CHAIN EMPOWERMENT

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SUPPORTING AFRICAN FARMERS TO DEVELOP MARKETS

Royal Tropical Institute

Royal Tropical Institute (KIT)

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The Royal Tropical Institute is an international institute specialized in the generation and dissemination of knowledge and expertise through institutional cooperation. KIT aims to contribute to sustainable development for poverty reduction, information dissemination and the preservation and exchange of culture.

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Faida MaLi is a non-profit company dedicated to poverty alleviation through facilitation of market linkages between small-scale farmers and agricultural markets.

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Foreword

Millions of smallholder farmers and indigenous communities in Africa are working to improve their livelihoods in an environment characterized by dwindling government support and increased competition between producers, processing companies and supermarkets within agricultural markets. How can we assist smallholders to cope with these challenges and secure market access and better incomes? What strategies can NGOs and business development services adopt to support this type of farmers?

This manual brings together a broad range of experiences to secure market access for smallholder farmers and indigenous marginalized communities from very different contexts from throughout Africa. It shows how vital it is to invest in quality improvement of existing products, develop new products, establish market linkages, and build farmer organization and capacity. It describes small-scale initiatives to collect honey from pastoralist communities in Kenya or collect and process shea butter in Mali, as well as large-scale initiatives in sugarcane (in Tanzania) or paprika (in Malawi). Some experiences are directed to accessing local markets, others at gaining access to European markets. It is a book about creating opportunities for the poor, and about eliminating bottlenecks to their inclusion in dynamic chains.

We hope that this manual is a useful tool for NGOs and emerging business development services and funding agencies to reflect on their roles and improve their capacities to provide effective support to such initiatives. The manual also documents some experiences that Cordaid as a funding agency has been involved in for a number of years.

Cordaid tries to facilitate new initiatives and innovations by providing grants for capacity building and market analysis to business development support organizations, like Faida Mali or SNV. We provide institutional and programme support to local and international non-government organizations, such as PADO, CRS and VECO. Cordaid not only provides grants, but also offers loans to commercial companies such as Cheetah in Malawi, Tongu Fruits Company in Ghana, and to Highlow in Uganda, to promote investments among smallholders. This mix of grants and loans is aimed to ensure that initiatives facilitate the inclusion of poor communities into changing markets, while at the same time ensuring long-term financial sustainability.

The various experiences demonstrate the need for secure planning and for close collaboration on the ground between small-scale producers, associations, NGOs, companies, banks, funding agencies and technical and research bodies. We hope that the production of this manual contributes to the ongoing reflection on our work and will help us to become even more effective in our support to the poor.

René Grotenhuis

General Director, Cordaid

Preface

One of the lessons from 50 years of development assistance in sub-Saharan Africa is that matching true interests in a multi-stakeholder environment is essential to sustainable development. Over the past decade the ideological "Berlin Wall" between civil society organizations and the private sector has been effectively brought down. This has created many new opportunities, but also new questions regarding the roles, functions and core capacities of the various key players. Deep-rooted principles and paradigms have been cut down in a short period. It is sometimes like mixing an Italian basketball team with Nigerian soccer players, and trying to play in a volleyball tournament. The new situation raises many questions about how the game is played, and who are the winners and losers.

In some ways we can think of the world as a giant laboratory where both deliberate experiments and random mutations take place. Every moment, new partners meet, explore opportunities and create new ways to cooperate. Some of these become successful ventures, while others remain infant initiatives or turn out as failures.

Yet science does not recognize failures as such. Einstein confirmed that failures contain more information than successes. But practice may be different. In our quest for success, we often forget to learn from our mistakes. At the same time, we also tend to repeat successes without analysing the underlying principles. Success may thus lead to stagnation, because it can cause corporate laziness.

Organizations and enterprises may have their internal learning mechanisms, but they rarely share knowledge with each other. They evolve separately, without interaction. This is not an optimal process for innovation and development – or for developing knowledge and disseminating information on emerging issues such as public–private cooperation, value chain development, or management of complex multi-stakeholder processes.

Accelerating learning processes is a skill that few organizations master. IIRR and KIT specialize in facilitating organizational and institutional learning. We apply a wide variety of skills and techniques that turn implicit "knowing" into explicit know-how. By doing so, we can initiate building knowledge. In this process of construction each brick counts.

This book is more than a heap of bricks. Relevant cases of chain empowerment and development of value chains in Africa are presented, analysed and compared.

This collective process that took place in Moshi, Tanzania, has resulted in a set of valuable lessons that are original, up-to-date and useful to a wide audience that is interested in market access for African farmers. The lessons are not the result of academic research, but are drawn from practice and daily reality. They tell us stories of the experiments in which organizations – previously unknown to one other – work together to realize a collective goal. Above all, these are stories about human interaction. Value chains are about linkages between actors who transfer or exchange goods, capital or knowledge. In that respect, they are also trading places of culture, values, and personalities. If these match, we observe that there is trust or "chemistry".

The quest for good practice and lessons from value chain development is an exploration of human behaviour. This book is a stepping-stone towards a better mutual understanding, between people of various backgrounds, be it farmers, entrepreneurs, civil society representatives, economists, etc. The contributors to this book are very diverse, but by taking up complementary roles and functions and focusing on a collective goal, they have succeeded in producing a valuable output. In this sense they have become a good example of a successful value chain themselves.

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1
Setting the scene

Rapid changes in the social and economic environment are challenging African smallholders to supply their products to the market and their ability to improve their families' livelihoods. These changes include:

- Market liberalization and integration
- The rise of the retail sector
- The decline of government support for and intervention in agriculture and rural areas.

Market liberalization and integration

Over the past 20 years, new trading policies have liberalized and integrated markets. Some farmers have benefited. But many farmers in developing countries have seen their incomes fall. Their terms of trade (the price of what they sell compared to what they buy) have declined steadily as prices of agricultural commodities have fallen compared with manufactures.

The integration of world markets, or "globalization", has formed closed supply networks. Buyers and sellers sign contracts to produce and trade a wide range of specialized products. For example, a buyer may want to purchase a specific variety of pineapples, grown to strict specifications and packaged in a certain way. The buyer may negotiate a contract directly with a grower, rather than buying through a trader.

This new organization of supply chains is unfamiliar territory for many African smallholders. It is very different from the conventional, arm's-length trade in undifferentiated commodities such as maize or wheat, which may involve many intermediaries, and where the buyer may not know who the producer is.

It is accompanied by a market concentration, with a small number of powerful transnational companies dominating large parts of the agrifood system. Small-scale producers and processors have little market power in comparison.

The rise of processors and retailers

The rise of the food processing and retail sectors has compounded this market concentration. Buying power is now concentrated in the hands of a small number of food processing firms and supermarkets that have significant power over producers and other actors in the supply chain.

This trend is not just true of the developed world. In Africa too, supermarket chains such as Shoprite, Uchumi and Nakumatt are coming to dominate food retailing. Supermarkets account for 30% of the food retail trade in Kenya, and 55% in South Africa (FAO 2003).

The supermarkets enforce exacting standards for the produce they buy. They want their beans to be a uniform length, their mangoes to ripen at exactly the right time, and their bananas to be free of bruises. They have developed new private standards and rules, and have created certification and auditing systems to make sure they get the product they want.

These rules enable the supermarkets to sell what consumers want – and to be left with as little unsaleable produce at the end of the day. The supermarkets pay growers attractive prices to ensure they get produce of the right quality. But the rules are hard for smallholder farmers to comply with: they lack the right technology and management skills. So smallholders are being squeezed out of a lucrative market.

Declining government involvement in agriculture and rural areas

Structural adjustment programmes have meant that developing country governments have significantly reduced their support to farming communities. Investments in rural infrastructure (roads, electricity, telecommunications), input subsidies, marketing schemes, and services such as extension and research have all declined. In the past, most African governments provided services to farmers and rural areas through commodity marketing boards and state-supported cooperative movements. The decline of these institutions has hampered economic development as well as farmers' access to local markets.

For development to take place, various actors in the supply chain must invest in a coordinated way (Stockbridge et al. 2003). For example, government investments in rural infrastructure are profitable if farm organizations also invest in increased production, local businesses invest in processing and distribution, service providers invest in new technology, and so on. If these complementary efforts are not well coordinated, an equilibrium of underdevelopment may occur (Hoff 2001).

As a result of these changes, the majority of smallholder farmers in developing countries are now less organized than before. They are trying to increase their production in the face of reduced inputs and declining prices. This increases the

supply of low-quality goods onto the market, which further suppresses prices. This situation is "Cochran's treadmill" (Cochran 1979): more farmers supply more products into a market where prices are steadily falling, natural resources are being degraded and poorly managed farming systems are spreading into increasingly marginal areas.

The challenge for smallholder producers

To address this situation, development agencies, donors and NGOs are placing more emphasis on enabling farmers to increase their level of competitiveness, to produce for an identified market, rather than trying to sell what they have already produced and also seeking new market opportunities that offer higher levels of income. These goals can be achieved through better economic coordination and institutions. Farmer organizations can play a key role of organizing economic activities beyond local boundaries. They can build up relationships with various chain actors and create commitments from various actors to cooperate on mutually beneficial actions and investments and thus create value chains (see box below).

