Event report

Making Links from Small Farms to Markets in Africa: lessons from villages and supply chains

On February 25, 2013, ODI's Agricultural Development and Policy programme (ADP), in partnership with Agriculture for Impact (A4I) and the Future Agricultures Consortium (FAC) held an event to present findings from two projects looking at smallholder commercialisation and linking smallholder farmers to markets.

Welcome & Introductions

ODI's Anna Locke, head of ADP, and Professor Sir Gordon Conway, director of A4I, kicked off the event, introducing the work of the **Future Agricultures Consortium**, which is funded by the UK's Department for International Development (DFID), and **Leaping and Learning: Strategies for Taking Agricultural Successes to Scale, a project** funded by the Bill & Melinda Gates Foundation and DFID.

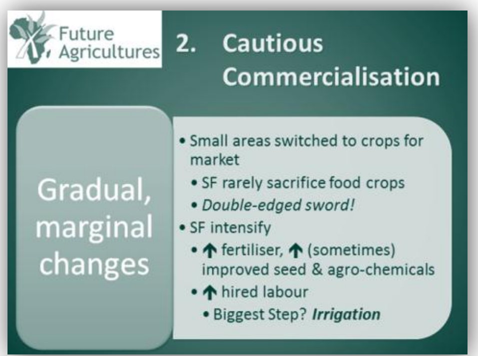
Session 1: Commercialisation of small-scale family farms: views from five sets of villages in Africa

In the first session, chaired by Gem Argwings Kodhek of FAC, ODI Research Fellow Steve Wiggins presented[1] key findings from village studies in five countries in Africa of smallholder commercialisation, drawing on household surveys, value chain and other studies.

The villages – some well-connected to nearby urban centres, and some more remote – were in Ethiopia, Kenya, Tanzania, Malawi, and Ghana.

Key points from the presentation — available on the **ODI website** include:

- **Drivers of change** are often domestic. Markets for produce are in most cases domestic, in the growing cities. Increasingly smallholder farmers are switching to feed growing domestic and regional markets. Furthermore, in these markets the demands for quality standardizing are less stringent. Exports are only occasionally of any importance: tobacco in Malawi, pineapples in Ghana.



- Commercialisation happens gradually, with marginal changes to existing farming systems, a process described as '**Cautious commercialisation**'.
- Cases are characterised by very active labour and land markets. In Lume in Ethiopia for instance, some 90% of farmers hired in labour, drawing in migrants from districts that lack Lume's natural resources. Both instances and costs per hectare of land rental increased considerably in recent years.

- **Sticky capital markets** make it very difficult for famers to access formal credit. Most investment comes from small farmers' retained earnings and savings. Lack of capita acts like **sand in the machine** rather than a spanner in the works – it may slow the process and can lead to uneven outcomes (whereby for instance some farmers can invest while others are put at a disadvantage), but it does not stop commercialisation from occurring.
- Returns to commercialisation are good — gross margins for irrigated vegetables such as tomatoes, onions, cabbage can be very high indeed — and incomes are rising.
- **Does commercialisation divide farmers?** Those smallholders able to benefit most from commercialisation tend not to be the poorest smallholders, but those in the upper parts of the distribution in terms of wealth and resources. That said, while commercialisation may not directly improve welfare of all, it provides many extra jobs, thereby potentially spreading the benefits.
- The **paradox of public policy**: Few cases result from programmes to commercialise:

[1] Available to download on the event page of the ODI website: http://www.odi.org.uk/events/3128-linking-farmers-markets-a4i-futures-agricultures-consortium

comprehensive action by the state is probably not necessary. But this is not to ignore key public actions. Public action is critical as the government has a clear role in creating a **good rural investment climate** (or at least removing the worst blockages of a bad investment climate) — encouragement to rural enterprise from painful reforms in the 1980s and 1990s has paid off; and in providing vital **rural public goods** such as roads, schools, and health posts.

- What is the role for the **Ministry of Agriculture**? Strategic, limited support by the ministry of agriculture can help, for instance in upgrading existing irrigation systems. Farmers need help in overcoming technical challenges, developing innovations, and technical support.
- Agricultural policy cannot transform longstanding **gender imbalances;** but, policies can recognise and support women's rights to land and water; invest in things that take up too much of women's time (for example drinking water), and in providing extension that is useful to women farmers.

Questions & Discussion following session 1

Three recurring themes are outlined below.

In responding to comments, Steve Wiggins and the FAC researchers stressed that the studies carried out were necessarily small-scale: resources did not allow for a broader investigation.

