Future Agricultures

CAADP Policy Brief

Supporting small farmers to commercialise

Accelerating growth in the agricultural sector by raising the capacities of private entrepreneurs – smallholder and commercial farmers – to meet the increasingly complex requirements of domestic, regional and international markets, is the central aim of CAADP Pillar II[i].

Commercialisation is about increasing engagement with markets[ii]. Smallholder farmers have long been engaged with markets for produce, inputs and information. Urbanisation, better communications and globalisation make understanding smallholder commercialisation all the more important.

This policy brief draws on recent research by Future Agricultures[iii] and asks:

- How do small farmers commercialise?
- What have been the outcomes of small farmer commercialisation?
- How can policies support smallholder commercialisation and encourage good outcomes?

How do small farmers commercialise?

Most cases of small farmers commercialising do not involve radical changes. Rather, small farmer commercialisation usually occurs within existing farming systems, carried out by households using their own labour. Changes are often small and incremental, although they may form part of a series of small steps that add up to quite substantial changes in the farming system. Dramatic changes tend to be limited by land tenure arrangements which limit the area a household can farm, and preference for organising labour within households (except during peak seasons).

Commercialisation does not necessarily mean specialisation. Most farmers also want to produce staples for home consumption, due to fears about availability and cost of food on the market. They are also often reluctant to risk relying on a single crop for their income.

What has led to commercialisation?

On the **demand side,** higher prices and better access to markets; and on the **supply**

side, diffusion of improved technology: both may result from public policy and investment.

Improved roads can reduce transport costs to markets and increase farm-gate prices. Urbanisation increases demand for agricultural products from surrounding areas, especially fresh and perishable products. Prices and production can also rise as currencies devalue and prices of export prices rise – for example, cocoa prices in Ghana in the 1980s with the devaluation of the cedi. State agencies offering guaranteed prices across the country can give farmers in remote areas higher prices than traders can offer, boosting production – as with maize from the Southern Highlands of Tanzania in the 1980s.

Technical advances can improve the productivity of crops or livestock, or they can reduce risks. These include formal innovations from research stations passed on by extension, as well as practices developed by farmers themselves. Generally, however, technology alone does not lead to enhanced production unless there is also market opportunity.

Obstacles to commercialisation

Traditional land tenure with usufruct rights under collective tenure is sometimes seen as a disincentive to investment in land. However, most evidence shows that farmers under such tenure invest and conserve their land to the same extent as those with freehold titles. Lack of land titling does prevent farmers from pledging their land as collateral, but risking land may not be good practice for small farmers operating under production and market uncertainties.

Larger farms are assumed to have economies of scale that give them greater returns when commercialising. However, there is little evidence of this on-farm for most crop and livestock production. In fact, the reverse may be true – inefficiencies set in when farms reach a size where most labour has to be hired in.

Economies of scale do arise in the supply chains: in processing and in getting access to capital, inputs and information. Smallholders often find it difficult or costly to get inputs, credit and insurance because of their size. This slows their development, but many small farmers do manage to invest and innovate. However, large suppliers have an advantage in supplying international and other markets demanding high-value produce: meeting standards; obtaining certification for quality and production methods; and delivering uniform large lots to strict schedules. Small farmers are being squeezed out of their former markets, as from horticultural exports in Kenya and Senegal, and pineapples in Ghana.

How do small farms link with larger businesses in supply chains?

Supply chains are diverse. Some are **decentralised, fragmented and competitive,** such as those linking farmers to domestic markets for perishable goods like milk and vegetables (Box 1). Here, farmers sell to small-scale traders in spot deals. Traders then deliver to wholesalers, small retail stores or directly to consumers, with little or no processing.

Other supply chains are **centralised and integrated.** Farmers – sometimes through traders – deliver to large-scale enterprises that process, grade, pack and deliver to wholesalers or retailers with demanding requirements for uniformity, quality and timing in bulk lots. This happens where there are large threshold economies (such as sugar) or processing is

critical to quality (tea); when working capital requirements are high; and when production methods matter either for quality of product or for certifying conditions of production.

