

Small farm commercialisation in Africa: A guide to issues and policies

Small farmers in Africa have long been engaged with markets — for produce, inputs such as fertiliser, credit, labour, land and information. Opportunities to do so are increasing with urbanisation and better roads linking villages to cities, making questions that arise about

smallholder commercialisation all the more important.

Expectations about process and outcomes differ considerably. Some see small farms as being like any other business: given access to

Box A: Poverty traps in rural Africa?

Many small farmers in rural Africa use fewer inputs of improved seed, fertiliser, crop chemicals than expected, given the returns in higher yields to their use. Sometimes the cause is that farmers cannot afford the inputs, since they have little cash and cannot get seasonal credit. The transactions costs between smallholders and banks, it seems, are too high: banks are reluctant to lend to them since they know too little about the competence and character of the farmers.

This can hinder commercialisation both directly as well as indirectly: if farmers cannot raise food production through the use of improved technology, they may not be able to allocate land and labour to produce commercial crops.

Some, most notably Jeffrey Sachs (2004), see these problems as so severe as to constitute poverty traps. If small farmers are too poor to afford to buy inputs needed to increase their production, and cannot obtain credit to overcome their lack of liquidity, then they cannot raise production and remain poor, even when the technical means to raise outputs are well known.

This argument is one reason for the subsidies on seed and fertiliser that Malawi began to offer its small farmers in 2005 that have aroused so much interest across Africa — see FAC briefing by Chirwa et al. 2010.

markets, most farmers will invest, innovate and prosper. Others worry that small farms may face obstacles on account of having high costs of interaction ('transactions costs') with larger businesses in markets and so be unable to make use of existing technology, leaving them trapped in poverty — see Box A.

Some argue that farmers are only partly subject to market forces, that social ties and obligations means that capital has to be redistributed so there is too little to invest. Others expect that only some small farmers, those favoured with more land, labour and capital, will benefit from engagement with markets, leading to wider differentiation. Indeed, the better-off smallholders may then have the means to take over the land of their less fortunate neighbours. In the same vein, some see it as inevitable that smallholdings will soon give way to large-scale commercial farms, since they consider the former to be too small to be technically efficient.

What does the evidence show? How do small farms commercialise? What are the outcomes? Are the fears of undesirable outcomes justified? And what should policy-makers be doing to encourage better outcomes? This briefing reports the highlights of an extensive review of the literature on commercialisation of small farms in Africa.

Process of commercialisation

Most cases of small farmers commercialising do not involve radical changes. On the contrary, much, perhaps most, commercialisation of small-scale farming takes place within existing farming systems, within existing land tenure forms, carried out by households using their own labour, according to longstanding norms about who does what, and with what reward. Changes are often small and incremental,

although they may form part of series of small steps that eventually add up to quite substantial changes in the farming system.

Two things tend to prevent more dramatic change. One is land tenure: in much of Africa, collective forms of tenure allocate land for usufruct, limiting landholding to the area the household can farm. The other is the preference for organising labour within households, where labour is self-supervising and has incentives to be diligent: most small farmers are reluctant to operate farms with hired hands, other than for short periods at peak seasons.

Commercialisation does not necessarily mean specialisation. On the contrary, commercialisation may well be associated with diversification. Most small farmers want to produce a large part of staples for home consumption, owing to fears about availability and cost of food in markets. They are also often reluctant to take the risk of relying on one or two crops for their income.

What has led to commercialisation?

Two factors stand out: on the demand side, higher prices and better access to markets; and, on the supply side the diffusion of improved technology — both of which may result from public policy and investment.

Higher prices at the farm gate can come when improved roads cut transport costs to market; as towns and cities grow and demand supplies from surrounding areas, especially for fresh and perishable produce. Prices can also rise as currencies devalue and prices of export crops rise. For example, in Ghana heavy devaluation of the Cedi in the 1980s led to much higher prices for cocoa farmers. State agencies have in the past offered guaranteed prices across the country, no matter where, thereby offering farmers in remote areas prices well above what

traders could offer given transport costs — as was the case in Tanzania and Zambia in the 1980s for maize, leading to major increases in marketed surplus from remote areas such as the southern highlands of Tanzania.