1. Identifying drivers & constraints

What role does people's perception of secure land tenure play?

What role did farmer organisations and aggregation play, for instance in helping smallholders access credit?

On the demand side, how much commercialisation is a response to known and unknown demands?

What were the constraints faced in terms of access to inputs, finance, and technology? What drives early adopters to commercialise and what is the process of cautious commercialisation?

Once drivers are identified, what is the policy implication?

On **land security.** In Lume, land is owned by the government but famers have indefinite land use rights, and are able to rent each other's land. The rental period is annual, but this one-year limit is imposed by the farmers rather than the government. The farmers are reluctant to let their land for longer periods, which may limit long-term investment. Government restrictions limit the amount of land famers can rent out: to a maximum of half their farm. Overall these two factors – the annual rentals and the difficulty in accessing large areas of land in which to expand activity, affect the performance of some farmers.

On **farmer organisation,** one striking example is the response of Tanzanian irrigated onion farmers when asked about cooperation: They say they don't cooperate, because however much they like their neighbours, they do not necessarily trust them enough in production and marketing. However, the irrigation system used by all is a surface irrigation system operated at the level of the village, totally reliant on village cooperation. The paradox is that when it really matters to cooperate, it happens.

On **questions about the demand side**. Most of farmers' market involvement seems to be linked by local traders, or contract and brokered scheme or schemes with the local market. Local knowledge circuits are key.

On **cautious commercialisation and early adopters,** recent FAC resurveys seem to show some evidence of some farmers catching up with their neighbours who intensified their production earlier.

On **seed quality**. In these studies often the seed used is of low quality or adulterated. People rarely have have guaranteed certified seed. Saving a few dollars on the price of seeds seems a poor economy given the amounts farmers spend on irrigation, fertiliser, and hired labour, but it happens a lot.

2. Outcomes

Did the research consider environmental or social sustainability? Was happiness of families after commercialisation considered? Was food self-sufficiency considered? What if terms of trade shift between their product and other foodstuffs, making it difficult for them to access food? What more can be said about results and impacts in the local economy of increased incomes?	On **environmental sustainability.** While the FAC cases did not throw up any cases where an environmental limit was clearly being hit, it is possible that not looking for it means it cannot be seen. Still, while the cases include clear examples of difficulties with soil fertility, availability of manure, control of pests and diseases, in no case did the research throw up a case of environmental problems leading to collapse. On **wellbeing**. Good question, one on which FAC research has thrown up a few insights though nothing where we can say conclusively that people are happier. For instance, we have just got results in from Malawi where people report they don't feel better about their diets; but their dietary diversity scores are getting better. On **what people are doing with their incomes**. Ephraim Chirwa of FAC Malawi is about to do another study on this so we should have some insights soon.

3. Research methods

Were **seasonal issues** considered? Was the longer-term **story of change** examined – or was the research just a snapshot? Why were **these villages** chosen to be studied? What factors influenced their choice? How much can we **generalise** from these case studies?	On **dynamics**. Yes, panel or repeat surveys, are valuable, although there is the danger of survey fatigue. Community histories can reveal some of the story, such as the onion villages in central Tanzania, where irrigation began thanks to an individual who settled in the area some 30 to 40 years ago and taught the locals how to irrigate. On **the choice of village**. Villages were chosen purposively so that at least some farmers had a certain scale of commercialisation, or had been subject to some programme which had sponsored commercialisation in some way. Several of the cases are peri-urban, with large markets within a couple of hours drive; but not all are. On **how much we can generalise from these cases**. Studies like this are very rich in generating hypotheses; generally the research looks to see if we can find confirmation in other studies, or whether we are finding refutation.

Session 2: Linking smallholders to markets; lessons from the supply chains

In the second session, chaired by Barbara Adolph of IIED,

ODI Research Fellow Steve Wiggins presented findings from the Leaping and Learning study of connecting smallholder farmers to markets. A detailed report from this study will soon be available (A4I will be announcing details of its dissemination – keep up to date on their website)

Leaping and Learning looks at insights from the literature on linking smallholder farmers to (input and output) markets, as well as from more than 30 documented cases of smallholder farmers linking to markets across sub-Saharan Africa. Examples include Coffee in Rwanda, Maize and Beans in Kenya, Inputs in Zimbabwe, Sunflower seeds in Uganda, among many more.