It is a challenge for smallholder farmers, through their organizations, to understand market demand and develop their skills and capital requirements to supply the required volumes of quality product at the right time of the season.

- **Market information** A group finds it easier than individual farmers to obtain the information that members need to grow for a particular market. At the same time, other chain actors find it more attractive to deal with a group than with numerous small-scale producers.
- **Capital and skills** The group can pool their resources, access credit and services to develop the technology and skills needed to produce more sophis-

Actors, supply chains and value chains

Actors are those involved in producing, processing, trading or consuming a particular agricultural product. They include direct actors which are commercially involved in the chain (producers, traders, retailers, consumers) and indirect actors which provide financial or non-financial support services, such as bankers and credit agencies, business service providers, government, researchers and extensionists.

A **supply chain** is a set of linkages between actors where there are no binding or sought-after formal or informal relationships, except when the goods, services and financial agreements are actually transacted.

A **value chain** is a specific type of supply chain – one where the actors actively seek to support each other so they can increase their efficiency and competitiveness. They invest time, effort and money, and build relationships with other actors to reach a common goal of satisfying consumer needs – so they can increase their profits.

ticated products. A group is more able than an individual to take risks.

- **Volume** The group can grow enough produce to meet a buyer's volume requirements. The buyer can deal with the group as a whole rather than with individual farmers.
- **Quality** A group can set rules specifying quality standards, and can appoint members to enforce them. The group can access extension and marketing advice that would be impractical to provide to individual farmers. And it is worthwhile paying for certification and inspection procedures so the group can sell produce to high-value export markets.
- **Consistency of supply** A group finds it easier than an individual to ensure a consistent supply of produce in terms of volume and quality. Group members can organize among themselves to grow crops that mature at staggered times, so ensuring a continuous supply for the buyer. They can pool their resources (or get credit) to acquire the technology they need to force flowering or fruiting, invest in irrigation so they can grow off-season crops, or to store produce. They can also buy produce from other farmers to cover shortfalls in their own production.

Principles of empowering smallholders

Empowerment is vital for sustainability. Confronted by short project timeframes and limited funding, development organizations often make the mistake of trying to intervene too much – for example, by taking over management of the chain, rather than enabling the farmers' organization (or other players) to do it themselves. When the project finishes and the development organization withdraws, the value chain is left without a key link, so it collapses.

Intermediary organizations should aim instead to support farmer organizations to strengthen their capacity to manage chains or chain activities. They should embrace the following principles before engaging smallholders in a value-chain development process. This may help ensure that interventions target development objectives such as equity, gender, sustainable development, and poverty reduction.

Sustainable businesses

Successful intervention in a chain involves promoting sustainable business models. This means that the various actors in the chain must all be able to make a sufficient profit. After an initial period of assistance, each of the actors in the chain must be able to act on their own, without continuing long-term outside subsidies or other forms of support. A business model that does not generate sufficient profit on a sustainable basis for each of the actors, or that relies on continuous outside support, is doomed to fail in the long term.

Value chains and the Millennium Development Goals

Donors support the value chain approach because they recognize that to reduce poverty and to achieve the Millennium Development Goals, the livelihood issues of the world's rural poor must be addressed. Many donors have shifted their attention towards private-sector implementation of programmes, market-based allocation of resources, and public–private partnerships.

A value chain approach supports several of the Millennium Development Goals:

MDG 1: ***Eradicate extreme poverty and hunger*** Strengthening the capacity of smallholder farmers to develop markets increases their share of the value chain and thus improves their livelihoods. Also, it helps them indirectly, by generating employment and creating wealth in rural communities and in the larger economy that can trickle down to the very poor.

MDG 3: ***Promote gender equality and empower women*** The majority of farmers are women, though they are typically under-represented in farmer organizations and are poorly served by extension and other services. Value chain interventions typically mainstream gender issues, or include a strong gender component.

MDG 4: ***Reduce child mortality*** Reducing child mortality depends on access to nutritious food, which a value chain strategy can increase.

MDG 7: ***Ensure environmental sustainability*** Rural people are custodians of much of the world's land and water resources and biodiversity. They are central to achieving this goal.

MDG 8: ***Develop a global partnership for development*** Improved market access (especially international trade in agriculture, which remains highly protected) depends directly or indirectly on pro-poor agricultural growth.

More information on the Millennium Development Goals: United Nations 2005

Equity

Equity means ensuring that the economic gains in value chains are fairly distributed among the various actors. It is necessary to take into consideration aspects such as return on investments and the bargaining power of the various actors. Returns should be proportionate to the level of effort and risk that the actors assume. Smallholder farmers should be treated as rational business people who require empowerment to be able to negotiate a higher economic return.

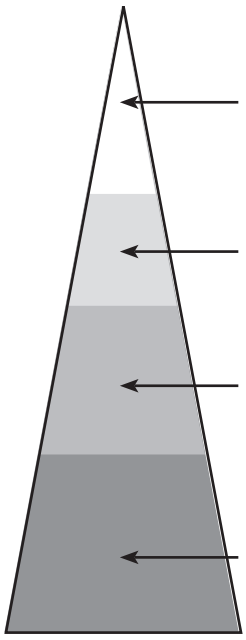
Inclusion and exclusion

Value chain development should not be seen as a social policy to include everyone. It is targeted at particular players – those who have the potential to generate wealth by producing and processing specific products that the market demands. Inclusion – and exclusion – are a necessary part of such a "game". Smallholders must be able to meet market conditions if they are to become players in this game. Not everyone can grow a particular specialist crop (that would merely flood the market). Not all farmers will have the right type of soils, own enough land, have land near enough to a road, or possess the necessary skills to grow a certain crop. They may not be able to organize themselves into groups, and they may not be interested in doing so.

That does not mean that development agencies should focus on the more fortunate members of society, a "chosen few", and ignore the rest. That would reinforce the divisions in society rather than helping create broad-based opportunities (see *Pro-poor value chain development* below). Rather, it means that strategies to promote inclusion should focus on building the farmers' organizational and management skills and supporting farmers to realize where and how they can sustain a profitable business.

Gender responsiveness

Although women do the majority of farm work in Africa, they are relatively poorly served by development agencies. There is a danger that women and other vulnerable groups are excluded by default from new, potentially profitable opportunities. It is a challenge to overcome the inherent gender biases in society, culture and organizations. Steps are needed to ensure that women and other vulnerable groups (such as young people, elderly people, and people living with HIV/AIDS) are given the opportunity to participate in and contribute to such initiatives. Ideally, interventions should provide opportunities for various segments in society: men and women, young and old, privileged and underprivileged.



1 Highest wealth quartile	Most innovative, most educated and articulate; includes leaders and people with most skills	This group generally benefits most from social support programmes, is most interested in new ideas and ready to take on new risks
2 Incremental asset building	Social mobility dependent on local economic growth	Can follow the first group, but are generally not leaders
3 Lower asset group	Precarious in terms of their ability to keep the assets they gain	Seeking change but less able to control their assets and options
4 Poorest of the poor, declining assets	Poorly educated, low assets, marginal areas, landless, often receiving food aid/remittances	Number of this group in a community depends on distance to market, local economy, degree of integration with mainstream economic processes, shocks and opportunities

Wealth categories within a rural community

Specific interventions to support the needs of disadvantaged groups are often appropriate. Such groups typically have limited access to and control over resources, so are less likely to benefit from new opportunities. The intermediary organization should check which groups (in terms of wealth, sex, age, etc.) control what resources. This will help them understand how decisions are made at household level – for example, how are decisions made on what crops to produce, when to sell, and what to grow for the family's own consumption? Understanding this will enable interventions to be designed and targeted properly.

Social responsibility

Promoting value chains often involves difficult issues of social responsibility. For example, many farmers think that children are the best pollinators of crops such as vanilla. During pollination season, they may take their children out of school for weeks or months so they can work on the farm. The family may earn more money, but at the price of poorer education for the children. So should development agencies promote vanilla? This is not just an issue for NGOs and government agencies, but also for private firms engaged in value chains. Irrespective of the size of the enterprise, they should pursue a socially responsible agenda.

Pro-poor value chain development

How can value chain development be targeted to help the poor?

By default, most development programmes benefit the better-off people in a community. These are the most innovative, better educated, upwardly mobile people, who are generally more confident and interested to take on new risks (see the figure on the previous page). Interventions targeted towards them risk merely helping those who least need it.

Vulnerable households – those headed by women, or the families of AIDS victims, for example – may find it difficult to grasp new market opportunities. Even if they have the information they would need, other constraints may prevent them from benefiting, such as limited access to credit, natural resources or social capital. The poor generally lack a cushion that enables them to take on risk – and risk is inherent in business.

This means that if the goal of the intervention is general economic development, a lack of targeting is likely to select the best-off people in the community. This is particularly true for interventions that include a lot of risk. But if the aim is to specifically support the poorest, then the approach will need to target groups based on their ability to save or ability to deal with exposure to risk.

Designing supply chain interventions so they benefit vulnerable groups poses a considerable challenge for development organizations. It is necessary to identify beneficiaries who are likely to be able to benefit from a supply chain approach.