Contract farming is a common way for small-scale farmers to enter such chains – farmers enter into agreement with a private company to supply produce in return for inputs, technical assistance and marketing. This overcomes difficulties of getting seasonal credit, whilst the company is assured regular supplies from farmers.

Outcomes of commercialisation

Farmers can achieve higher gross margins from commercial crop and livestock products than from their traditional enterprises, thereby increasing their incomes. Examples include coffee and dairying in central Kenya, tomatoes in Brong-Ahafo, Ghana, and horticulture in Lume Woreda, Ethiopia (Box 2).

Landless and marginal farmers can also benefit from extra jobs being created in dairying, horticulture and other cash crops[v] and through

Box 1. Small-scale cabbage growers and markets: Kenya[iv]

Horticultural production in Kenya is valued at US$2.4 billion, with cabbages alone worth over US$140 million. Nyandarua County supplies around half of the cabbages sold in Nairobi's main Wakulima market. The typical Nyandarua farmer cultivates less than 1 ha and derives income from a range of crops, livestock and off-farm sources. Roughly a third of farmers grow cabbages on small plots of around 0.1 ha, with production averaging 2 tonnes per year.

The farms are very engaged with markets, managing risk by diversifying. However, this means they don't take advantage of scale economies in production or marketing and are not specialised enough to ensure they are at the cutting edge of costs of production, productivity and profit maximisation. This poses a challenge to policymakers under Kenya Vision 2030: how to encourage farmers to specialise in larger stands of fewer crops and enterprises.

The government provides extension services for commercialising production, raising productivity, building capacity and forming groups. Though currently supported by two donor-funded projects, resources and staff limit government efforts. Private sector seed companies and NGOs also play a role in promoting commercially-oriented cabbage production. Small local stockists supply seed and other inputs, as well as the latest information on seed varieties, chemicals and diseases, and offer credit and discounts to farmers they know.

Farmers grow a number of varieties of cabbage with differing characteristics, costs of production and prices. The average cost of producing a cabbage under rainfed conditions is KSh5. The prices farmers receive are highly sensitive to seasons and grades. Most farmers get the lower prices (around KSh10) most of the time. The few who invest in irrigation get better prices more of the time.

Farmers market around 80 percent of their production through brokers hired by wholesalers/ traders on a commission basis. Brokers locate produce, negotiate prices with the farmers, pay a deposit before harvest, and organise transport from the farm. The brokers are useful to traders, moving around between farms to fill a truck and get it to market as soon as possible. A known broker is useful to the farmer, especially when supply is plentiful, advancing a percentage of the final price. Brokers also operate in the main Nairobi markets, Wakulima and Gikomba. When a consignment arrives, a broker negotiates a price and sells it on to other wholesalers, helping the market function smoothly. The Cabbage Traders Association ensures that contracts and obligations are met. Wholesalers supply retailers serve the mass market as well as high end supermarkets across Nairobi.

A cabbage that costs KSh5 to produce, and is sold by the farmer for KSh10, ends up selling at KSh40-120. Being in the cabbage business can generate a decent income, but this may be little more than the minimum return to cover investment, time, costs and risks involved by the different market players. There may be potential for improvement in the performance of Kenya's domestic horticulture market, reducing margins and reconfiguring the balance between producers, traders and consumers. The Vision 2030 policy of encouraging farmers to specialise in a narrower range of crops is running up against farmer preference for different enterprises to address risk and seasonality. So far the market has not provided an incentive for producers to make investments like irrigation to reduce these risks.

Small-scale farmers supply most of the cabbages in Nairobi markets through brokers

linkages in the local economy. Multipliers in rural Africa may be particularly high, since so much of small farmers' additional income is spent in the rural economy.

What of possible drawbacks? There are concerns that growing cash crops may reduce **household food security.** Yet few cases have been identified where small farmers sacrifice home consumption to grow crops for sale. Households producing more cash crops generally produce more food, using their cash to buy inputs to intensify production.

Commercialisation can however lead to **greater differentiation** in rural societies, with widening gaps between those commercialising and their neighbours. Whilst those at the bottom are becoming less poor, this may not necessarily be a major cause for concern. But what if these imbalances persist and worsen over time, with already better off households gaining greater advantage than others? It can take time before marginal farmers adopt cash crops or the benefits of commercialisation feed through to the local economy.