Some key points from the presentation – available on the **ODI website** include:

- Small scale farmers engage less with markets than expected, given opportunities to specialise and use external inputs or technology. Reasons can include: missing, or inappropriate technology, high transport costs, uninsured risk, and crucially, **high information & transactions costs**.

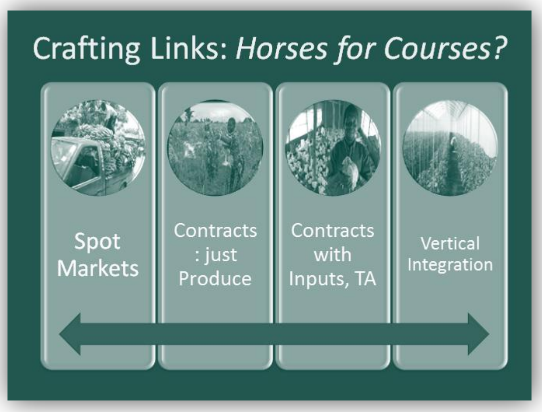
- In the past, **parastatals** were the model for linking small scale farms to value chains . Though there are exceptions that functioned well, too often parastatals involved **high cost, high inefficiencies, and overt politicisation**. Now the model for linking small scale farmers to markets is a **market model**. Farmers may be clustered into groups and associations; private firms or agribusiness may be involved, as well as NGOs, private foundations, and government agencies. **There is a wealth to learn from existing cases.**

- Three considerations are key for successful links: Firstly, there must be an **Investment Case** – here there is an essential **Public Role**, and a need for a **Business model**; Secondly, there must be an **Organisation Model**; and thirdly, there must be an **Approach to Change**

- The public role requires fostering the **Rural Investment Climate** (It doesn't have to be perfect!); and providing **Rural Public Goods**: roads, power, irrigation, education, health, water, research & extension.

- Ghana is a good example of a country that made great leaps in agricultural gross production (with commensurate improvements in poverty incidence and malnutrition of under-fives) largely by removing the brakes on its rural investment climate.

- Business models are concerned with markets: demand is critical. **Export markets** can be great (for example, Rwanda's exports of higher value coffee have generated a much additional foreign exchange in recent years) … But, **Domestic markets are far greater** than export markets — and growing faster. Furthermore, they are **less demanding** (on issues such as certification — that can be a high cost trap) and **less risky** in terms of international competition and sudden price fluctuations. Kenya's green beans, once a high-value export, for instance show them going increasingly to domestic markets.



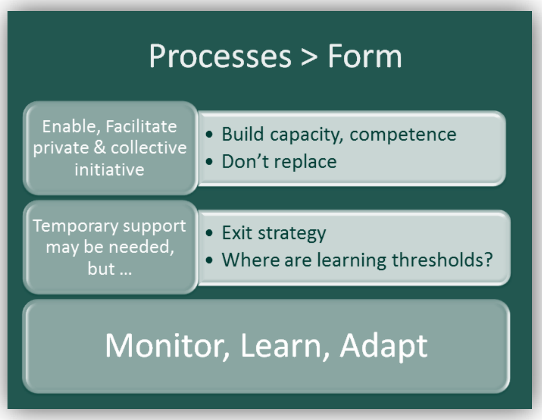
- Organisational models vary, from spot markets to forms of contracting to vertical integration. There's no best model; it's horses for courses, depending on circumstances.

- **Information costs** of dealing with many smallholder farmers are **real and high**, thus aggregation is often essential. But there are few self-sustaining co-operatives: why?

- Finding what works is then largely about **processes** — this is more important than the form the linkages might take.

- Dilemmas that arise include **social inclusion** – firms work first and foremost with better-off smallholder farmers, and functioning collectives may exclude the poorest, to limit risks.

- Are jobs on and off-farms, such as in factories, a possible answer?



- When it comes to scaling up, questions often focus on the right organisational form – but is this the wrong question?

- **Approach is all-important**. Enabling, facilitating activities; learning from experience; providing temporary support appropriate for local initiatives, but with a clear strategy for exit.

- What then is the **public role?** A provisional answer includes: to **run challenge funds**, programmes that allow seed or infant capital to find its way to pioneer experiences; to **support NGOs** that help connect farmers to markets in the field; and finally, to **monitor, document and evaluate the wide experience that exists**. At the moment, not all experiences are documented, usually only successful ones, and hardly any are evaluated to any rigorous level. Perhaps no more than one in 10 experiences are generating anything like the information that they ought to be able to.

Questions & Discussion following session 2

*A stimulating **Questions and Discussion** session followed. Four recurring themes are outlined below*

1. What markets, crops, and farmers?

Quality is another issue or dilemma not mentioned.