Efforts will be needed to build the group's livelihood assets and strengthen their capacity to manage the chain or chain activities.

The ability of communities to respond to development interventions depends on a number of factors. These include:

- The farmers' access to **capital assets**: economic/financial capital, physical capital (such as infrastructure), natural resources (land, soil, water), human capital (skills, education, labour), and social capital (ability to organize, links with outsiders, etc.).
- The level of **social integration** of the community. Some groups are relatively isolated (e.g., forest dwellers, pastoralists and ethnic minorities), while other communities are in regular contact with urban centres and have strong social and economic ties with influential outsiders.
- The **stability of the environment** where the community lives. Has the community been exposed to security problems such as civil war or ethnic conflict? Is it recovering from a disaster, or has it been exposed to economic shocks? Is it subject to chronic emergencies, such as repeated drought, disease or political discrimination?

Purpose and readership of this book

Markets play an increasingly important role in the lives of even the most remote economic actors. This book describes how marketing strategies can help groups of smallholders analyse their position in the supply chain, and develop and take advantage of supply chains to improve their incomes and livelihoods. It illustrates how service providers can assist and empower rural and peri-urban communities to identify market opportunities, improve supply chain management skills, increase their competitiveness and diversify into alternative and higher value products.

The approach takes a "value chain" perspective that strengthens business linkages between producer groups, service providers and other actors such as processors and importers, rather than focusing only on on-farm interventions. The book provides case studies on how intermediary organizations have empowered farmer organizations to develop markets. The lessons drawn from these case studies will serve the various intermediary organizations and enhance their performance to facilitate market access for smallholder farmers.

The book is intended mainly for use by organizations interested in empowering smallholder farmers to develop markets. It is specifically aimed at those involved in project design and implementation, building staff capacity in market facilitation, and project evaluation. They may include the following:

- **Extension workers**: individuals or institutions providing agricultural extension services, particularly those involved in market linkages practices.
- **NGOs, national farmers' associations**, and other organizations that provide market linkage services.

- **Training institutions** at all levels, especially farmer training colleges.
- **Ministry of Agriculture** staff and other development workers.
- **Private sector actors** involved in inputs, extension, business planning, finance, market facilitation, storage, etc.
- **Research organizations** promoting market linkage methods, especially national agricultural research organizations.
- **Policy makers and donor** organizations.

These organizations and individuals inevitably have different perspectives, but they all have a common interest: developing the ability of farmers to produce and sell a product that consumers want, on a reliable basis.

The interest of development agencies and NGOs in this is obvious: they have a development agenda to increase the income and wellbeing of the poor. Responsible firms in the private sector have a similar interest: in order to supply their customers with a quality product at a reasonable price, they need to develop stable, long-term relationships with producers and processors. They therefore have a major interest in supporting the development of farmer groups, helping them organize, educating them to produce the desired product, and ensuring that they approach the market in a businesslike way.

Development organizations can help this process in various ways (see Chapters 7 and 8):

- They can **initiate** or **facilitate** the process as a neutral outsider.
- They can act as **trainers** or **coaches** to strengthen the capacity of farmers' organizations to manage chains.
- They can act as **information** and **knowledge brokers** to facilitate understanding of the value chain and provide information about innovations.

Success is not easy. It may require considerable amounts of effort, perseverance, and support from outsiders. If the efforts are to be sustainable, the farmers and supply chain actors must be able to understand the market and respond to its many, constant changes in a timely, effective way.

Parts of the book

The remaining chapters in this book focus on the concept of value chains and how to improve them.

Chapter 2, Introducing value chains, describes a framework for analysing the farmers' position in a value chain, and for making strategic decisions on how to help them improve it. It presents four roles that farmers may play in the chain.

Chapters 3–6 present cases describing how groups of farmers have improved their position in the chain, either by improving how they perform the role, or by taking on new roles. These chapters also describe the role of the intermediary organization in helping them to do this.

Chapter 3, Chain actors, describes how three groups of producers improved their position as chain actors by improving their production techniques and finding markets for their produce.

Chapter 4, Chain partners, tells how various groups have been able to take on more management roles in the chain, so becoming chain partners.

Chapter 5, Chain activity integrators, shows how farmers' groups shifted from being chain actors to chain activity integrators by adding value to their produce, for example by processing it.

Chapter 6, Chain co-owners, describes how farmers have become chain co-owners through a combination of increasing the types of activities they perform, as well as increasing their ability to manage the chain itself.

Chapter 7, Strategies for chain empowerment, distils lessons from these cases. It describes the strategies that the intermediary organization can use to help farmers improve their position in the chain.

Chapter 8, Facilitating chain development, describes the various roles that the intermediary organization may consider playing in promoting value chains.

Chapter 9, Resources, gives a brief overview of various tools that intermediary organizations can use in analysing and facilitating the development of value chains. It also lists relevant resource materials and provides details on the contributors to this book.

How this book was prepared

This manual is part of wider efforts to promote pro-poor access to markets in Africa. It is designed to reflect the experiences and views of many organizations working with pro-poor supply chains. The book was developed with a range of partners (see pages xiv–xvi) with experience in assisting farmers develop markets for their produce.

The idea for this book began with a report produced by KIT and Faida MaLi in 2004 on the role of Dutch farmers in Tanzania's rural economic development (Verkuijl and Masao 2004). This examined the contribution of Dutch enterprises to local economic development by creating employment opportunities and transferring knowledge of sustainable production systems, improved labour standards or food-quality and safety standards. One of the report's recommendations was to capitalize on Faida's and KIT's experiences in securing smallholders' access to markets. Therefore, a "writeshop" was proposed in 2005 to learn and disseminate the experiences of various organizations on this topic.

In April 2005, KIT and Faida MaLi met with the International Institute for Rural Reconstruction (IIRR), which has extensive experience in facilitating writeshops. IIRR recommended starting with a preparatory workshop with key stakeholders that would allow the participants to agree on the content, scope and target audience of the manuscripts. Such a preparatory workshop was held in Arusha,

Tanzania, on 16–17 March 2005, with participants from Faida MaLi, FAO, KIT, Matchmakers Associates, SNV and the University of Florida.

KIT facilitated the conceptual learning process, played an overall technical role and raised funds. Faida MaLi organized the logistics and shared its experience, and IIRR advised on the overall process, assembled the technical team, facilitated the writeshop and took charge of the book editing and printing. KIT funded the preparatory workshop, while Cordaid and CTA funded the writeshop itself. Others like SNV, FAO and CIAT contributed by supporting the participation of their staff.

The Moshi writeshop

An intensive, 6-day writeshop was held in Moshi, at the foot of Mt. Kilimanjaro in Tanzania, on 24–30 October 2005. The contributors brought manuscripts with them, along with other printed materials, and photographs relevant to the subject. A total of 38 representatives from local, regional and international NGOs, United Nations organizations and international research centres, together with staff of KIT, IIRR and Faida MaLi, participated in the writeshop.

Each of the participants was asked to prepare a brief paper describing a particular case they had been involved in. Each case focused on how a particular group of farmers had, with the assistance of an intermediary organization, developed a supply chain or improved their position within it. The participants brought these manuscripts with them to the writeshop.

The writeshop began with a presentation of a framework describing different ways that farmers can participate in a supply chain – as chain actor, chain partner, chain activity integrator, or chain co-owner. This framework facilitates a strategic understanding of interventions to integrate small-scale farmers in the chain. Substantially modified as a result of comments made during the writeshop, it forms the basis of Chapter 2 in this book.

The participants then split into two groups, each discussing half of the case studies that had been prepared. Each participant presented his or her case study; the other participants commented on the drafts, asked questions, and suggested additions or changes. The participants then revised their drafts with the assistance of a team of editors and resource persons. Artists drew illustrations to accompany the text. The participants then presented their revised drafts to the group a second time, along with the illustrations, which allowed other participants to make further suggestions. The editors and artists again helped revise the text and illustrations. The groups were fairly fluid: individual participants and resource persons were able to move from group to group, so contributing to the drafting of more than one chapter.

By the end of the writeshop, the participants had completed drafts that fitted into the four typologies of the framework (chain actor, partner, activity integrator and co-owner). These cases form the bulk of the book – Chapters 3 to 6.

Also during the writeshop, the participants divided into four smaller groups, each of which synthesized the case studies on one of the typologies, and discussed the strategies appropriate to that typology. This resulted in Chapter 7. The draft of this chapter was also presented to the plenary, and participants were able to provide comments and suggestions on the text.

After the writeshop, considerable restructuring and rewriting were necessary to eliminate overlap among the various chapters and to ensure the style was clear and consistent. The chief editor in collaboration with the representatives of KIT and Faida MaLi were responsible for finalizing the book.

Throughout the writeshop process, the initial manuscripts were revised substantially or were completely rewritten. The information they contained was selected, sifted, and combined with ideas from other sources, and was distributed throughout the book. A single section in the book may contain information provided by many different participants. This means it is not possible to label a particular chapter or section as the work of a particular participant. The "authors" and resource persons of the book are thus the contributors listed on pages xv–xvi.

