

Review of Experiences on Market Oriented Agricultural Advisory Services (MOAAS)

The First Mile Project and improving farmers access to markets and market information

Country: *Tanzania*

Name of intervention: *Linking Local Learners, the Firstmile Project and improving farmers access to markets and market information*

Time period under analysis: *June 05 to June 06*

Institutions/agencies involved: *IFAD, SDC, Agricultural Marketing Systems Development Programme (AMSDP) Government of Tanzania and ISG*

Brief summary of intervention objectives :

The objectives of the First Mile Project were to reduce the poverty of smallholder farming families by: a) improving their access to markets and market information, and b) putting modern information and communication technologies at their service and under their control. The project took its name – the first mile – from this challenge to give rural people access to the internet so that they can learn from their peers how to improve their market linkages. Thus, the project was all about small farmers, traders, processors and other key players learning how to develop marketing chains from producers to consumers. It was a collaboration between the Agricultural Marketing Systems Development Programme of the Tanzania government supported by IFAD and the Swiss Government with Technical Assistance from the International Support Groups

Rapporteurs: *Clive Lightfoot, Ueli Scheuermeier and Vincon Nyimbo*

Date: *November 2006*

What are the settings and arrangements for MOAAS?

The objectives and scope of the project

The First Mile project was all about local people, producers, traders, processors, and others from rural villages and towns learning together through trying out new ideas and exchanging experiences with each other about how to build all the links in a marketing chain from producers to consumers. Conducted within the Agricultural Market Systems Development Programme of the Tanzanian Government the project concentrated on building capacity of service providers organized into district core groups to build collaborative partnerships across a market chain linking producers to consumers. Key to their learning was the exchange of local experiences and good practices.

The project facilitated the emergence of local group to local group learning to improve market linkages by the district service providers through the development of intermediaries that linked remote rural producers with no electricity or telephones to the internet. The First Mile Project encompasses within one effort:

- The facilitation of ‘local group-to-local group’ learning to improve market linkages;
- The generation of locally developed good practices in building market chains that give meaning to the use of the internet; and
- The empowerment of smallholder farmers to enable them to achieve for themselves greater access to ICT, as their needs evolve.

The work was done over one year in three phases. Phase one, from May to July 2005, assessed local peoples current access to modern information and communication technologies and explored their interest in learning about marketing chains. Working with AMSDP’s district core groups Phase two, from July to December 2005, equipped them with the skills and internet learning support service to use the internet to share experiences between districts and enhance their learning. Phase two ended

with an assessment of progress in developing marketing chains, access to the internet, and using linked local learning methods to do this. From January to March 2006 Phase three continued the mentoring of district core groups in the development of marketing chains and evaluated the impact of the project in a user’s assessment workshop.