Technical advances can improve productivity, remove an obstacle to producing crops or raising livestock in particular environments, or reduce risks in production. Although the literature highlights the contribution of formal innovation emerging from research stations and diffused by extension services, some innovations owe more to practices developed by farmers themselves — such as the planting pits ('zai') and stone bunds deployed on the Mossi plateau of Burkina Faso to retain soil and water. Technology, by and large, does not of itself lead to enhanced production and commercialisation, unless there is a market opportunity that makes it worth adopting.

Obstacles to small farm commercialisation

Some worry that small farmers with usufruct rights under collective tenure will neither invest in their land nor conserve it: land titling programmes often take this an article of faith. Most evidence, however, shows that farmers with such tenure invest and conserve their land to the same extent as those with freehold titles. Lack of title does however prevent farmers pledging their land as collateral for credit: but there are serious questions about allowing farmers to bet the farm when both production and prices in markets are variable.

Scale lies behind the other potential hindrances. Economies of scale do not apply on farm for most crops and livestock: on the contrary, there may be diseconomies of scale that apply when farms reach a size where most of the labour has to be hired in.

Economies of scale are, however, seen in the supply chains: in processing, getting access to capital, inputs and information. It is because smallholders are small, that transaction costs are high for them, making it difficult or costly to get inputs, credit, and insurance. This is not disputed. But it is difficult to know how serious this obstacle is. Given how many small farmers manage to invest and innovate in the face of high transactions costs, then they may be a drag on development, but not necessarily an absolute barrier.

This may differ by crop and market: transactions costs mount when small farmers try to supply international and other demanding markets for high-value produce, where requirements for certification of production methods and for leaner logistics increase by the year. Across the world, there are documented cases of small farmers being squeezed out of markets they once had: horticultural exports from Kenya and Senegal, pineapples from Ghana are examples.

It is widely suspected that traders dealing with small farmers exercise monopoly power to depress prices paid. While there is evidence of imperfect competition, and cases where prices to farmers have thus been held down, there are counter cases of competitive trading with low margins — especially when the high costs of transport and risks run by many traders are taken into account. Recent surveys in eastern Africa, moreover, show that most farmers can choose to sell maize to half a dozen or more traders.

Who commercialises?

Processes of commercialisation are uneven: even if markets are equally accessible and technology known to all in the village, response to these stimuli varies between farms. This should not surprise, since even within areas where

smallholdings dominate, substantial differences often apply in access to land, capital, labour, knowledge and skills.

If some farmers are more able to commercialise than others, what does this imply for the prospects of their less well positioned neighbours? They may benefit by imitating those commercialising, from additional local jobs on farms, or from multipliers in consumption as extra earnings are spent locally, thereby creating opportunities in the non-farm economy. On the other hand early movers may be able to take up opportunities and pre-empt others following them. Moreover, it could be that the more successful commercialising farmers are able to use their initial advantage to expand their holdings by buying up or renting land off others, thereby potentially undermining the livelihoods of their neighbours.

How do commercialising small farms interact with larger-scale businesses in supply chains?

Supply chains are as diverse in their integration and sophistication as the farms they serve. Some are decentralised, fragmented, and competitive; often seen linking farmers to domestic markets for perishable goods, for example, onions, tomatoes and milk. Farmers sell to small-scale traders, with more than one to choose from, in spot deals. Traders in turn deliver to wholesalers, small retail stores, or directly to consumers, with little or no storage or processing.

Other supply chains, however, are **centralised and integrated**. Farmers deliver — sometimes through traders — to large-scale enterprises that process, grade and pack output, and deliver to wholesalers or retailers with demanding requirements for uniformity, quality and timing,

in bulk lots. These arrangements are found when processing has to achieve large threshold economies, as applies for sugar, or when processing is critical to quality, as applies to tea; when working capital requirements are onerous for small farmers; when quality may not be immediately apparent — for example, pesticide residues; and when the production methods matter either for quality of product, or for certifying the conditions of production.

An increasingly common way that farmers enter such chains is through **contract farming** where a private company enters into agreement with farmers to supply produce. The contracting processor provides farmers with inputs, technical assistance and marketing — thereby overcoming difficulties in getting seasonal credit — in return for an assurance of getting regular supplies from the farmers.