Writeshop advantages

The sequence described above is an adaptation of the writeshop approach pioneered by IIRR at its headquarters in the Philippines. IIRR–Africa has used this approach to produce extension and information materials on a wide range of subjects. Writeshops have several advantages over conventional methods of producing a publication. They speed up the production process, taking full advantage of the participants' range of expertise. The process of writing, getting comments, revising and illustrating takes place at the same time, considerably shortening the often-difficult process of writing, editing and publishing. A large number of participants contribute to each topic: in effect, the writeshop provides an opportunity for technical peer review by a large number of reviewers, as well as pre-testing for understandability and field relevance by a group of the intended readers.

In addition, writeshops bring together a large number of people from various institutions and walks of life, each with different perspectives and expertise. They are an excellent training and networking opportunity, with individuals learning about each other's work and exchanging ideas and experiences that will be of value for them when they return home. It is hoped that the relationships and networks forged during the writeshop will continue long into the future.

2
Introducing value chains

Zahina grows pineapples on part of her 3 ha farm in Bagamoyo district in the Coast Region in eastern Tanzania. She plants shoots on her farm at the beginning of the rainy season, and applies a spoonful of fertilizer near each plant. She weeds her field a few weeks after planting to make sure that weeds do not smother the young plants. She watches anxiously as the flowers appear and then the fruits begin to swell in the centre of the spiky crown of leaves. When the fruit is ready for harvest, she hires several young men in the neighbourhood to harvest the fruit by hand and carry it to the road. The young men load Zahina's fruit onto a lorry owned by the producers' association she is a member of. The lorry takes the fruit to the association's grading station, where it is weighed, graded, sorted and packed into boxes for shipment. The association pays Zahina for her produce – enough to buy several sacks of maize for her family.

Simone is a Brazilian tourist staying at a beach resort on the island of Zanzibar. Each morning, the hotel serves its guests with fresh pineapple for breakfast. Simone does not know it, but the fruit she is eating this morning was grown by Zahina. The previous day, the hotel received a consignment of fruit from its supplier in town. The supplier buys from a trader who has a contract with Zahina's association for a regular supply of fresh pineapples.

Zahina and Simone* are at opposite ends of a value chain. Between them is a long chain of activities: planting, pest and disease control, harvesting, sorting, grading, packaging, transport, shipping and storage. Each of these activities has to be carried out in the right way, at the right time. If not, the pineapples will not be in tip-top condition when they arrive at the hotel, and the hotel manager will cancel the contract with the supplier and arrange to serve mangoes or watermelon instead.

* Zahina and Simone are hypothetical. Except where stated, everyone else named in this book is real.

Each of the links in the chain involves a different set of actors: input suppliers, farmers such as Zahina, labourers who harvest the crop, the association's workers who sort and pack it, the trader who buys the fruit and sells it to the hotel's supplier, the shipping firm that ferries it across to the island, the supplier who brings a van load of fresh produce to the hotel each day, and the hotel's management and staff who prepare breakfast each morning for the hotel guests.

Supply chains

We are all part of a supply chain. In fact, as consumers, we are all part of innumerable chains – of fruit and vegetables, grains and oils, textiles and cosmetics – that stretch from the producers in far-flung corners of the globe, all the way to our kitchens, dinner tables, wardrobes and bathrooms. At one end are the producers – the farmers who grow the crops and raise the animals. At the other end are consumers, who eat, drink and wear the final products. In the middle are hundreds and thousands of individuals and firms, each performing one small step in the chain: transporting, processing, storing, selling, buying, packaging, checking, monitoring, making decisions. Other players also have a key role: the banks that provide loans and arrange payments, the government that sets regulations and determines policy, information brokers who keep the market players informed about prices and quantities, and so on.

At each stage in the chain, the value of the product goes up. The same pineapple that Zahina sold for €0.10 may cost the hotel €2.00 or more in Zanzibar. The value of the product goes up because the product becomes more convenient for the consumer – after all, Simone does not want to have to travel to Bagamoyo just to eat pineapple for breakfast. The product may also be transformed or processed in various ways: the pineapple may be peeled and sliced, diced and canned, or turned into jam, cakes or juice, before it is consumed.

The same is true for other crops. For example, if a farmer dries and husks her maize, she will be able to sell it at a higher price than maize that is still on the cob. If she grinds it to make flour, she can sell it at a still higher price. This processing may help preserve the product (enabling her to sell it at a later date when the price is higher), make the product more attractive for the buyer (sorted, graded produce fetches a higher price than ungraded), or enable her to sell to a different buyer (a baker rather than a miller).

Costs are also incurred at each stage in the chain. Zahina has to buy fertilizer and pay the young men who harvest her pineapples. The producers' association has to employ staff and pay for its operations. The trader has to cover the costs of transport, crating, shipping and storage. The supplier in Zanzibar has to pay for its office and staff costs, as well as the salary of the van driver who delivers the pineapples to the hotel. The hotel must pay salaries of the restaurant staff who peel the fruit and serve it to Simone for breakfast.

Losses also occur: despite all the best efforts of everyone in the chain, some of the fruit may spoil before it is sold. And each actor in the chain must also cover

their risks and make a profit – otherwise they would not want to be involved in the pineapple business.

Some people benefit more than others from being part of a supply chain. Individuals and firms can grow rich if they can exploit advantages in the chain. For example, a trader who has the only truck in an area can buy from farmers at rock-bottom prices, then sell at a high mark-up in the nearby town. Supermarkets or processors are often powerful players that can dictate terms to their suppliers and force down prices.

Farmers are often at a disadvantage in such chains. Many farmers grow crops or raise animals on an individual basis, so they have little bargaining power vis-a-vis traders or input suppliers. They often lack market information – so they may not know how much their produce is really worth, and how much more they might earn if they were to transport it to the nearby town rather than sell to the trader who arrives at the farm gate in a truck. They are often involved only in producing the crop or animal, and not in processing it to add value. They lack an understanding of the market: they do not know who the other players in the market are, what happens to their produce after they sell it, or what types of products consumers want. They do not control the terms on which they participate in the chain.

This is particularly true for smallholder farmers in Africa. They often live in remote areas, far from good roads and markets. The physical environment may be difficult: rainfall may be erratic, soils poor, and crops and livestock may be attacked by pests and diseases. Rural areas in Africa are poorly served by infrastructure such as electricity and telecommunications. Smallholder farmers usually lack the capital to invest in irrigation, equipment, inputs or marketing. They have limited access to information about prices, quality standards and other market-related information. All these factors make it especially difficult for African farmers to benefit from the chains they are involved in.

But it does not have to be so. Smallholder farmers in Africa can benefit from their supply chains in several different ways. They can do more of the activities in the chain – for example, they may process their product before selling it. And they can take more control over the management of the chain itself – for example, by negotiating better prices and terms of trade, seeking new markets, and controlling product quality.

Supply chains vs value chains

One of the key differences between Zahina and millions of other farmers around the world is that she and other members of her producers' association are part of a value chain.

Other farmers grow their produce and sell it to the highest bidder – or more often, at a pitifully low price to a single trader who comes by with a lorry at harvest time. They grow the same crops as everyone else in their area, they all plant and

Complex chains

Many chains are much more complex than the pineapple example at the beginning of this chapter. Pineapples themselves can end up in various different forms: sliced or diced in cans, as juice in bottles, or in cakes and jam. A product such as vanilla may be sold to consumers as dried beans or as powder, and in bulk as powder to ice cream makers, bakers, chocolatiers and confectioners. Paprika may be sold fresh or dried, or as an ingredient in a thousand different types of packaged food, from chilli sauce to dried soup. So rather than single lines, chains may in fact look more like a tree with many branches – with each branch representing a particular end-product.

These complex chains offer a multitude of choice to farmers. They may choose to supply a specific market segment, and produce the crop or animal that is tailored to that segment. They may also try to process their produce to add value to it: they may dry chillies rather than selling them fresh, or they may make shea butter rather than selling the unprocessed nuts.

Farmers need to understand the players in the chain and the requirements of the different branches so they can supply the product which that branch requires. That will increase their bargaining power in the chain, and improve the price they get for their product.

Export vs local consumption

The example at the beginning of this chapter is of an African farmer who is part of a value chain that ends in a luxury hotel in another part of the same country. The hotel pays a premium price for a reliable, high-quality product. Such value chains are still a small part of the total market in Africa.

Exports are increasingly important for African farmers as Africa becomes integrated into the world trading system. Africa is increasingly supplying farm produce to foreign markets: cut flowers grown in Kenya are flown daily to Amsterdam's flower auctions; Ethiopia and Kenya export large numbers of cattle, sheep and goats to the Middle East; farmers in Mali and Burkina Faso produce shea butter that is sent to Senegal and Côte d'Ivoire, as well as to the chocolate and cosmetic industries in Europe.

Consumers in developed countries like to buy produce that appears in top condition: fruits must be free of blemishes; vegetables must have a uniform size, shape and colour; produce must be fresh and attractively packaged.

In addition, developed countries impose stringent quality standards on imported produce. The produce must pass phytosanitary hurdles, be free of pesticide residues, have no disease and mould, and so on. It must be traceable to its origin. If a single consignment of produce violates these requirements, importing firms may refuse to buy from that supplier, and the importing country may ban imports of that type of produce from an entire exporting country.