Challenges for farmers and key players to improved marketing

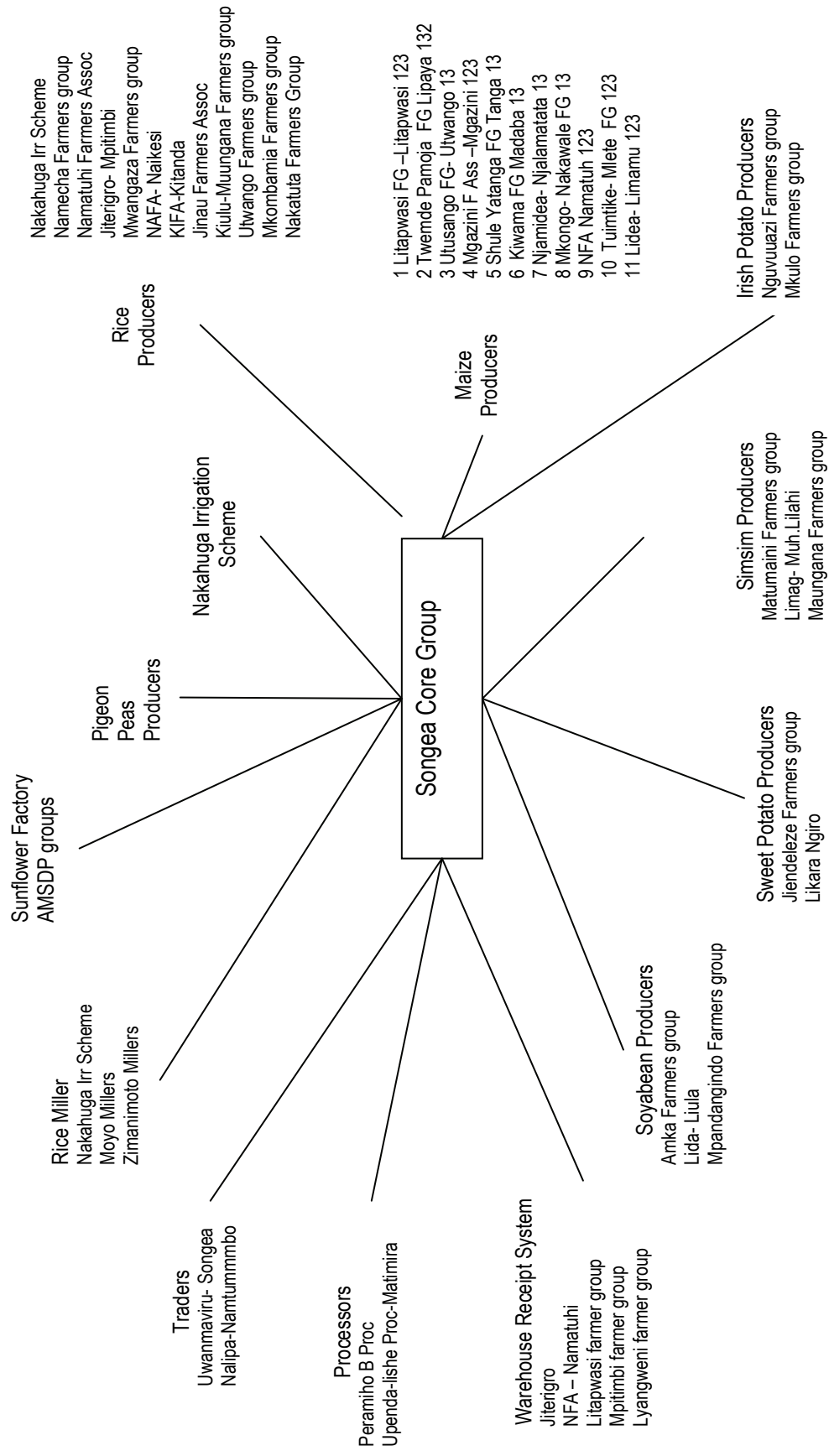
Key players including producers, processors, traders and service providers identified the major challenges they faced in marketing each from their own perspective. Looking at each other across the table key players agreed their marketing was a mess. “Everybody cheats everybody” was their statement on what is going on at present. Magugu rice, for instance, has a good standing throughout Tanzania but it is so frequently adulterated that price advantages are almost totally lost. Stopping adulteration would allow traders to pay a considerably higher price, as they will be saving a lot of transaction costs which at present they pass on to producers. The absence of standard weights and measures makes for easy cheating. Production quality is another source of market inefficiency. Absence of grading, poor packing and untimely delivery all conspire to reduce the prices that products can be sold at and therefore the incomes that producers can earn. Much of the cheating is made possible by poor communication. This is not just about market price information but communication between producers and traders. Transportation is another source of challenge with poor feeder roads, high cost of vehicle hire and even availability of vehicles all making marketing very costly. All agree that market prices fluctuate widely as commodities go through boom and bust cycles for simple reasons of seasonality and lack of storage. When producers and processors want to purchase inputs or make investments to improve quality or supplies they are hampered by high interest rates and lack of credit institutions to approach. So it appeared that it is not marketing information or market access that are the primary bottlenecks, but rather a combination of peoples behaviour, physical infrastructure and access to capital that need urgent attention. Today key players do not have sufficient understanding of each others problems. Producers have no appreciation of the work of brokers and traders. Distrust and cheating is prevalent. The idea that cooperation along the marketing chain may actually lead to win-win for all players was totally new.

Who are the clients of MOAAS?