Researchers report that quality saved the Kenyan value chain for beans; because they had such high quality, they tripled their export values – this raises the question of certification as a catalyst.

The case studies mentioned were horticultural or cash crops: what about staples? How much of the big increase in domestic consumption of crops is actually about staples, and what do we learn for staples markets?

Quality is indeed critical.

On **staples**. It is true that the cases reviewed for the study contain only a few examples of staples. One of the cases however is the case of One Acre Fund (OAF). In Kenya, OAF deals largely with farmers of maize and beans. Understanding that experience is key. It's certainly spreading; and why haven't similar things across Africa taken off? But yes, most of the accounts are of more commercial crops than staples. It is possible that this may be a case where current linkages in staples are imperfect but not so imperfect as in other chains. For instance, recent MSU studies on the maize trade show it thriving in Eastern and Southern Africa. But no, there is a bias in the literature on supply chains towards (and Bill Vorley can talk at considerable length about this) high value niches, seeing this as a way to get people out of poverty.

In reality, this will apply to a very small minority. It's interesting that the private sector initiatives nearly always deal with the higher value crops.

Which farmers do these initiatives reach? There's general agreement that not all smallholders can be reached by these initiatives. Even the

When linking smallholder farmers to agricultural markets, the size of the smallholders is crucial. How small is small? It is quite important and can vary from sector to sector.

Do we want all smallholders to stay in agricultural production? Do we want them to produce things for export that they won't consume domestically? For instance, the case of snow peas in Guatemala and Nicaragua – these crops have a high export value, but the domestic value is very low.

people who say they are working with farmers toward the bottom end of the pyramid are not going to get all the way down. The consensus is there is a certain group of farmers who are not going to work their way out of poverty. Some say only the top 25% are able to commercialise in a beneficial way, some say the top 40%; others think you can get further down. There is debate on how far down you might go and then on what is needed for the people who aren't going to be commercially linked into better value chains.

Andrew Dorward's paper on *Hanging in, Stepping up, and Stepping out* categorises smallholder farmers into three groups: a very helpful schema. The question is trying to operationalize it and find out how to encourage benign transitions across the levels. This is a major question for everyone dealing with differentiated smallholder farmers. No-one imagines that all smallholder farmers are going to go the same way.

On **gender**. In the majority of the case studies, there are more men engaged than women. Does this disadvantage females? It seems likely. There are some schemes however that do have a representation of women, but the data are not sufficient.

2. What about nutrition impacts?

Stunting in Mozambique and Tanzania appears to be stuck, whilst food security in these places is in principal fair. Why is stunting stuck at high levels? Would finding out about these issues require a different approach to the study?

On **the dilemmas of stunting**. Half of the problem in most cases has got nothing to do with food, it's a medical problem. Recent evidence from Malawi however is difficult to explain. The latest DHS shows a quite extraordinary collapse in under-fives mortality, a sign that the health environment is improving dramatically; but it's not showing up in the stunting. Nutrition is a complex outcome, affected by many different factors.

3. What partners, technology, and linkages?

There was a mention of high transaction costs / high costs of information: did you see an example of mobile phone technology helping to overcome this?

On **mobiles**. Yes they do help in some cases. Mobiles are very good at providing services that don't require trust. Farmers may phone dealers and say, 'in a week's time, our produce will be ready' and so forth. Other transactions like determining prices are more likely to be done face to face.

4. What next?

Where can challenge funds get help doing better evaluation?

Regarding the public role; we can identify what's already working, but what is the next step? How can we upscale what's working in systems? Do we grow the organisations, or can the public sector replicate an approach? It is an organisational structure that needs to be followed or an inherent structure?

Challenge funds are wonderful as long as you can tolerate failure within them. It is surprising that the recently set up challenge funds don't have the budget built in to do proper monitoring and evaluation. Surely that would be built in from the start of the design of the challenge fund. Challenge funds also have to be run as a portfolio. You can't assume all investments will work.

Christine Okali responded to the issue of categorising certain projects as failed, arguing that it is difficult to talk of failure. What is the definition? If it is failure to get what you want, then you can still learn from that failure, and some people gain. What some people gain may be very different from what the challenge fund wanted. Perhaps the issue of scaling up or going large scale is the wrong question to ask. Where do donors want to go?

Panel: Key points, policy implications, further questions

Nigel Harris, Chief Executive of Farm Africa chaired the panel which consisted of Christine Okali of FAC, Martin Evans of Agriprojects & Farm Africa, and Bill Vorley of IIED.