But most chains are more local in scope. The Kenyan farmer who supplies vegetables to the local Uchumi supermarket has a much shorter chain. The Malian farmer who sells her tomatoes at the village market is also part of a chain: one that links her with her friends and neighbours, who are also her customers.

These local chains are usually a lot less stringent than export markets. It is possible to sell produce on the local market that cannot be exported. Quality is lower, and so are prices.

But consumers in Africa's cities are becoming fussier. The customer in a Nairobi supermarket may be as choosy as one in Paris or New York. This poses new challenges, as well as new opportunities, for Africa's farmers. They are ideally placed to supply local high-quality markets. The question is, how can they upgrade their product and activities so they can do so?

harvest at the same time, and they all have to sell at rock-bottom prices. They do not check what specialist crops the market might want, and if they have a permanent relationship with a trader, it is based on mutual suspicion rather than trust. The farmers might sign a contract with a buyer to supply produce at a certain price – but they readily sell to another buyer who offers a higher price at harvest time. The original buyer is understandably reluctant to deal with people who break agreements so readily. This **supply chain** functions – but not very well: the farmers make little money and have no incentive to improve their product, and the traders face a great deal of risk and can buy only low-quality produce.

Zahina and her friends are different. Their association has negotiated a deal with a trader who buys a certain amount of high-quality fruit each week. The trader in turn has a contract with the hotel's supplier. This is a **value chain**: each of the actors in this chain is prepared to invest in the chain, and to support the other actors, to make sure that it functions smoothly. This makes sense for them all: all of them benefit from having a smooth supply of top-quality fruit arriving on Simone's breakfast table.

This book describes how intermediary organizations can work with farmers' groups and other actors to convert supply chains into value chains.

Strategies for chain development with small-scale farmers

The day-to-day work of supporting the integration of small-scale farmers into supply chains is very practical: it may involve identifying a buyer, solving a quality problem, or improving packaging. But behind these practicalities are more strategic issues. How should the supply chain be designed? Who should do what task? Who should have what skills and capacities? Where should the power lie? What should organizational and institutional arrangements look like?

This section presents a model to help you think about this in a strategic way. It presents a framework that distinguishes four basic forms of small-scale farmer participation in supply chains. Each of these roles requires different intervention strategies by the intermediary organization.

Small-scale farmers can participate in value chains in many different ways. These types of participation can be summarized into two broad dimensions:

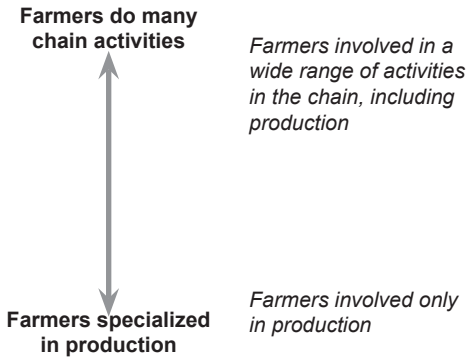
- The types of activities that farmers undertake in the chain
- The involvement of the farmer in the management of the chain.

Activities farmers undertake in the chain

Farmers may concern themselves only with production: they prepare the land, plant the seeds, apply fertilizer, control pests and weeds, and harvest the crop when it is mature. But they may also be involved in other activities – for example,

procuring inputs, drying their crop, sorting and grading, processing, transporting and trading. These are the **chain activities**. Being involved in various activities in the chain is known as **vertical integration**.

We can plot farmers' level of involvement in the chain on a line (see the figure below).



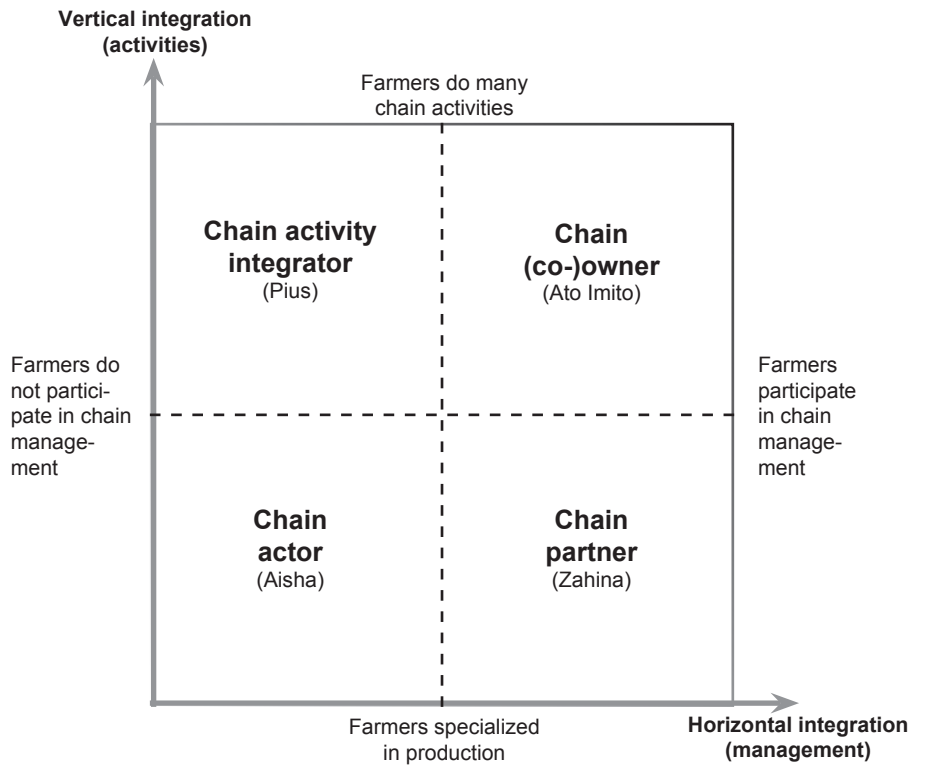
What activities in the chain do the farmers do?

Farmers' involvement in chain management

Farmers may be excluded from any decision making about issues that affect them – even over what crops they grow or what animals they raise. Someone else may make these decisions – then inform the farmers. Or the farmers may have a high degree of control over management: they may be able to decide how much they sell, to whom and at what price. They may control the terms of payment, the definition of grades and standards, the targeting of consumers, the management of innovation, and so on. We can think of these aspects as **chain management**.

We can also plot farmers' degree of involvement in the management of the chain on a line (see the figure below).

Who determines the conditions under which these activities are done?



Forms of chain participation by small-scale farmers

If we combine these two diagrams we get a matrix (see the figure above). Farmers may be located anywhere on this matrix. Here are some examples:

- **Aisha*** keeps a herd of goats in arid northern Kenya. Every few months, she sells a few goats to a trader who visits her village. The trader dictates the price he pays, and she has no choice but to accept. We call her a **chain actor**, because she engages only in farming and has no influence over the management of the chain. Farmers in conventional contract farming schemes are also chain actors.
- **Pius** grows maize on his small farm in western Kenya. He harvests and dries his grain, then mills it into flour before selling it a trader who visits his village after harvest. We call Pius a **chain activity integrator** because he has moved from farming into other activities in the chain, yet without exerting more influence on the management of the chain. Chain activity integrators may be organized into groups (such as marketing coops) to buy inputs, process or market produce, but they have no managerial control over the chain because they are not involved in quality management, consumer targeting, or proactive innovation.

*Aisha, Pius and Zahina (next page) are not their real names.

- **Zahina** grows pineapples in coastal Tanzania. She sells her fruit to the farmer association but does not do any processing or grading. Through the association, she has some control over the price she receives. The association has negotiated a contract to supply luxury hotels in Zanzibar. We call Zahina a **chain partner**, because she specializes in farming and – through the association – exerts influence over the management of the chain. Chain partners have a long-term chain partnership with traders, processors or retailers. They may be organized for technological innovation and institutional dialogue in the chain (as in farmer business schools, page 31), but they are involved only in production, and not in further processing of their produce.
- **Ato Imito** is a member of the Kaffa Forest Coffee Union (page 133). He harvests coffee, removes the pulp, dries the beans and then delivers them to the Union to be graded and packaged them for export from Ethiopia to Germany. The Union has negotiated to supply several importers with high-quality beans, and has created its own brand that fetches premium prices on the German market. We call this association and its members **chain co-owners**, because they have moved upstream in the chain, increasing both their activities and their influence. Chain co-owners are organized in business cooperatives that develop new products and reach the end-consumer.