Small farmers and market intermediaries as local client network

The most successful District core groups quickly established strong local networks of producer groups and other key players in the market chain. Once the core groups had decided which commodities they were going to concentrate on the successful ones made contact with a large number of producer groups and farmer associations. Figure One shows that Songea core group, for the rice commodity alone, made contact with twelve producer groups or farmer associations including the four hundred plus members of the Nakahuga Irrigation Scheme. Songea’s network is strong not only because it contains many producer groups in different commodities but also a number of key players in the market chain like traders and processors. It is also strong because they helped farmer groups plan their own use of ‘info-mediaries’ to get access to the internet and mobile phones. A large network of ‘customers’ having good communications allows for greater impact by the core group.

Figure One. Songea core group client network

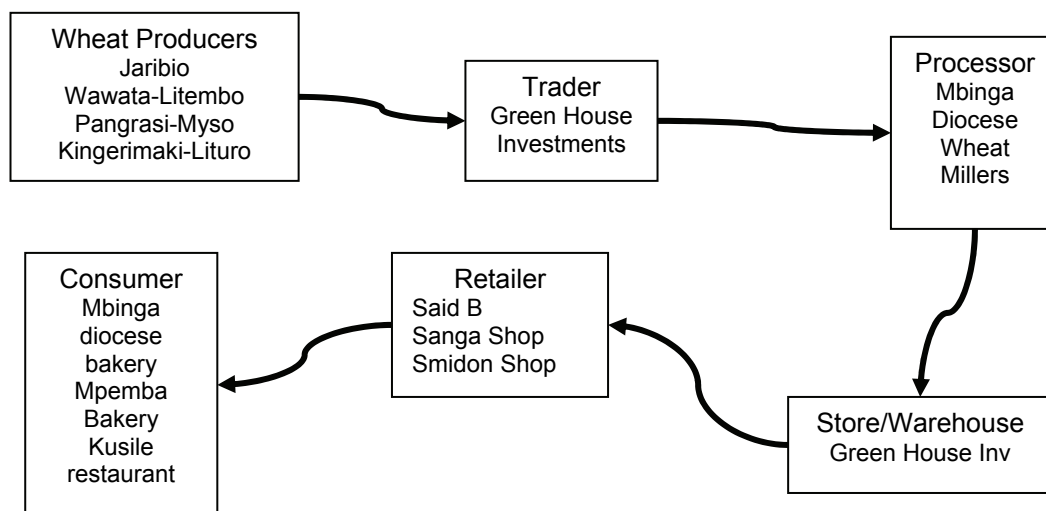


What approaches and methods are used for MOAAS?

Advisory services to improve market access

Successful district core groups undertake market research tracing each transaction as the commodity moves from producer to consumer before moving on to the job of convening the key players in a market chain. They put producers in touch with larger traders or wholesalers. They put producers in touch with processors. Core groups help producers and other key players communicate with each other using mobile phones. Core groups bring together in one ‘trade fair workshop’ as many of the key players as possible to vision better market chains in which each player benefits more. The Mbinga core group assisted wheat producers build a market chain that included a large trader to bulk their production to such a level that they could negotiate the use of a wheat mill owned by the Diocese. The chain went on to include the same trader who sold the wheat flour to retailers and large consumers like the local bakery. The complete chain can be seen in Figure Two.

Figure Two. Market Chain Development, Mbinga District Core Group



Enabling innovation and scaling up

Peer-to-peer sharing between core groups not only stimulates the development of new practices but also speeds up their application across districts. Sharing across District core groups is initiated at workshops and then continues through email and exchanges using the internet learning support tools at www.linkinglearners.net. Cross district learning using the internet occurred in many areas including how to get core groups organized! Core groups exchanged experiences in: a) how to get market chains started; b) how to operate the warehouse receipt system; and c) how to improve market linkages in a range of commodities, particularly maize and oranges. A total of two hundred and thirty exchanges were made in a six month period. Just over one hundred people from the fourteen AMSDP districts used the online learning service. The majority were core group members but some were leaders of producer groups and other key players in the market chain. Learners not only exchanged experiences and practices but also information about market key players as well. For instance, once Babati district reported their successful negotiations with Dodoma Transport, Sumbawanga and Songea districts immediately requested the contact details and were soon able to make their own successful negotiations. Engaging in such sharing requires the core groups to plan their own use of intermediaries to get access to the internet.

