

*Market, Chains and Sustainable Development*  
Strategy & Policy paper # 23

# Linking farmers to markets by improving domestic markets: the case of fresh fruits and vegetables in Tanzania

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January 2010

*Markets, Chains and Sustainable Development*  
**Strategy & Policy Papers**

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ISBN 978-94-6173-476-1

Available online at: <http://www.boci.wur.nl/UK/Publications/>  
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# Linking farmers to markets by improving domestic markets: the case of fresh fruits and vegetables in Tanzania

Gerdien Meijerink<sup>1</sup>

## *Abstract*

'Linking farmers to markets'. This is the catchphrase that many donors and NGOs use to describe value chain initiatives. In our research we question whether the approaches that are currently implemented by donors and NGOs are the most useful. Or whether there are alternatives that have been overlooked. Based on the study on fresh fruits and vegetables in Tanzania that was commissioned by LNV in 2007 we reveal the limited strength of producer organisations, the limitations of contract farming and export markets as a potential solution for pro-poor development and the importance of including traders in developing local and regional markets.

## **1. Introduction**

This chapter addresses the question what donors and NGOs can do to link fruit and vegetable farmers to markets. 'Linking farmers to markets' has become a popular phrase in value chain initiatives. Many donor-funded projects aim to achieve this by linking farmers directly to buyers, in contract farming arrangements, or through organising farmers in associations that link up with buyers directly. This way farmers can circumvent the middlemen: collectors, brokers, and other traders who would normally buy up the produce.

However, we argue that although producers' organisations and contract farming can be useful arrangements, farmers may be more effectively linked to domestic markets if these markets themselves are improved. There are several ways to do this. A first step is at least to actively include traders in value chain initiatives instead of avoiding them.

We will first describe how fresh fruit and vegetable markets function in Tanzania and what problems farmers and traders face. We then describe the research LEI has conducted for the Ministry of LNV<sup>2</sup> and the main results of whether producers' organisation and contract farming can link farmers to markets. We also provide a few alternatives and wrap up with conclusions and recommendations.

### How do fresh fruit and vegetable markets function in Tanzania?

Imagine you are a farmer in Tanzania whose vegetable crops, say tomatoes, are ready to be picked. You would like to sell them at the best price, but how? Once they are picked, they must be sold and transported to consumers before they deteriorate. You can always sell them to the traders who arrive unscheduled but fairly frequently in large trucks to the village. Because you don't know when they come, you do not pick your tomatoes before you have an agreement with them. However, you know you have to haggle a long time over prices,

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<sup>2</sup> This project was funded by the Ministry of Agriculture, Nature and Food Quality of the Netherlands (BO-10-002-002, Rural economy).

weights and quality. Selling your tomatoes can take hours of your precious time and you are not even sure you will receive the best price possible.

### Traders face many risks

Not only farmers face such dilemmas. Traders in the fresh fruit and vegetable sector in Tanzania face similar difficulties. Traders travel long distances in rickety trucks over broken roads to buy their produce. To fill their trucks, they have to visit many villages and negotiate with numerous farmers over price, quantity and quality. Just buying the produce takes hours. When they have returned with their produce after a long travel, during which they have been stopped several times by the police and tax collectors, the prices in the wholesale market may have changed again, and they may thus face a loss. However, they need to sell their produce fast, as quality is deteriorating fast.

Most produce is sold at wholesale markets. These wholesale markets are the main clearinghouses for fresh fruits and vegetables, where supply and demand meet and prices are established and thus play an important role. However, much can be improved. Although demand is fairly stable, supply is not. If several truckloads of tomatoes arrive simultaneously, prices will plummet immediately. Wholesale traders have to buy and sell produce without good market information, facing a constant uncertainty over prices and supply. Prices are not indicated centrally, which means that buyers and sellers must inquire about prices frequently with various other buyers and sellers.

Moreover, most wholesale markets do not have sufficient storage capacity, which means non-perishable produce is kept in trucks that are parked in the streets, or in shops where there is a high risk of theft. The marketplace is usually overcrowded and many traders are forced to sell and buy just outside the marketplace on the street. Most markets also lack equipment such as weighing scales. Weights of produce are estimated by the size of bags, which leaves a wide range open for negotiation. Standards for quality are also lacking, again leaving much room for negotiations. Buying and selling fresh fruits and vegetables is therefore a process that takes a lot of time and is a risky business for traders.