Commercialisation can increase **gender differences**, since commercial opportunities are often more accessible to men, who may use their advantages to pre-empt control of household resources and income. In The Gambia, women cultivating vegetables for export led to men seeking to take over the gardens. In the same country, attempts to irrigate rice foundered when the fields were worked by women, with men taking the earnings. For commercialisation to increase gender differences, there have to be existing tensions over roles. External interventions need to be wary of potential impacts on gender roles and outcomes.

Commercialisation of small-scale farming can expose small farmers to **increased risks** in prices in the market and in production. This could lead to disaster, having to sell the farm to cover bad debts, but such outcomes are rare. Farmers try to reduce risk by diversifying production and limiting cash spending on the commercial crop. Downsides are that diversification reduces potential gains from specialisation, and lower investment means applying less than optimal amounts of fertiliser or hired labour.

Increased commercial production can increase **environmental damage**. While intensified and expanded production can be harmful to the environment, alternative uses may be no less damaging: expanding subsistence cultivation on valuable habitats or increasingly marginal land which is susceptible to degradation. Moreover, in some cases commercialisation has helped conserve resources. Degraded areas in Machakos, Kenya were transformed through investment in conservation measures by small farmers moving into coffee, dairy and green bean production for Nairobi markets. Similar improvements with intensification have been seen in Burkina Faso.

External shocks from sudden policy changes, falling world prices and more stringent market requirements hit commercial small farms hard. Pineapple farmers in Ghana suffered losses of European markets due to competition from a different variety in Costa Rica, which led to a restructuring of Ghanaian production that excluded many former small growers. The highly demanding GlobalGAP standards applied to export horticulture in Kenya and Senegal led to many small farmers losing an export market. Some growers in Kenya were able to switch to the domestic market, while in Senegal some larger farmers managed to meet the standards and hired in many poor labourers.

Box 2. Small farmer vegetable commercialisation: Ethiopia [vi]

Despite decades-old knowledge on irrigation, irrigated crops have not been widely cultivated for market by small farmers in Ethiopia. Now, small-scale irrigation development, improved extension services and rapidly growing domestic demand have boosted vegetable production and commercialisation of small farmers. Sustaining this trend requires institutional and policy support. Production and export of horticultural crops is a priority for the Ethiopian government. All-round support and incentives are available to large-scale domestic and foreign private investors; while support for smallholders has generally been limited to extension and technical training, rather than marketing and business support services along the whole value chain.

The Lume Woreda Small-scale Irrigation Programme is a case where the Agricultural Office has been supporting small-scale farmer production of horticultural crops, primarily for market, since 2005. Good water supplies, slightly larger landholdings[vii] compared to other parts of the Ethiopian highlands, and proximity to Addis Ababa markets provide favourable conditions for intensive horticultural production. Strategic state support has been crucial in helping small farmers seize these opportunities.

From 2010 to 2012, most households increased the share of their land planted to vegetables, on average from 13 percent to 25 percent per farm. Production has increased rapidly, though not all crops have experienced equal growth: onion production grew by 125 percent from 2010-12, whilst tomatoes declined by 40 percent. Farmers frequently switch crops following prices in preceding years and expectations of future demand (as well as non-market factors such as pests). There has been a gradual shift from diversified production to more specialised production – though not to single enterprise farms.

Most farmers managed to improve the productivity of their farmlands, but there is a wide gap between the best and worst performing households, indicating opportunities for further intensification. Specialising in cash crop production has not generally lessened household food security. Farmers have become more outward-looking, investing in their farm and children's education.

Since the emergence of irrigated vegetable production there has been a dramatic rise in the hiring of labour from nearby land-scarce and low fertility areas. This, together with increased demand for farmland and credit, points to positive multipliers in the local economy from commercialisation.

Benefits of commercialisation can be sustained and consolidated if farmers are supported along the value chain: in accessing long-term credit, post-harvest handling and output markets. Support for lower performers – with farm inputs, storage facilities, irrigation infrastructure and the formation of groups to seek economies of scale in obtaining finance, inputs and marketing – can create large potential gains, if efforts are made to learn and scale up practices of farmers harvesting high yields. In marketing, there is scope to improve the seasonal mismatch in demand and supply and facilitate linkages between producers and potential buyers in nearby towns.