Linking Local Learners methodology

Linking local learners integrates face-to-face action learning with internet supported peer-to-peer exchange. The structured action learning process takes local learners through analysing their present situation to generating their ideas to realize their future vision and finally to build the necessary partnerships for action. Reflecting on the impact of their actions takes learners full circle to a new situation and vision. In the practice of improving market linkages producers and other key players in the market chain visualize their present situation and future visions of producer to consumer market chains. Ideas for action to improve linkages and build market chains are identified, then the partnerships to start the work. Peer-to-peer learning comprises of documenting ideas and experiences for sharing and engaging in asynchronous discussions over the internet. The internet learning support tools for discussion, searching, library, contacts and knowledge pooling at www.linkinglearners.net provide a learning platform for the virtual knowledge network.

What are the outcomes and impacts of MOAAS?

Improving farmers access to markets and market information

Small farmers’ access to markets has increased substantially in just one year. Arumeru district core group estimate that there has been a 54% increase in farmers with access to markets. Babati core group estimate an increase of 35%. Several districts report specific instances of access to new markets as the examples below show.

- Four groups have managed to access the market in baby corn with Gomba Estates in Arumeru District.
- Endavukai and Olkokola groups have marketed Artimisia to Techno Serve in Arumeru District.
- Five farmer groups in Mudio village have identified markets for tomato variety Tanya in Hai District.
- Thirty six group members of Magadini village were linked to produce Mushrooms for Shoprite super market, a link that benefited other 120 mushroom producers from Shrimugungani, Wanri and Mungushi villages in Hai District.
- Nineteen farmers from Shirinmugungani village in Hai District were linked to produce Flower Seeds for Mauwa Arusha Company.
- Forty six farmers from Magadini groups in Hai District were linked to produce safflower for Quality Food Company.
- Producers of rice, beans, groundnuts and beef cattle in Mbarali District were linked to big buyers like Fida Hussein from Mbeya town.

Greater access to markets usually starts with better access to market information. AMSDP district core groups and the producer groups they support have invented many different ways to increase farmers’ access to market information beyond the radio and agriculture shows. Most districts improved access to market information through use of billboards in the village. Farmers used mobile phones to get updated information from the district market monitor and put it up on the billboards in the villages. These data enabled farmers to have more bargaining power with buyers coming to the village. Many farmers had better access to markets and better market information by using SMS and cell phones. Market research committees searched for market information from village to District and national markets like Kariakoo and Tandale in Dar es Salaam. Poorer farmers increased their access to markets through using group-owned mobiles which were used to communicate with buyers and transporters. The pioneering district core groups invented new ways for producers to access markets and market information. They learned:

- How to negotiate deals with big traders or processors
- How to organize or start a Warehouse Receipt System and SACCOS
- How to establish and operate a network of market centres in the District
- How to start marketing new commodities

- How to operate a system with Mkulima Shushushu or market scout
- How to form and strengthen District core groups and farmer client networks

It was the rapid development of all these good practices that assisted small farmers benefit from increased market efficiency, removal of cheating and lowering of transaction costs. Access to warehouses and savings and credit societies provided small holders with foundations on which they negotiated better prices and realized the benefits of added values and higher quality products. In under a year AMSDP district core groups learned ‘on-the-job’ that they can improve small farmers’ access to markets with dramatic effect for the farmers they serve.

Impact on small farmer production and incomes from improved market access

In March 2006, after eight months of Linked Local Learning, those involved came together and assessed the impact of their work on market chain development. In what was in effect just one season they reported very significant increases in the volume of marketed crops and incomes.

