documented, and can prove a major impediment to market access for the rural poor. For instance, average costs and times for moving goods, per tonne, along the main trade routes of the Economic Community of West African States (Ecowas) are 400–1,000 hours of time and $175-$310.

But one should not assume that raw spending quantity – on infrastructure, subsidies or input supports – are desirable indicators in themselves. How and where governments spend money is much more important. While the African Union is pressing for 10 percent of government spending to be directed towards agriculture, the experiences of countries elsewhere suggest quantity is not the essential factor. IMF data shows that Brazil, China and Thailand – high performing agricultural producers – spent less than 10 percent of their national budgets on agriculture. In fact, between 1989-1997, the three spent 2.5, 5.4 and 9.8 percent of their budgets on the sector respectively, falling to 3.8, 3.3 and 6.6 percent in the 1998-2005 period.

Large government outlays can even hold agriculture back if they disturb the incentives of producers. In 2011, Zambia's government began subsidising the price of maize sold by the Food Reserve Agency to maize millers. The government hoped that by receiving maize at subsidised prices, millers would pass along the discount to Zambian consumers in the form of lower retail maize meal prices. But little of the costs incurred in providing maize at below market prices benefited urban consumers. Instead, it boosted the profit margins of the selected millers. And most small-scale and informal sector maize millers had no access to the subsidy, which – by pushing some out of business – undermined the diversity and competitiveness of the Zambian maize sector. Malawi's maize subsidy, meanwhile, was heralded as a success when launched – but one unintended consequence is that farmers have increasingly focused on cultivating maize at the expense of cassava, a more drought-resistant crop.

Climate risks

Not all of Africa's agricultural fortunes rely only on African governments and local or foreign companies. To some degree, international coordination is required to deal with one of the biggest emerging threats to the sector: climate change.

Warming of 2°C could result in a 4 to 5 percent permanent reduction in annual income per capita in Africa and South Asia, as opposed to minimal losses in high-income countries and a global average GDP loss of about 1 percent. These losses would largely be driven by impacts on agriculture. Major cereal crops such as wheat, rice and maize are already at their heat tolerance threshold, and with an increase in temperature of between 1.5°C and 2°C production could collapse.

These threats go far beyond the ability of individual governments to address, and will require much greater engagement from the international community to help low-income countries to adapt.

IFC, a member of the World Bank Group, combines investment and advisory services to help agribusinesses build sustainable supply chains in emerging markets. With over $4 billion in agribusiness investments per year, IFC addresses key constraints to increasing global food security and expanding market access for smallholder farmers.

IFC's commitment to agribusiness

Photo: Curt Carnemark/The World Bank

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