Policies to promote commercialisation with good outcomes

Policies need to address two main areas: promoting increased productivity and production for sale; and linking farmers to markets in effective, efficient and fair supply chains.

Priority policies for **higher productivity** are those ensuring a favourable investment climate and the supply of public goods. The former include peace and security, stable economic conditions, fair levels of tax and predictable policy. These need to be complemented by rural public goods which farmers depend on: roads, irrigation, health, clean water, research and extension. Public spending on these pays off, with higher returns than spending on private goods such as subsidies for inputs.

Beyond these fundamentals lie challenges of levelling the playing field so small farmers can commercialise, and reducing their costs of doing business. There are no general simple solutions: sharing existing experiences would help in learning lessons.

Linking farmers to markets means enabling them to access improved inputs, finance, advice and market information. To overcome high

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Small-scale irrigation and growing demand are boosting small farmer horticulture in Lume, Ethiopia

transaction costs when small farmers interact with large enterprises in supply chains, three types of policy have been used. One is establishing **government parastatals** to organise the entire supply chain. Their record has been disappointing – parastatals are expected to meet political and social objectives as well as run a business, whilst lacking incentives as public monopolies to work efficiently. Many were wound up or cut back when economies were liberalised from the mid-1980s.

Another option is forming **farmer associations and cooperatives** to gain economies in marketing and input provision, and to provide countervailing bargaining power to big business in the supply chain. There have been frequent failures due to mismanagement, attempting to do too much, and having too wide a membership, making it difficult to hold leaders to account. However, where associations are focused around simple and straightforward business tasks, they are much more successful – for example, the National Farmers' Association of Malawi (Box 3).

The third solution is to have large private enterprises run the supply chain through **contract farmers**. Governments may need to offset imbalances of power between farmers and enterprises by ensuring that farmers' land rights are secure, that farmers have access to information on technology and markets, and that farmers are helped to negotiate a fair deal. They can encourage contracting by facilitating contacts; providing information such as model contracts; supervising or regulating contracts; underwriting promising schemes; guaranteeing returns to investors and farmers; providing roads and other public goods; or subsidising investments for start-up or innovative schemes.

Given limited budgets and administrative capacity, it is not possible to do everything to support small farmers at once. Sequences of policies need to be devised which first address the tightest bottlenecks and activities, following well appraised technical proposals with low risk, before moving to more risky, unproven areas[viii]. Fortunately, most policies and programmes for a positive rural investment climate and rural public goods are relatively straightforward. Ghana, with one of the fastest growing agricultural sectors in Africa, probably owes most of its progress since the mid-1980s to prioritising these measures.

The future for commercialising small farms

Analysis of the main strengths and weaknesses facing smallholders (Fig. 1) shows that small farmers can be low-cost, competitive producers, but they have limited access to inputs and capital and therefore difficulties in meeting the demands of high-value supply chains. Opportunities for small farm commercialisation lie in the growth of domestic and international markets; large areas of land which are currently under-utilised but could be developed; technological advances from biotechnology; and developing agroecological systems such as conservation farming.

Potential threats come from climate change – though these may be managed through more resilient farming systems and using regional trade to balance out harvest fluctuations.

Box 3. Farmer organisations and commercialisation: Malawi [ix]

The National Farmers' Association of Malawi (NASFAM) is a farmer-directed business system with over 100,000 members, most of them farming on less than 1 ha. Farmers are organised into Clubs, Action Groups and Associations for extension services and marketing of inputs and produce such as groundnut, rice, chilli, cotton, soybean and tobacco. NASFAM aims to change perceptions of smallholders from 'farming to subsist' to 'farming as a business'.

Farmer organisations can play a vital role in facilitating small farmer commercialisation by providing technical assistance and technology to increase yields; securing better prices for members' produce and inputs by buying in bulk; increasing smallholder farmers' knowledge in business management; and promoting market access.