The increases in volume of crops marketed, shown in Table One, were achieved through various means. In some cases farmers planted more area while in others better husbandry and more inputs increased yields. This was certainly the case in Mufindi for new or recent crops like Safflower, Mushrooms, Sunflower, Paprika, Peas and Beans. Even more remarkable were the increases in marketed volumes of maize and wheat in Songea, Mbeya, Mbinga and Rungwe where drought occurred. Here increases were due to a combination of greater areas planted and more of the harvest share going to market than before. The doubling and sometimes quadrupling of marketed volumes in just one season demonstrated how responsive small holder farmers can be when assured of a market and a fair price. Not reported in this table was the experience of coffee growers in Songea who uprooted their coffee to plant pigeon pea for which they had a contracted buyer. Previously coffee had been left to rot because markets had not been found for them or prices had been unacceptably low.

Table 1. Changes in Marketed Volume of Various Commodities by Producer Groups in Eight AMSDP Districts August 05 to March 06.

COMMODITY	DISTRICT	MEMBER NOS	MARKET VOLUME tons			
			BEFORE	AFTER	DIFF	+ %
Rice	Mbozi	103	44	100	56	127%
Rice	Songea	909	1,438	2,979	1,541	107%
Coffee	Mbozi	161	176	267	91	51%
Wheat	Mbinga	73	82	105	23	28%
Mushrooms	Hai	108	0.002	0.008	0.006	300%
Safflower	Hai	156	0.0	19.2	19.2	
Sunflower	Hai	146	2.8	11.2	8.4	300%
Beans	Mufindi	30	0	15.6	15.6	
Beans	Rungwe	84	19.0	43.0	24	126%
Paprika	Mufindi	30	0	2.2	2.2	
Potatoes	Rungwe	165	42.1	127.1	85.0	201%
Bananas	Rungwe	79	79.0	453.0	374.0	473%
Pineapple	Rungwe	80	63.0	160.0	97	153%
Maize	Songea	119	357	494	137	38%
Maize	Mbeya	67	2,000	3,450	1,450	72%
Maize	Rungwe	30	4.0	23.0	19	475%
Peas	Rungwe	23	4.0	13.0	9	225%

Increases in the volumes of commodities going to market have resulted in dramatic increases in gross income for producers and other key players in the market chain as shown in Table Two below. It is important to acknowledge here other factors that contributed to the increase in crop prices and hence incomes. These included the shortage in supply of many commodities due to drought conditions during the previous year and the introduction of a warehouse receipt system in some of the districts. Producers got better prices because the warehouse receipt system and formation of SACCOS enabled

them to store their crops and sell directly to bigger buyers when prices were higher than those offered at harvest time. Producers in Songea were able to sell much larger quantities of rice directly to Dodoma Transport Company at the slightly higher price of 685Tsh per kilo rather than 635Tsh. They sold their maize at 173Tsh per kilo compared to their old price of 119Tsh. In Hai district producers got higher gross incomes because they were marketing commodities they had not sold before. In the case of Safflower 156 producers earned thirty two thousand US dollars alone selling directly to the processor/exporter Quality Food Products Ltd.

Table 2. Changes in Producer Gross Incomes for Various Commodities August 05 to March 06.

COMMODITY	DISTRICT	MEMBER NOS	GROSS INCOME million Tsh			
			BEFORE	AFTER	DIFF	+ %
Rice	Mbozi	103	6.7	20.0	13.3	198%
Rice	Songea	909	914.4	2,040.6	1,126.2	123%
Rice	Nkasi	67	0.45	1.20	0.75	167%
Coffee	Mbozi	161	297.5	464.0	166.5	56%
Wheat	Mbinga	73	12.30	18.90	6.60	54%
Mushrooms	Hai	108	0	0.31	0.31	
Safflower	Hai	156	0	38.4	38.4	
Sunflower	Hai	146	5.6	22.4	16.8	300%
Maize	Songea	119	42.8	85.7	42.9	100%
Maize	Mbeya	67	702.4	1,331.7	629.3	90%
Maize	Nkasi	75	0.18	0.45	0.27	150%

Taken together the AMSDP district core groups from seven districts, shown in Table Three below, managed to increase, in just one season, the gross income of the producer groups they supported by 1.8 million US dollars. Net incomes are likely to have increased proportionately as input use did not increase dramatically. Selling much larger volumes of grain, like rice and maize, to big wholesalers, as has happened in Songea, brought the biggest absolute gross income increases. Producers in Hai showed that new niche crops like mushrooms, safflower and sunflower can also give sizeable income increases.