## **2. A survey in Tanzania**

The Ministry of Agriculture, Nature and Food Quality (LNV) asked LEI to conduct a survey in East Africa to analyse the role of producers' organisations and other 'institutional innovations' (such as contract farming) that farmers can use to market fresh fruits and vegetables. The 2008 World Bank Report<sup>3</sup> *Agriculture for Development* had just been published. This report suggested that such institutional innovations could overcome various market failures. In particular, the World Bank saw an important role for the 'third sector' - communities, collective action, and NGOs - in overcoming some of the market and state failures, with special attention for producer organisations.

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<sup>3</sup> World Bank. (2007). *World Development Report 2008*. Washington, The World Bank. The ideas put forward in this report correspond with the policy document 'Agriculture, rural economic development and food security' written jointly by DGIS and LNV (published in 2008 by the Ministry of Foreign Affairs of the Netherlands).

The question of LNV linked up with this World Bank report: 'To what extent do such arrangements link farmers effectively to markets?' To focus this question, LNV and LEI decided to conduct a survey in Tanzania, which has a long history in producers' organisations and to focus on fresh fruits and vegetables which had become a rapidly growing sector in East Africa.<sup>4</sup>

LEI conducted the survey in Tanzania in 2007 and gathered data through semi-structured interviews with the main stakeholders in the horticultural sector. Stakeholders consisted of small-scale and large farmers, firms that employ outgrowers' schemes, researchers from the national agricultural research system, policy-makers and donors/NGOs. The information received from the interviews was then cross-checked with at least two other sources (also called triangulation). In total, 52 people were interviewed in Arusha, Dar es Salaam, Tanga/Muheza and Morogoro. The study focused on two main horticultural crops: tomatoes and oranges.

### **3. Do producers' organisations improve farmers' linkages?**

Producers' organisations in Tanzania are generally weak and not well-established and organised. In particular, smallholder farmers are not well organised in associations, cooperative societies or groups that provide fora for discussion, negotiations, and strengthening bargaining power. The few existing groups, societies and associations do not have the requisite capacities in terms of human as well as financial resources.<sup>5</sup> Most producers' organisations do not engage in marketing activities, but limit themselves to training, input supply and - to a limited extent - lobbying.

Why do farmers in Tanzania not organise themselves more often into a marketing association to collectively market their produce? We did not look into the functioning of producers' organisations in general - which is a broad topic - but only focused on specific marketing associations. We saw a few cases of marketing associations that were established with the help of an NGO or donor-funded project, but these were very small and only functional in the context of a specific project. The most successful cases of farmers' marketing associations were in combination with contract farming (see below). However, to what extent such farmers' associations can be regarded as autonomous and having bargaining power is debatable.

#### Sceptical farmers

In general, farmers were rather sceptical of the idea of organising themselves into a marketing association. They gave two general reasons. First, they said that they did not object to marketing associations in general, but basically want the assurance that the

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<sup>4</sup> LNV also asked LEI to compare the results of Tanzania with those of neighbouring countries: Uganda, Kenya and Ethiopia by comparing differences in history and institutional environment. For the full report we refer to Eaton, Meijerink, and Bijman. (2008). *Understanding institutional arrangements: Fresh Fruit and Vegetable value chains in East Africa*. Paper. Market, Chains and Sustainable Development Strategy & Policy. Wageningen: Wageningen University and Research Centre. Available at <http://www.boci.wur.nl/UK/Publications/>.

<sup>5</sup> MITM. (2008). *Agricultural Marketing Policy*. Dar es Salaam, United Republic of Tanzania: Ministry of Industry Trade and Marketing, August.

management would be accountable and transparent. In the past this was often not the case, and farmers lost influence over decision-making. However, they did not know how to realise an accountable and transparent management structure. Second, farmers said that even if they succeeded organising themselves into a functional marketing associations, they would not be able to circumvent traders.

#### Why farmers won't join a market association

One farmer we spoke to had tried to circumvent traders and sell produce directly to the market. Together with other farmers he had hired a truck and had gone to the main market in Arusha. However, all the wholesale traders there had offered him such low prices that it was not worth the effort: 'I could dump all my carrots in the streets.'

Another farmer said he would not join a marketing association to demand high prices because 'that would be the end of the market, no trader would buy from us'.

#### **4. Do contract farming arrangements improve farmers' linkages?**

Several farmers in Tanzania produce fresh fruits and vegetables under a contract with a contractor, which can be a large scale farmer, a flower and seed company, a large processing company or a supermarket. Such arrangements were most often seen in combination with a farmers' association, usually established by the contractor. Contractors said they preferred this arrangement because dealing with one or a few farmers' associations is easier than dealing with hundreds of farmers, especially when the production involved requirements such as GlobalGap. Training and inspection is done through farmers' associations. To what extent farmers obtain more bargaining power through such associations is not clear, however. The examples we studied in Tanzania did not suggest this.