About the matrix

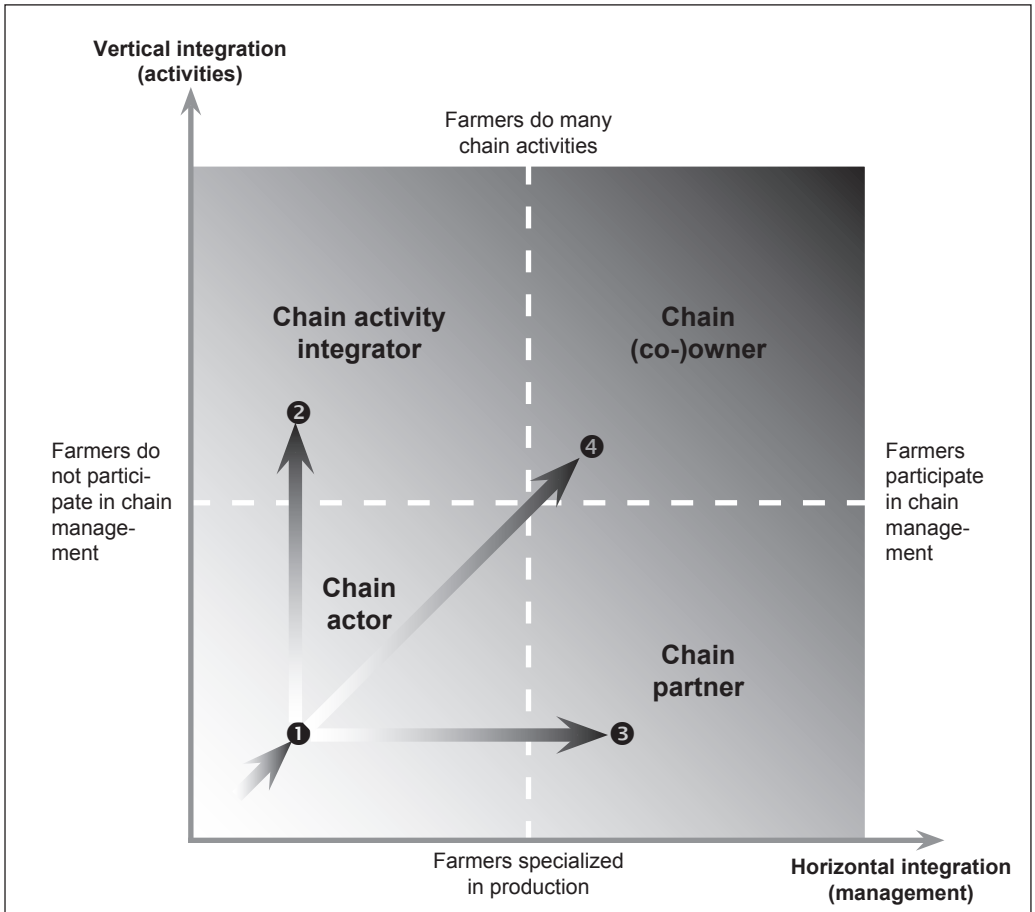
The matrix on the previous page is about the position of the farmer within the chain. The two dimensions refer to the chain: who does what in the chain, and who determines how things are done in the chain? Against this wider chain analysis, we focus on the position of the farmer – for he or she forms our target group.

The matrix is a tool for strategic thinking about chain development. It is useful for making sense of reality quickly and sharply. But reality itself is far more complex than a simple model with four boxes. To do justice to this complexity, we can think of the matrix as a continuum. The four quadrants are vague, blurred areas, and a farmer can be located anywhere within the large grey rectangle (see the figure on the next page).

For example, a farmer may start off at the bottom left corner of the rectangle. He begins grading his product. Doing so moves him a little upwards in the rectangle, so increasing his vertical integration (because he adds an activity). He also moves a little to the right, reflecting greater chain management (because he improves quality management). But he remains within the area of the chain actor ❶.

If the same farmer later starts processing and packaging his product, he may move into the activity integrator segment ❷. Or he and his neighbours may organize as a group and negotiate deals with traders, input suppliers and credit agencies, and may start working with the local research institute to test new technologies. This would move them into the chain partner quadrant ❸.

A combination of vertical (more activities) and horizontal (more management) movements would push the farmers into the chain co-ownership quadrant ❹.



How farmers can improve their position in the chain

It can be difficult for farmers to move from one quadrant into another. There may be considerable resistance from other players in the chain. Traders may see their position threatened if farmers take more control over the chain management (see the box on the next page). Established processors may be reluctant to see farmers taking on such a role. The authorities may wittingly or unwittingly prevent value chains from emerging (see the box on page 23). It can take a long time for farmers to move from being chain actors to co-owners.

It is also possible to move to the left or downwards in the matrix. For example, a farmer group that gives up processing to focus on production would move downwards (since they perform fewer chain activities). A farmers' association that disbands might move to the left (since it has given up some management functions). These movements may be detrimental to the group, and they may be forced on it – for example as a result of falling prices, a drought, or new taxes. Or they may be desirable and a result of a conscious decision – for example, if the group sees that they can make more money by giving up an inefficient processing operation.

How *rumbesa* harms Karatu District's onion growers

Karatu District in Tanzania is a popular destination for tourists: it is home of the famous Ngorongoro Crater with its teeming wildlife. But Karatu's people do not depend just on tourists. The district is also one of the biggest producers of fresh onions in the country. The Mangola plain in the Rift Valley is where most of these onions are produced. Farmers grow various varieties, attracting traders from different parts of Tanzania and from neighbouring countries.

During the harvest season, traders bring lorries into the villages to buy directly from the growers. The onions are packed and sold in bags, rather than being weighed and sold by the kilogram. The farmers are forced to over-fill the bags: a bag intended to hold 100 kg is sewn together with an extra half bag to bring the total volume almost 1.5 times that. There is even a word for this practice: *rumbesa*, which means "in excess".

Understandably, the farmers are unhappy with this unfair practice. They are being cheated, but they cannot do much to stop it – not yet! Their incomes depend on these onions. If they store them for a long time, the losses will be even higher. And the farmers need to sell immediately at harvest so they can pay for their immediate family needs.

Rumbesa works to the advantage of the traders. They get almost half as many onions again for the same price. They take the produce Dar es Salaam, Arusha and Nairobi and sell it for a good price.

Many farmers have tried taking their onions to Dar es Salaam to sell in Kariakoo Market and other wholesale markets. But the marketing system is "closed": only middlemen called "*dalali*" (brokers) can sell. The farmers can only hand over their onions to a *dalali*, who decides what price to sell at. The farmers cannot meet the end buyer, let alone negotiate. The *dalali* have formed a sort of cartel with the traders who buy from the villages. Others cannot penetrate easily.

The *rumbesa* system is used to measure almost all crops that can be transported in bags, especially bulky produce such as cabbages, carrots, potatoes, and most grains and legumes.

Initial efforts by government ministries to address this problem through policy formulation and strategy setting are yet to bear fruit.

Local levies hamper development

During the 1998/99 growing season, one Tanzanian investor got involved in oil crops in northern Tanzania. He had done a feasibility analysis and gained insight into this business. With the help of an experienced market linkage facilitator, his company contracted smallholders to produce safflower seeds to supply his oil mill. This was a trial year for the company, and the first time the farmers had grown the crop. Smallholders in the district had not grown safflower commercially before.

The company invested up front: it provided the farmers with good seed and ploughed their fields. The farmers agreed that the company would deduct the loan from the crop sales at the end of the season.

The facilitator helped the farmers organize collection centres for the crop at the end of the season. The company sent lorries to pick up the crop and bring it to the factory in Arusha, about 300 km away.

But then the local government stepped in. The authorities set up checkpoints on the road leading out of the district town. Officials inspected each lorry, and the drivers had to declare how many bags of safflower seed the vehicle carried. They sometimes even had to offload the bags to count them. They then had to pay a levy of TSh 300 (€0.21) per bag before they could continue. This levy increased the cost of the safflower by 4% per bag. A series of checkpoints along the road stopped each lorry, scrutinizing its travel documents, and certified that the levy had been paid.

This exercise caused unnecessary delays on the road and meant unexpected expenditures for the company. It was a surprise for the facilitator, company and farmers alike – safflower was not on the list of crops grown in the district (since it was being planted for the first time), so no crop levies had been announced. The authorities did not inform the investor about the levy, even though the company had informed officials beforehand about its intended investment.

The investor was discouraged and almost pulled out. The facilitator helped the company lobby the district authorities to reduce the levy on safflower during the following season. But the company was unable to continue with the pre-financing arrangements for the farmers, and the whole chain collapsed.

By imposing unannounced levies, the local authority had killed off an important investment. It would have been better to announce the levies beforehand so the investor, farmers and market facilitator would have better information about the costs of production and transport.

Where is best position for farmers?

One danger with a matrix like this is that readers may think that the ideal position for farmers is as a chain co-owner. That is not necessarily true.

For example, hundreds of farmers in Spain, Portugal and Italy grow tomatoes for processing companies. They earn a good living doing so. In Ghana, small-scale growers who produce pineapples under contract for Tongu Gold Farm (page 34) earn much more than they could before. They have all the conditions they need for sustained entrepreneurial growth. Through crop specialization and a secure market outlet the farmers may generate a high income – even though they are "mere" chain actors.

Supply chains and subsistence farming

Are subsistence farmers part of a supply chain?

Almost always, yes. The vast majority of subsistence farmers also grow crops or raise animals for sale. Even in the most remote areas, many subsistence farmers are connected to markets, selling small amounts of cash crops in a local village market or to a trader who comes and visits the farmer to buy.