Success depends on there being a good business opportunity that neither processor nor farmer could easily seize without the participation of the other. It helps if the market is reasonably stable and the promised price is in line with the spot market; as well as when there are few opportunities for farmers to sell on the side to some other buyer..

Outcomes from commercialisation of small farms

Farmers can achieve higher gross margins from land and labour used for commercial crops compared to former uses, thereby increasing their incomes — examples include coffee, dairying and vegetables in central Kenya, tomatoes in Brong-Ahafo, Ghana, and tomatoes and peppers in south-west Nigeria.

The farmers are not the only ones to benefit: under the right conditions, linkages in

production and consumption should lead to extra jobs being created in the local rural economy, to benefit landless and marginal farmers unable to commercialise. Multipliers in rural Africa may be particularly high, since so much of the additional income to small farmers is spent in the local rural economy.

What of possible drawbacks? A frequent concern is that growing cash crops may **reduce household food security**. Yet the evidence shows few cases where small farmers have sacrificed home production to grow crops for sale. Small farmers time and again prioritise growing most of their main staple food. Indeed, generally households that produce more cash crops, also produce more food crops, since they can use cash to buy inputs to intensify production of staples, and in some cases rotation of crops means that cereals benefit from residual fertiliser on fields used in the last season for the commercial crop.

Commercialisation can however lead to **greater differentiation in rural societies**, with widening gaps between those commercialising and their neighbours. This unwelcome news prompts two additional questions. One is how much concern there should be over widening gaps between rural households, so long as those in the lower echelons are becoming less poor. There are few reports of those at the bottom of the income distribution actually becoming worse off.

The other question concerns outcomes through time. The initial phases of commercialisation are almost bound to see some households, already better off than their neighbours, gaining greater advantage than others. But does this imbalance persist? It can take time before more marginal farmers adopt cash crops, or before the benefits of multipliers feed through the local economy.

Outside of Africa, in North Arcot, Tamil Nadu, studies in the early 1970s showed that opportunities afforded by the arrival of green revolution rice varieties and supporting public policy were taken up by a minority of farmers. When resurveyed in the early 1980s, the new rice varieties had been adopted by the vast majority of farmers. Moreover, the largest proportionate gains in incomes accrued to landless labour, thanks to strong multipliers from agriculture to the rest of the rural economy.

There are fears that commercialisation can increase **gender differences**, since commercial opportunities are often more accessible to men who may use their advantages to pre-empt the resources of the household to earn income they can control. This can happen: examples can be seen in The Gambia when women have cultivated vegetables for export leading to men seeking to take over the gardens. In the same country, attempts to irrigate rice have foundered when the fields were worked by women, while men took the earnings. For commercialisation to increase gender differences further, however, there have to be unresolved tensions over roles already. That said, too many external interventions have been blind to potential impacts on gender roles and outcomes.

Commercialisation of small-scale farming can expose small farmers to **increased risks**, both with prices in the market and in production. Although this could lead to calamity, including having to sell the farm to cover bad debts, such outcomes are rare. This is because the common response to risk is to diversify production, limit cash spending on the commercial crop, and cope with economic misfortune by accepting low implicit returns to household labour. These responses have their downside: diversification sacrifices potential gains from specialisation; less investment means not applying optimal

amounts of fertiliser or hired labour. The variance of returns may be reduced, but so too is the mean.

More commercial production could mean **greater harm to the environment**. While intensified and expanded production can do so, these impacts need to be set against what might otherwise have occurred. If instead of commercial production, the rural population had to look to subsistence production for their livelihoods, chances are that they would use more land and push further into the extensive margin — converting valuable habitats and farming soils susceptible to erosion and degradation.

In some cases, moreover, commercialisation has helped conserve resources. For example, in the 1940s before commercial crops were planted, Machakos, Kenya saw widespread soil erosion and deforestation. Half a century later, the coffee, dairying and green beans of upper Machakos had justified widespread terracing, gully stabilisation, tree planting, and application of green manures, amongst other conservation measures. Similar improvements with intensification have been seen more recently in Burkina Faso.