NASFAM members have significantly improved their access to extension, inputs and markets and increased their incomes. However, not all farmers participate in NASFAM commercialisation initiatives. Farmers' decisions to participate, and the extent to which they are able to commercialise, are hampered by credit market constraints, food insecurity, gender biases in access to land and capital, and greater domestic responsibilities for women which reduce labour available for farming.

Microcredit would increase farmers' access to resources and inputs, enabling them to raise productivity or scale up activities and enter markets. Policy-makers should also prioritise creating access to stable food markets, as instability may be constraining farmer attempts to commercialise. Food markets in Malawi can be made more functional by addressing constraints facing private traders which limit movement of maize across seasons and integration of markets: inadequate storage, lack of access to capital, poor infrastructure and unpredictable government interventions.

A more targeted approach towards female farmers – addressing their constraints to market participation, such as poor access to credit – would have positive spill-over effects for their households' welfare. Investing in young farmers would provide livelihoods to a group beset by underemployment and unemployment – and kick-start small farm commercialisation.

Fig. 1: Small farmer commercialisation in Africa: SWOT diagram

Strengths • Self-supervising, diligent labour • Knowledge of land and local conditions • Flexible production	***Weaknesses*** • Limited access to capital, inputs • Risks in production and marketing • Meeting standards of some supply chains
Opportunities • Urban growth • Asian markets • Large areas of under-utilised land • Technical advances, some already known, others likely in future	***Threats*** • Climate change • Land alienation • Evolving supply chains with more demanding requirements • Policy biases

International supply chains are biased towards large-scale farms and buying in bulk. Policy may be biased against small farmers, particularly the threat of land allocations to large-scale farms. Over the next 10-20 years many of the continent's 33 million farming households will, in the absence of adequate resources, be looking for off-farm jobs or moving to cities. With the right support, a significant number could become successful commercial farms.

Key points for policymakers

- Some of the measures to help small farms commercialise are relatively straightforward: ensure a favourable rural investment climate, and provide public goods such as roads in rural areas as effectively and efficiently as possible.
- Small farmers need to be supported to link with opportunities in rewarding supply chains – through farmer associations or contracts with agri-business.
- Prospects for small farmers are much better if there is overall economic growth, with the urban economy growing to create jobs markets. As China has found, there is no inevitable contradiction between agricultural and urban development.

End Notes

i Comprehensive Africa Agriculture Development Programme (CAADP): Framework for improving rural infrastructure and trade-related capacities for market access. Pillar II, Food and Markets

ii Commercialisation is about increasing the proportion of crops and animal products destined for sale, and increasing inputs and factors of production being acquired from markets. Indices to measure degree of commercialisation include value of farm sales over value of farm production. However, commercialisation indices are problematic since very poor farmers selling much of their harvest to repay debts can appear as commercial producers.

iii Wiggins, S., Argwings-Kodhek, G., Leavy, J. and Poulton, C. (2011) Small farm commercialisation in Africa: Reviewing the issues, Future Agricultures Research Paper 023; Wiggins, S. (2012) Small farm commercialisation in Africa: A guide to issues and policies, Future Agricultures Policy Brief 050

[iv] Odame, H. (forthcoming) Cabbage production and marketing in Nyandarua, Kenya, Mimeo

[v] These enterprises tend to have high labour demands in comparison to most cereals and tubers.

[vi] Gebreselassie, S. (2012) Helping small farmers to commercialise: Evidence from growing onion and tomatoes for sale in central Ethiopia, Future Agricultures Research Update 03; Ibid. (forthcoming) Small commercial vegetable producers in Lume Woreda, Ethiopia, Mimeo

[vii] With an average of just over 3 ha, farms are still considered small.

[viii] Dorward, A. (n.d.) Sequencing of investments for agricultural growth, poverty reduction and food security, Future Agricultures Discussion Paper 1

[ix] Chirwa, E. and Matita, M. (2012) Factors influencing smallholder commercial farming in Malawi: A case of NASFAM commercialisation initiatives, Future Agricultures Policy Brief 051; Ibid. (2012) From subsistence to smallholder commercial farming in Malawi: A Case of NASFAM commercialisation, Future Agricultures Working Paper 37

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