- They may sell surplus that they cannot consume themselves: for example, a farmer may sell a few bags of maize to pay for the next season's inputs; a family may sell eggs or milk to help cover household expenses.
- They may grow crops specifically for cash: Malian farmers often grow cotton to sell as well as food crops for subsistence.
- They may have to sell part of their staple crop to pay off debts, and then buy back their own grain later at higher prices.
- They may process some of their produce and sell it to their neighbours. For example, women in Zimbabwe make beer from maize to sell as well as to drink at home.

Selling their products makes these farmers part of a value chain. The chain may be very short – they may sell directly to the consumer. But it is still a chain. And the type of analysis described in this book can still be used.

In their situation the question often is how they can improve their performance as a chain actor. They may be able to increase the quality or volume of their output, or improve their farm management, to their incomes and improve their livelihood. This is a necessary first step before any other type of chain development may take place.

So the best chain position for the farmer depends on the specific situation, and may change over time. As farmers evolve from chain actors into chain owners, they add "economic rent" to their business (they increase their share of benefits), increase their control over the chain, and protect themselves better from competition. But this brings with it greater risks and responsibilities, which the farmers should be able and willing to bear. The costs may outweigh the benefits.

Intervention strategies

Intermediary organizations can help farmers to get integrated into the chain, to improve as chain actors, or to move onto another form of chain development – partner, activity integrator, or co-owner. The matrix shows that pro-farmer chain development is a two-dimensional process. To improve the position of the farmer in the chain, we can either work on chain activities or on chain management, or on both at the same time.

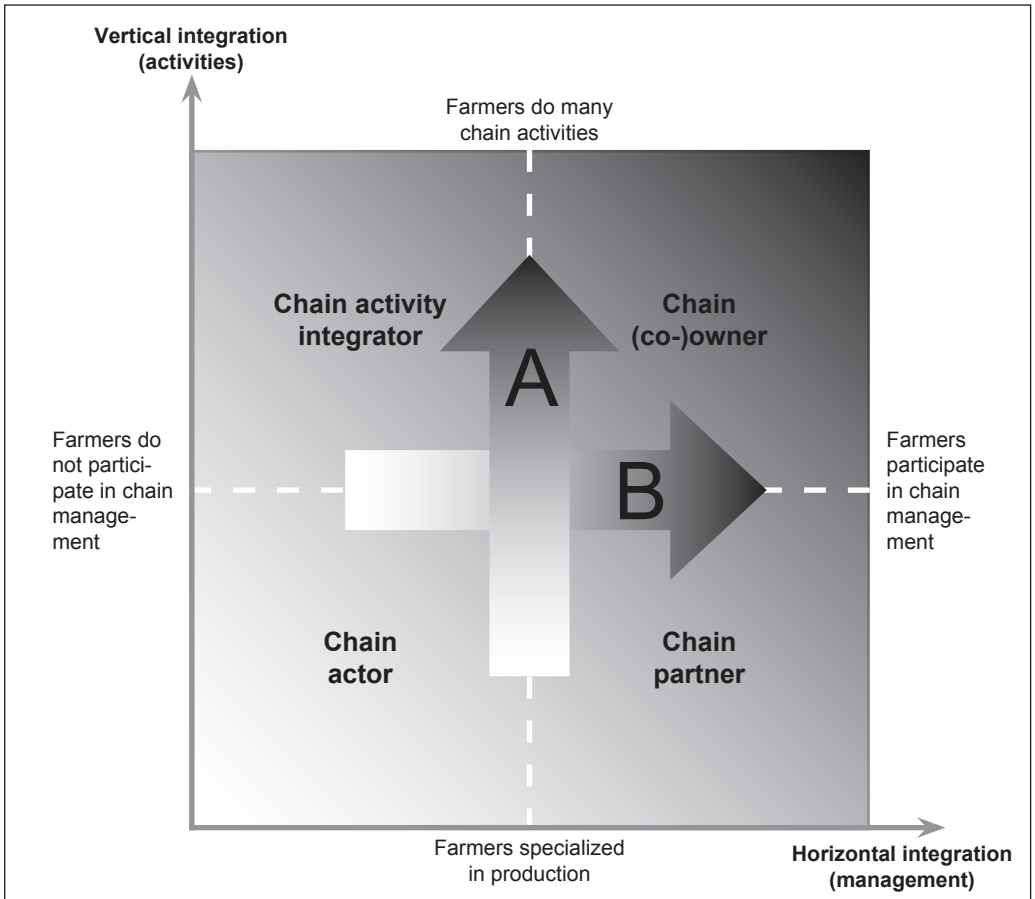
Vertical integration

One type of intervention is vertical integration (arrow A in the figure on the next page). This tries to increase the number of chain activities the farmer undertakes

– from farming into processing, transport, and trading. Vertical integration seems the preferred strategy of farmers. They like to "shorten the chain" by cutting out traders or other intermediary agents. They think that adding activities to their businesses will provide them a lot of added value and extra income.

This, however, is not always true. Adding activities also means adding costs and risks. More importantly, it requires a new set of assets and skills. Some of these are:

- **Technology** Identifying and using appropriate technologies for the value-adding activities (grading, processing, transport, etc.). These technologies must be well maintained and be kept updated. Technological innovation is a permanent concern.
- **Finance** Securing access to (a) credit or investment in facilities for processing, marketing and distribution, and (b) working capital to run the operations. Reserves must be built up for future investments. Profits must be divided in a rational way between the farmers and the cooperative they are members of. Profits should be paid in accordance with the performance or contribution of each member.



Two types of intervention strategies

- **Human resources** Building up managerial competence and appropriate human resources to operate these facilities – for example, a specialized marketing manager or quality control staff.
- **Organization** Making sure that the farmer organization has the organizational discipline to get involved in joint value-adding activities. Farmer-members should adhere to quality standards, delivery procedures, obligations to sell their produce, etc.

Chain management

The return to investments in vertical integration may be disappointing unless due attention is also given to the second dimension of chain development: involving the farmer in chain management (arrow B in the figure on the previous page). Some aspects are the following:

Information management Knowledge is power. Often the farmers are in a disadvantaged information position. They have no information about the performance of their own organization, let alone of the market. By contrast, companies downstream in the chain tend to have elaborate information systems. For example, supermarkets register the daily buying behaviour of their customers, while processing companies register the yields, volumes and prices of major crops. The more information someone manages, the better he or she can manage a company, and the higher are the returns. To improve the position of the farmers in the chain, their management of information has to improve. Some elements of information management are:

- **Record-keeping** of the use of labour and farm inputs. This is necessary to give a proper understanding of the costs involved, to base farm management decisions upon information, and to build the ability to negotiate the price of the product.
- **Traceability** This means keeping records to guarantee the buyer on the source of the product and the inputs that were used.
- **Market information** This involves knowing about prices and trends in the market so that the farmers can bargain with potential buyers.

Quality management Quality management assures that both the product and the production processes satisfy the consumer. It assures that the farm product can find its way into the market. Quality can be a unique selling-point, through which one group of farmers differentiate themselves from other suppliers. Quality increases the attractiveness of farmers as business partners, hence, their bargaining power. Some aspects are the following:

- **Grading** of the product into homogeneous quality grades, each with a different price, each for a different market segment.
- Implementation of **quality control systems** at critical points in the production system. These make sure that the farmers are on top of the product – that quality is controlled.

- Implementation of **quality certification schemes** that are demanded in the market, such as GAP (Good Agricultural Practices), Food Safety Certification, EurepGAP (quality management system of European Union supermarkets), etc.

Innovation management Often innovation is steered from above. New technologies are brought to the farmers by extension officers from contracting companies or the public sector. The farmers are passive recipients of ready-made technological solutions. But it can also be the other way around. Farmers have detailed knowledge of what works best in their fields. They can share these experiences among each other, identify best practices, start experimenting, etc. They can make study trips to large-scale farmers, research institutes and experimentation centres. In this way, formal scientific knowledge will be combined with practical knowledge from the ground. This will not only boost innovation in the chain, but also make the farmers more attractive business partners.

Chain cooperation Cooperation with other chain actors is a skill in itself. Often chain relations are marked by distrust. The farmers and traders fight over the price; the farmers may swindle the traders by putting low-quality produce at the bottom of the crates, and the traders may swindle the farmers by using inappropriate weights and measures. This situation is bad for all. That is why it is important to seek cooperation along the chain. Some elements are the following:

- **Chain vision** Chain cooperation starts with the recognition that the chain actors depend on one another for their business performance. A good chain has synergetic, complementary relations between specialized chain segments. This chain vision can be built up by taking the farmers (or other chain segments) on excursions to companies up and downstream in the chain, and showing them the reality along the chain. For example, this will show them that poor quality at the beginning of the chain multiplies into great losses elsewhere in the chain. A bad tomato which is transported to the city is a loss of money. This loss may lower the price paid for a good tomato. Hence it is better not sell the bad tomato and get better price for the good one.
- **Trust building** Once there is recognition of mutual dependency between two chain segments, then there is a scope for a dialogue around shared interests. Initially the dialogue is focused on trust building, exchanging information and creating shared visions. Later, the dialogue may result in joint action plans to improve the chain to the benefit of all.
- **Joint action plans** In dialogue with each other, the chain actors can identify ambitions (e.g., the development of a new product, or improvement of quality) that they may want to undertake together. Or they may identify problems that they may want to tackle (e.g., the loss of produce during transport). For such problems or ambitions they can draft a joint action plan, in which each of the parties undertakes certain actions.
- **Negotiation** In such dialogue the parties can also structure their negotiations about the transaction conditions (price, quality standards, payment procedures, etc.).