External shocks from abrupt switches of policy, falling prices on world markets, and more exacting demands in supply chains can hit hard commercial small farms hard. For example, competition from a different variety of pineapple grown in Costa Rica caused a temporary loss of market in Europe for smallholders growing the fruit in Ghana, and led to a restructuring of production that omitted many former small growers. The application of the highly demanding EurepGAP standards to export horticulture in Kenya and Senegal led to many small farmers losing an export market. In Kenya, however, they were able to turn to the domestic

market, while in Senegal larger farms that could meet the standards hired in many poor labourers.

Policy to encourage commercialisation with good outcomes

Policies to promote commercial small farming 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 that ensure a reasonable investment climate, and the supply of rural public goods. The former include peace and security, stable economic conditions, fair levels of tax, and predictable policy: necessary preconditions for investment and innovation. But these need to be complemented by rural public goods on which farmers depend, including roads, irrigation; education, health, clean water; research & extension. Such public spending pays off, with returns higher than those for spending on private goods, such as subsidies on inputs.

Perhaps the most challenging part of promoting commercialisation by smallholders is **linking them to markets**: so that they can access improved inputs, finance to invest both long and short term, advice on technical matters, information on markets, and that they can sell their output reliably and to the standards and requirements of buyers. Much of the recent literature on commercialisation has been concerned with relations between small farmers and others in the supply chain.

To overcome high transactions costs when small farmers interact with large enterprises in supply chains, three responses have been used. One is to set up **government parastatal**

enterprises to organise the entire supply chain. The record of these has often disappointed: as result of being expected to achieve political and social objectives as well as run a business; and for lack of incentives as public monopolies to work efficiently. Hence they have tended to be costly both to government and the farmers they serve. Not surprisingly many were wound up or severely cut back when African economies were liberalised from the mid-1980s onwards.

Another option lies with forming **farmer associations and co-operatives** to gain economies in marketing and input provision and to provide countervailing bargaining power to any monopolists in the supply chain. In Africa, however, they have often failed, owing to lack of competence and honesty of their managers, often in collusion with the leaders of the co-operatives. These problems have been exacerbated by forming co-operatives that have attempted to do too much, and that have had too wide a membership making it difficult for members to hold leaders and managers to account. But if associations are restricted to simple and straightforward business tasks, there are hopes for a new generation of more effective associations.

The third solution lies in having **large private enterprises** run the supply chain, by contracting farmers. Contract farming may not need government intervention, but government may wish 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 farmers are helped to negotiate a fair deal. Governments may further encourage contracting by facilitating contacts, providing information including model contracts, supervising or regulating contracts. This may go as far as to underwrite promising schemes, guaranteeing returns to investors and farmers;

providing key public goods, such as roads; or even subsidising initial investments.

Political economy, administrative capacity and sequencing

It is easy to recommend policies to promote smallholder commercialisation, but more difficult to realise them in practice. The political economy of decision-making, administrative capacity in the public sector, and sequencing of measures are as important as technical considerations of ideal policies.

Several aspects of **political economy** can leave small farmers at a disadvantage — see here for FAC work on this. A belief that larger means more efficient, despite much evidence to the contrary in farming, can lead to large-scale farming being favoured in policy — all the more so when large farmers dominate national farmer organisations. Populist policies, such as subsidies and debt cancellations, appear to favour farmers, but often large farms disproportionately capture benefits,; while the heavy cost of such policies can be at the expense of investing in public goods. Governments are often tempted to regulate production and marketing. The results have usually either been ineffective, since they have been difficult to enforce, or else have prevented farmers from taking advantage of opportunities. Overall, it is surprising just how little influence on policy small farmers often have, despite their numbers.

Capacity in staff, funds and expertise limits what public policy can achieve. This has prompted debate over what ministries of agriculture may reasonably hope to achieve in rural Africa — see here for more detailed FAC work on this — with views ranging from favouring a return to days of large and seemingly powerful ministries with interventionist policies to preferring minimalist ministries that focus on

The future for commercialising small farms in Africa

Figure A: Small farmer commercialisation in Africa, a SWOT diagram

<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Self-supervising, diligent labour • Knowledge of land and local conditions • Flexible production 	<p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Limited access to capital, inputs • Risks in production and marketing • Meeting standards of some supply chains
<p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Urban growth • Asian markets • Large areas of unused land: ‘sleeping giant’ • Technical advances, some already known, others likely in future 	<p><i>Threats</i></p> <ul style="list-style-type: none"> • Climate change • Land alienation • Policy biases • Evolving supply chains with more demanding requirements

oversight of a sector dominated by private enterprise. Much depends on the capacity of the state and the difficult question of how severe problems of high transactions and imperfect competition in rural markets are, and how the state should react, if at all.