Rethinking some of the conventional wisdom

- Rethink the consensus around exports and Northern markets as the main focus.
- It is not well understood that small farmers are themselves the main investors.
- Delivery models underestimate how small-scale producers make their own choices
- A factor explaining the recent value-chain focus is the history of contract farming. It was an example of transferring improved technology, access to inputs, knowledge, and so forth, which worked — and so it attracted attention. But it may not work in all situations.

Reiterating some points of agreement

- Everyone has agreed is that there is no magic bullet or simple formula: and yet we're still searching for one. The encouraging thing about this discussion is that it's all about process: about doing things well; about helping others to do things well.
- Big problems often arise when there is conflict or when the state interferes too much, as in overtaxing rural people.
- Scaling up is a will-o-the-wisp. There is never going to be a single programme or the intervention of a single company which is going to do everything. Rather; development is incremental steps; building on everything else and making the enabling environment work better and better.

And some implications

- More reporting of failures in linking farmers to markets is needed.
- It is important to look at the wider picture. When it is not fully understood; we could be seeing a positive spillover, or negative rural differentiation.
- Not all farmers are going to succeed — policy is going to need to be dual policy.
- There is a question of what model or lens is used to interpret findings.
- What are the necessary or sufficient threshold conditions that trigger sustainable market behaviour? That would be extraordinarily useful to know.

The role for ministries of agriculture

- Collaboration with other ministries: for instance the infrastructure, trade, and police departments need to get the roads and the infrastructure funded, to deal with trade barriers, and remove features that that add transactions costs. Cross-ministry work should help provide a more nuanced understanding
- It is not clear the Ministry of Agriculture could do extension as well as the private sector, but they could be urged to put their money into research.
- If land and market policies are right, smallholders are the main investors and will come forward and spend; it's not all about attracting foreign investment.
- Both soft and hard infrastructure needs to be in place. More informal buyers, reduced information gaps, increasing domestic trade, regional trade, urbanisation, and economic growth will happen if the basics of security and infrastructure are in place.
- Government is needed, but it should know its role and when it should step away.

Barriers to scale and supply of finance

- There is much doubt and confusion. Evidence is needed ahead of action and discourse. We need to know where the global and the national private sector can intervene best on behalf of smallholders and wage labourers.
- Nonetheless, a lot of companies do know very well what needs investment. Also CSR issues. A bigger question is whether these public-private initiatives can attract true commercial capital.
- What we don't know is far greater than what we know and we have to be much more modest about goals of our projects or development work.

Concluding comments

Gordon Conway, A4I

What we've seen quite clearly is the pink (because it's so visible) elephant in the room: the public sector. The most important thing that comes out of this is the creation of an enabling environment. For example, in Nigeria, Akin Adesina has gone in and removed the incredibly corrupt fertilizer schemes. So we've got to somehow get coordination — for example, linking donors with government to create an enabling environment. On the issue of land and labour — what can the government do without making lots of land reforms? That's a good question to ask. Irrigation is an enormous untapped potential.

The second part of the public sector (or quasi-public) sector is the NGO — what is their role? They have to be the interface between farmers or the farm community and the private sector or the market. I liked Steve's slide on Horses for courses.

How does this all fit within a rural economy? How do we create a virtuous circle that creates a vibrant rural economy?

Finally, sustainability: from Asia you know, with increasing vegetable production you get pests, diseases, for instance diamondback moths — horrid. Cabbages may look lovely in the market but they have been dipped or sprayed in pesticide. Problems are horrendous and they'll destroy you in the end.

This presentation of course fronts a large body of work. A set of really clear guidelines about donor engagement/ private sector engagement and so on is emerging.

Anna Locke, ODI

There is a tension between the need to have a broad policy focus and richness on the ground; how do you square that? Who are we dealing with and what do they want? Where do they want to go? There is plenty of evidence in the literature — not mired in traditional practices, an outdated picture of the ignorant or inflexible peasant; in reality there is a lot more dynamism.

Today we did get a nice conceptual framework — but with the health warning attached that you look at certain conditions. Then we need to look at how that ties in with wider dynamics; partly resources; partly the focus of case studies themselves. There was furthermore the issue of how it works at different levels. How impacts are felt, not just on communities you're working with but on those elsewhere. There is also this need for an incremental approach; cautious commercialisation.

Finally a point about the fashions: how do you keep the fashions at bay so that you create that space to make meaningful contributions.