Contract farming as a tool to link farmers to markets has received much attention, although their share in total number of farmers is probably small. We found different degrees of success with contract farming. In general, contract farming functioned well when farmers were contracted to produce specialty produce for a niche market (such as raspberries) which cannot be sold easily on the local market. Such arrangements provide a guaranteed outlet for farmers and a steady supply of high quality produce for the contractor. A successful example is the Lushoto Usambara Lishe Trust, a farmers' association with 300 members that produce high value vegetables for hotels in Dar es Salaam and exports. This was the result of the Smallholder Horticulture Outgrower Promotion Project (of USAID).<sup>6</sup>

#### Side-selling

However, arrangements that involve fresh fruits and vegetables that can also be sold on local markets are much more difficult to maintain. Farmers often have an incentive to side-sell outside the contract to another party (such as local traders) that offer a slightly higher price. In this situation, the contractor is thus not assured of a steady supply of produce. This can be a real problem if the contractor has made agreements with another party (for instance a supermarket or an importer in Europe) and cannot fulfil the contract. One large processor of tomatoes said his company was occasionally forced to import tomatoes from neighbouring

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<sup>6</sup> SHOP is a two-years project (2007-2009) funded by USAID (with a budget of over 1.3 million US\$). It was implemented by ACDI/VOCA. See [http://pdf.usaid.gov/pdf\\_docs/PDACO768.pdf](http://pdf.usaid.gov/pdf_docs/PDACO768.pdf) for more information.

countries. Processors usually demand fewer quality requirements, but need a minimum constant flow of produce, which may be particularly difficult to attain in the off-season.

## **5. Are there other ways to link farmers to markets?**

Establishing producers' organisations or linking farmers directly to buyers through contract are not the only ways of linking farmers to markets. Linking farmers to markets by improving the market conditions is another way. This is reflected in the DGIS LNV Policy Note<sup>7</sup> which states under track 4:

'Most food crops find their way to local and regional markets. Improved access to these markets for small-scale farmers, traders (often women) and local processing enterprises will contribute to economic development and poverty reduction. Producers will only benefit from higher prices if markets are sufficiently transparent and efficient. To achieve this, investments in rural infrastructure (rural roads, electrification and telecommunications) and market information systems (e.g. SMS services) are needed.'

In Tanzania we found an example of a donor-funded project that tried to achieve just that.

### Nyandira market: benefitting farmers and traders

Nyandira is a remote village high up in the Uluguru Mountains. Its climate is ideal for growing vegetables, but because it is so far from any major town, marketing is a problem. Trucks need to wind up very narrow and broken roads to reach the place, which takes several hours from Morogoro, the regional capital. Some farmers in the village own a wheelbarrow or a bicycle, but this does not bring them very far.

After 2005 this situation had changed when the 'rural markets development project' (RMDP)<sup>8</sup> established a market in the village. It built a roofed area with ramps for trucks to (un)load and storages that can be locked. However, it also established a market board with elected members who were trained in accounting and reporting, collect taxes, implementing market rules, etcetera. The training was to attain a competent and transparent market board. A road association was established to repair the road leading to the market.

Both farmers and traders benefitted from the market. Farmers told us that they received higher prices at the market than earlier from traders who would stop at the village. Moreover, the market board enforced the rule that weighing equipment must be used for all transactions. Traders told us they were willing to pay a higher price because they could buy

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<sup>7</sup> Ministry of Agriculture Nature and Food Quality of the Netherlands. (2008). *Agriculture, rural economic development and food security*.

Track 2 specifies that 'Enabling environment: the private sector must take the lead in this, but governments should play a key role, by creating proper frameworks and investing in public services and institutions. Institutions such as farmers' cooperatives, trade unions and employers' organisations can ensure the necessary checks and balances.' Track 3 specifies that 'Sustainable value chain development: the value chain - output, trade, processing and consumption - should be made more effective and sustainable, with due regard for People (income distribution), Planet (ecological sustainability) and Profit (economic growth).'

<sup>8</sup> RMDP was a three-years project (2002-2004) implemented by FERT in consortium with GRET, and financed by AFD. MVIWATA, the Tanzanian producers' organisation was a partner. More information on [http://www.fert.fr/missions-gb/fiches/tanzania\\_markets.htm](http://www.fert.fr/missions-gb/fiches/tanzania_markets.htm).



vegetables much quicker at the market. They could now also bring other products to the market to sell, such as fertilisers and grains because there was storage available.