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: sequences that would ideally tackle the tightest bottlenecks first of all before moving to tackle less pressing issues. Public action varies in difficulty, from relatively simple tasks, with proven technical proposals and low risks, to things more difficult and complex since technical proposals are risky and not proven. Sequences should begin with the former and progress to more difficult challenges as capacity — and confidence — is developed. Fortunately, most policies and programmes for an encouraging rural investment climate and rural public goods, are fairly straightforward.

Much can be achieved by working on this straightforward agenda. One of the fastest

growing agricultures in Africa, Ghana, probably owes most of its progress since the mid-1980s to prioritising these measures. Beyond these fundamentals lie challenges of reducing transactions costs and imperfect competition. These are stimulating issues, but troublesome to resolve: there are no general, simple answers to the questions posed. Progress will thus be made partly by trial and error, a process facilitated if existing experiences are documented and reviewed to learn the lessons. What are the main strengths, weaknesses, opportunities and threats that smallholders face now and in the future? Figure A summarises.

The **strengths** of commercialising small farms consist of low cost, but highly motivated and diligent labour; detailed local knowledge of physical conditions; and the ability to be quite flexible in production, since the household can tolerate, for a time, low returns in farming. Small farms can thus be low-cost, competitive producers.

Weaknesses are equally apparent: limited access to inputs and capital since rural markets for these work imperfectly; limited ability to bear

risk, leading to risk-averse practices that forgo potential gains from commercial farming; and difficulties in meeting the demands of some high-value supply chains, especially those where credence characteristics and certification matter.

Opportunities lie in the growth of the urban and non-farm economy, creating rapidly growing domestic markets, with increasing shares for higher-value produce. At the same time, Asia is increasing its imports of animal feed and oilseeds, amongst other things. With these market opportunities, Africa also has some of the largest areas of underdeveloped, medium potential land: the Guinea Savannah, with 400M ha or more of land that could be developed.

To these opportunities can be added the promise of technical advances made possible both by biotechnology — not necessarily involving transgenetics; and by work on developing agro-ecological systems — conservation farming, agro-forestry, etc.

Against these are ranged some potent **threats**. Climate change probably means more variable weather, more variable harvests. There may be ways to adapt to this, through more resilient farming systems and by using regional trade to balance out harvest fluctuations. Those managing international, and some national supply chains have no necessary interest in dealing with small farmers: if they can source from large farmers in bulk lots with lower transaction costs, they will.

Policy may be biased against small farmers, most particularly with the threat of allocating land to large-scale farms. This prompts a major question: it is clear that some small farms in

Africa can successfully commercialise, given the right conditions. But how many of the 33 million smallholdings on the continent will be successful small commercial farms in ten or twenty years' time? And what will happen to the rest?

Not all small farms have the resources, above all land, to step up to more commercialised production. Most of those on farms lacking assets probably have better options in off-farm jobs, or in moving to the growing towns and cities. They may not all give up their farms: instead many will remain as part-time farmers, but increasingly their incomes will come from off the farm.

Main policy messages

Three points stand out:

- Much of what is needed to help small farms commercialise are straightforward, simple measures: ensure a favourable rural investment climate — it does not have to be perfect, good enough will do; and supply public goods in rural areas as effectively and efficiently as possible. It is frustrating that this is not already the case across rural Africa: both sets of measures should be vote winners;
- This needs to be complemented by efforts to link small farmers to opportunities in rewarding supply chains. Farmer associations or contracting with agri-business are promising ways to do this; and,
- Prospects for small farmers will be so much better if there is overall economic growth: if the urban economy grows creating jobs off the farm. There is no necessary contradiction between agricultural and urban development: China has not achieved what it has by walking on one leg, why should Africa?

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