Table 3. Reported Increase of Turnover of District Core-Group Customers

District	Million TSH
Mbozi	186.0
Mbinga	8.51
Hai	80.3
Songea	1,169.1
Mbeya	734.1
Arumeru	0.565
Nkasi	1.02
Total of Districts =	2,179.6
<i>(exchange rate 1\$ = 1,200Tsh)</i> USD =	1,816,329

These figures only show the income increases received by producers and not the incomes of other key players in the market chain. We expect that further analysis would reveal that wholesalers, like Mohamed Enterprises and Dodoma Transport, and processors, have increased their incomes through increased trade volumes and significant savings in transaction costs.

What is the role of development cooperation and other key stakeholders?

Roles of development agencies, government and farmers

District core groups comprised of the AMSDP District Focal Person and Partner Agency, usually an NGO or consulting company contracted by the programme to support programme implementation. These two provided the leadership to the core group which also included a District Market Monitor and representatives from producers and processors or traders. In order to improve farmers access to markets core groups had to ‘learn’ how to develop a network of clients as well as how to develop market chains and share experiences with their peers in other districts. This required not only collective action, but also improved access to the internet and the wider use of mobile phones. The core groups mainly provided the following services to their clients:

- Brokered links for farmer groups with traders, wholesalers and processors.
- Convened trade fair workshops/meetings for key players in specific commodity chains to make new linkages, improved communication between key players and improved the efficiency of the market chain.
- Installed information boards and initiated the use of SMS market price information.
- Supported the organization of farmer groups into higher level associations, alliances and SACCOS.

Capacity building by ISG

AMSDP’s District Focal Persons, Partner Agencies, Market Monitors, producers and other key players in marketing started acquiring the necessary skills with a “Key Players Exploratory Workshop on Market Linkages” in Arusha, Tanzania in early June 2005. This exploratory workshop helped the forty five participants of the AMSDP programme understand the different challenges people face in marketing and develop future visions of improved market linkages. Participants also explored the concept of linked local learning as a process for learning and innovation in marketing. Following the exploratory workshop thirty seven people drawn from fourteen district core groups were trained as facilitators in the Linking Local Learners methodology of action learning and peer-to-peer exchange. This “Training-of-Trainers Course” ran from the 15th to 18th June 2005 in Arusha. The course produced facilitators capable of: a) planning, managing and facilitating a local action learning process; and b) organising district core groups and setting up a communication network linking them together.

Once the district core groups were up and running with their access to the internet sorted out twenty one participants from their ranks were trained in how to use the LLL Internet Learning Support Service. The training took place in Arusha from the 25th to 28th July 2005. It provided the district core groups with at least one member who knew how to share their experiences and engage in peer-to-peer exchange with other core groups. From August to February 2006 they trained most of the one hundred and four information contact persons who now use the LLL internet learning support service. These information contact persons perform the job of sharing experiences and practices with their peers in other districts. From August to March these information contact persons were mentored by ISG in their use of the LLL internet learning support service. Mentors guide, encourage and make suggestions to learners, they make links to others who can help, and they enable the documentation of outcomes to build a knowledge pool of experiences, good practice and impact stories. They do this through direct emails to the learners as well as through the LLL learning support service. Mentors prepare syntheses of discussions and help draft contributions to the library. Mentors also maintain the data base of contact persons registering new members and changing member contact details.

Which insights and lessons can be learnt from the case?

Key institutions to develop

Today, many small farmers in Babati District will tell of the bad old days when middle men visited their farms and bought their rice before harvest time at very low prices. They will tell of how they were forced to sell because they needed cash to buy food, or for a sick child, or some other emergency. Two key institutions supported by AMSDP have put an end to this form of exploitation: The warehouse receipt system; and the savings and credit cooperative societies. Now those small holders have joined a savings society and take their rice to a warehouse operating a receipt system. This means that they not only get a much better price for their rice when it is sold, but also can borrow cash if they have a family emergency. Being able to bulk up their crop with other farmers and sell at the right time always gave them better bargaining power in the market chain. Indeed large volumes are often a requirement for producers to deal with bigger buyers and processors. So a third institution to develop are the alliances between farmer groups to provide the larger quantities demanded by processors. Higher level associations form in response to the challenge of negotiating better prices for small farmers.