In general, we found very few examples of donor-funded projects or NGOs working directly with market systems and traders. This is not only true for Tanzania, but for the development community in general. In a recent publication by KIT on the role of traders in value chains<sup>9</sup>, the three main Dutch NGOs (ICCO, Cordaid and Oxfam Novib) admitted that a focus on traders 'is a new field for these three agencies'. A quick inventory of the research projects on value chains of the BO Cluster International Programme of LNV shows that only one or two have included traders and those who have only marginally. The focus of most projects has been mainly on farmers or on buyers such as supermarkets. This can be explained by the fact that most projects dealt with high-value (export) crops only.

## **6. Conclusions: more than producers' organisations and contract farming only...**

This chapter addressed the question what donors and NGOs can do to link fruit and vegetable farmers to markets. The most common approach used by donors and NGOs is to link farmers directly to buyers, either through organising farmers in producers' organisations or by linking them in contract farming arrangement, or a combination of the two. The aim of this approach is to avoid inefficient markets and shrewd traders, who are only interested in high margins and taking advantage of farmers.

Our first conclusion is that in Tanzania, producers' organisations have limited success in linking farmers to markets. The reasons for this lack of success are the insufficient management skills, transparency and accountability of most producers' organisations, which become especially important when marketing and money are involved. Furthermore, farmers have weak bargaining power in markets. Even when they are organised in market associations: they still compete with many other farmers.

Our second conclusion is that contract farming may be useful in certain specialty (high value) fresh fruit and vegetables that are not sold in local markets but only in high-end markets (export markets and supermarkets). However, there are several reasons why contract farming may not be the most practical way for farmers to sell their produce, or buyers to secure supply. First, producing specialty fresh fruits and vegetables may only be possible for a limited number of farmers and will bypass the large share of farmers who produce for the local market. Another reason is the incentive of farmers to sell to other parties who offer a slightly higher price, which is the case for most locally marketed fresh fruits and vegetables (as well as for other local food products such as grain).

Third, we conclude that donor funding that aims to improve domestic markets and existing value chain initiatives for local produce should actively include traders. Traders and markets in Tanzania (and elsewhere in Africa) play an important role in marketing local fresh fruits and vegetables and trying to avoid them may be counterproductive. Although traders are often seen as shrewd middlemen who swindle farmers, many of them are actually small and resource poor and are therefore potential targets to achieve MDG1 in reducing poverty. Furthermore, some of the traders actually do create value added by performing functions for

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<sup>9</sup> KIT, (2008). *Trading Up*. KIT Publishers, Amsterdam.

matching supply and demand. However collaborating with small traders may not be easy, as traders are always on the go and are critical about how their time is used. In addition, their interests may not always be aligned with those of farmers.

## **7. Recommendations: better use of funding in international projects**

In general, we recommend that more attention is given to improving domestic markets. Many of the donor-funded 'linking farmers to markets' initiatives as well as much of research by Wageningen UR has focused on high value produce for high-end markets. However, a more pro-poor approach should include domestic markets where local food produce is traded.

More specifically, we distinguish two levels for research by Wageningen UR, funded by the Dutch Government:

First, on the level of domestic markets for local food produce:

- 1 Use value chain projects that focus on capacity development to provide specific training that will help to increase transparency of traders' and farmers' associations (such as on accounting; see example of Nyandira market).
- 2 Request that value chain projects stimulate more interaction between farmers, traders and public authorities. This can be done through multi-stakeholder platforms to discuss different interests and information (it might be that the interests of farmers and traders may coincide where is concerns public authorities). This can also be done in a more active way by linking farmers to traders, e.g. to learn about what requirements the market and consumers demand from their produce. Traders can gain more trust of farmers by explaining the risks and costs involved in transporting and selling in local markets.

Second, on the level of policy research:

- 1 Use relatively small Wageningen UR research project budgets to harness larger-scale development initiatives that aim to develop markets in Africa (e.g. the ECX in Ethiopia<sup>10</sup>). Most of such initiatives are usually focused on implementation and have no additional budgets for analysis, evaluation or research. Those research projects can be used to analyse what the impact is of specific interventions and feed back 'lessons learned' to LNV, DGIS and other major donors, but also to national governments.

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<sup>10</sup> The Ethiopian Commodity Exchange, which was established in Ethiopia in 2008, with help from the World Bank.

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### Acknowledgements

Research for the Strategy & Policy Papers has been executed by Wageningen UR through grants from the Netherlands Ministry of Agriculture, Nature and Food Quality (link) and from the Directorate General for International Cooperation (DGIS) of the Netherlands Ministry of Foreign Affairs.



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