Farmers have not developed these key institutions on their own. Farmers have not contacted wholesalers or processors and brokered new deals on their own. AMSDP has supported a small group of service providers comprising district officials for agriculture and marketing as well as a local NGO to provide market linkage services to these farmer groups. The district core groups gather market intelligence on market demands and who the key players are in the market chain from producers to consumers. Successful core groups go beyond information gathering to actually bringing the key players round the table where they help broker deals and enhance the efficiency of market linkages. Successful core groups built special business platforms to promote fair trade along the market chain. Successful core groups developed large ‘client’ networks of small holder farmer groups. The key institutions to develop are: savings and loans societies, warehouse receipt systems, higher level associations for small holders, and district core groups of market service providers.

Key behaviour changes to promote

The far higher prices small farmers got for their crops was not because consumers were paying more. No, they came from the huge savings in transaction costs being made by key players along the market chain. First of all avoiding the ‘middleman’ saved on all the ‘commissions’ as crops pass from hand to hand before they arrive at the processor or wholesaler. But more importantly producing, grading, bulking and packaging a crop of the right quality generally reduced wastage and the costs of sorting later in the chain: For instance processors and wholesalers saves the cost of employing someone to go through bags of grain just to remove the stones. The Kalungu fishing group in Nkazi doubled the price of their sardines by drying them on tables rather than on the sand. Consumers prefer their sardines without grains of sand. Farmers in Hai changed to the ‘Tanya’ variety of tomato to get a better price. Producers in Babati, Sumbawanga and Songea all sold more grain and got better prices because they could deliver in the required quality and quantities to Dodoma Transport Company. The right quality and quantity of wheat was key to Mbinga core groups successful brokering of a market chain between producers and Trader/wholesaler ‘Green House Investments’, and processor ‘Mbinga Diocese Wheat Millers’. It is only key players that want to cooperate that can enjoy the costs savings that come from trust and transparency. Giving a fair price to producers allows key players in the chain to cut costs and add value in ways that lead to win-win situations for all. Those who maintain the behaviour of profiting by exploitation and hiding information will, if they do not change their behaviour, move on or go out of business. Cooperation that replaces cheating along the market chain is the behaviour that needs to be promoted.

Key developments to support

The communication environment is rapidly changing in rural Tanzania. The reach of mobile phone coverage is growing fast and has already outstripped by far the coverage of land lines and power grid. Rural people are already using mobiles in innovative ways, mainly for purposes of marketing and for saving transaction costs in their dealings with urban areas. For instance, Mufindi District has very successfully spearheaded the use of ‘Wakulima Shushushus’ the farmer market spy. Spies remain in close contact with their home village using mobiles while negotiating deals from far-away markets. Without mobiles, this would be impossible. The time-sensitive micromanagement to make sure that produce is at the right place at the right time in the right quantities to be picked up by the right trucks, etc., depends on fast and reliable communications over mobiles in a network that encompasses village groups and large national trading companies. For instance in Mbeya the bulking of maize for transport to Malawi was so much more efficient when the local ‘Mbalizi’ trader stayed in touch with farmer groups through their mobiles and arrange for the pulling together of the produce at the right time. No wonder mobiles are showing up everywhere in rural areas, even when the signal can only be received on a hill a few kilometres from the village. This very recent phenomenon is fundamentally reconfiguring the links of the traditional market chains.

However, mobiles only allow one-on-one communication. For learning in a network of peer-exchange an archiving function needs to be established for their locally relevant ‘know-how’. The need for such internet-based platforms is now well established as witnessed by the intensive discussions among District core groups and farmer groups on www.linkinglearners.net. Enlarging the one-to-many communication possibilities of an internet archive is also possible using local radio. Our experiences suggest that local radio could have a major impact on marketing efforts provided the information is locally relevant and always up-to-date. Using local learners in call-ins is another way to make the one-to-many connection between people living in remote areas. How to make this expansion of one-to-many communication possible is a key development to support.