Marketing intelligence This involves making sure that the product finds its way into the market. Production processes must be tailored to market demands. There must be knowledge of what the consumer wants. Products should be produced, designed and packaged to attract the preference of the consumer.

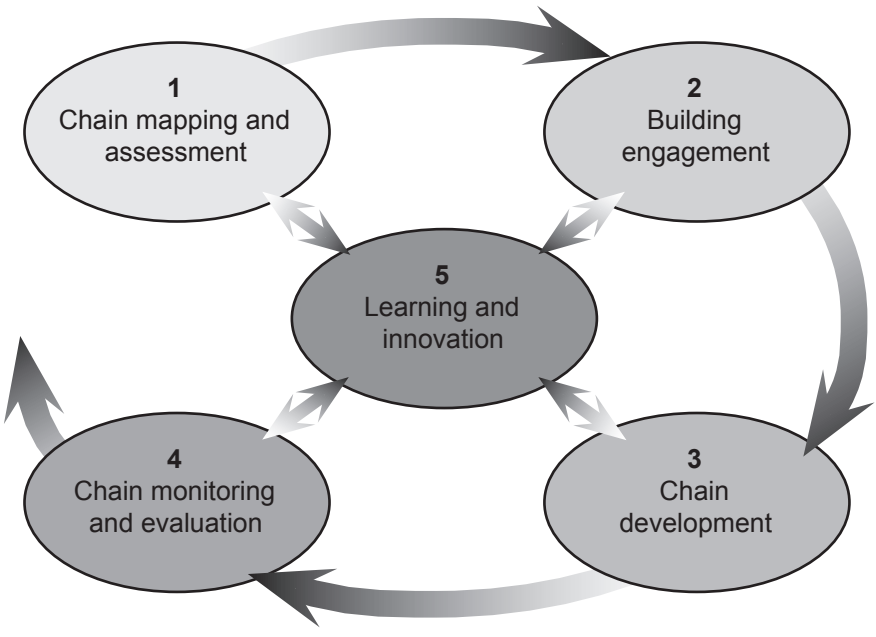
Components of chain interventions

The case studies in Chapters 3–6 present experiences with implementing these two types of chain interventions. These interventions fall into five components or phases (see the figure below).

1 Chain assessment

The first thing to do is to analyse the situation and the goals. This includes:

- Assessing the farmers, their organization, livelihoods, skills, assets and ambitions.
- Mapping the different actors in the chain, and profiling each of them.
- Analysing the market, trends, prices, comparative advantages, competitors, etc.
- Reviewing the business environment, analysing stakeholders and the policy environment.



Components of chain interventions

2 Building engagement

Any intervention requires engagement from and between farmers, other actors in the chain and the wider (policy) environment. Some elements are:

- Identifying common and conflicting issues.
- Identifying chain leaders and facilitators.
- Strengthening linkages and building trust among chain actors.
- Developing a joint chain strategy.
- Learning by doing joint projects and through platform meetings.

3 Chain development

Farmers and their organizations may improve their position in the chain in several different ways:

- **Process upgrading** This means producing the same product more efficiently – perhaps by using new technologies or management methods. For example, farmers may grow more by switching varieties or applying fertilizer; they may reduce pest attacks and save costs through integrated pest management rather than spraying; they may husk maize more quickly using a machine rather than by hand; or they may invest in build new grain bins to improve storage. Farmers can also improve their links with other actors in the chain – for example, they can sign contracts with input suppliers or processors.
- **Product upgrading** Farmers can improve their product in various ways. For example, they may plant a new variety that has more desirable characteristics; or they may stop using agrochemicals and apply for certification so they can sell their produce as "organic".
- **Functional or intra-chain upgrading** Farmers can take on new activities in the chain, either upstream or downstream, or change the mix of activities they undertake. For example, they may start grading and sorting their produce; they may bulk it to make pick-up more convenient for buyers; or they may process it (drying, milling, etc.) to improve its value or increase its storage life.
- **Chain or inter-chain upgrading** Farmers can also set out on a new value chain: they can start growing a new crop, keep a new species of livestock, or start a new enterprise such as dairying or agrotourism. They may be completely new to these activities, or they may transfer their skills and experience from their existing enterprises.

The first of these, process upgrading, is vital if farmers are to increase their income and participate in wider markets than at present. The farmers must be able to produce enough output, at the right time to interest a buyer; they must have the links with the buyer so they can sell it at all.

But while process upgrading is necessary to boost farmer's incomes, it is unlikely by itself to give them a larger slice of the cake – a bigger share of the income from

the value chain. They can do this only by introducing new products or improving existing products (product upgrading), by changing the mix of activities in the chain (functional upgrading), or by getting involved in a new value chain (chain upgrading).

But this is not easy. Small-scale producers are likely to run into powerful interests that hamper their progress (see the boxes on pages 22 and 23). Other interests – traders, processors, larger-scale producers – may be reluctant to help small-scale farmers take a slice of their own profitable businesses. This means that farmers' organizations and intermediary organizations must analyse the value chain carefully (see page 28) before deciding what action to take.

In many instances, indeed, other players in the chain may actually welcome the small-scale farmers' involvement, for example if they increase the volume of produce that can be processed, so making factories more efficient (see the example of cashew in Mozambique, page 47).

4 Monitoring and evaluation

Monitoring and evaluation are vital for the farmers and their organizations, and for intermediary organizations that assist them. Here are some indicators to watch:

Within the supply chain

- **Production cost** How much does it cost to produce the output?
- **Yield** How much does the crop (or livestock) produce per unit area (or per unit of a key input such as labour)?
- **Gross margin or profitability** How much money do the farmers make after deducting their costs?
- **Distribution of benefits** How are the benefits distributed between the farmers and the organization, and among the farmers?
- **Improvements in products and efficiencies** In what way are these achieved: through process, product, functional or chain upgrading? (see page 29).

In the market

- **Market penetration** What percentage of the market do the farmers serve?
- **Sales volume** How much produce do they sell?
- **Sales value** How much money does it bring in?
- **Product differentiation** What range of products do they supply?

Livelihoods

To judge the effects of the chain on livelihoods, check the effects on different groups in the community: men and women, different ethnic groups, and poor vs better-off people.

- **Role of income from chain** How big a role does income from the chain play in the farmers' overall livelihoods? What do they use the extra money for?
- **Diversification of income sources** Does the chain add to the farmers' income sources, or are they over-reliant on a single source?
- **Income stability** Does the chain give the farmers income throughout the year?
- **Employment** What has been the impact on employment?
- **Economic participation** Do the farmers participate in the local economy more? E.g., do they buy and sell more in the local market?

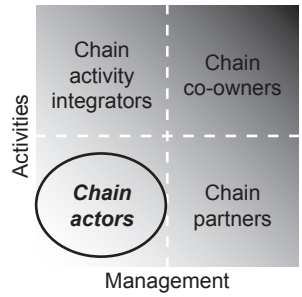
5 Learning and innovation

Learning and innovation are at the heart of interventions in chains. Both farmers' organizations and intermediary organizations must be able to learn from the situation and adjust their approach accordingly.

Two examples of interesting innovations:

- "**Farmer business schools**" are an approach pioneered by FAO. This builds upon the "farmer field school" approach that supports farmers to learn about and innovate in their production systems. Farmer business schools support farmers to be market-oriented, start business planning, and improve their market information systems (see page 155).
- "**Chain platforms**", piloted by KIT, bring various stakeholders or actors in a chain together so they can discuss issues in the chain and develop ways to improve it (see page 173).

3
Chain actors



Chain actors are engaged only in farming and have no influence over the management of the chain. In general, such farmers are not well connected to markets, so their production is not well tailored to what the market needs. They may produce mainly for their own consumption, or they may supply staple crops to passing traders.

A first step to chain development is to support these farmers to improve their farming skills. This helps them produce higher yields of higher, more consistent quality, and produce which is better suited to the market. This enables them to make more money and improve their livelihoods.

Becoming a crop specialist is a necessary first step, before any other form of chain development. Unless the farm is well run, it makes no sense to invest in processing or to seek chain partnerships. When the farmers have consolidated as specialists, however, other options open up.

In the following case studies we see examples of how intermediary organizations have supported farmers to become crop specialists:

- Reviving Mozambique's cashew industry.
- Setting up an outgrower scheme for pineapples in Ghana.
- Jatropha herbal soap: from development project to commercial venture.

Setting up an outgrower scheme for pineapples in Ghana

"My name is Aad den Heijer. I'm from the Netherlands. I was in the flower business for more than 25 years. I first worked as an employee for a company, and then I started my own business in flower trading. My main customers were supermarkets in the UK, Germany and Switzerland. In 1996 I sold my company to an English consortium and started a company providing machinery and equipment for the agricultural sector.

"In 1999 I was invited to Ghana to assess the possibility of growing flowers. After I had travelled around for 7 days, it became clear that the average temperature is too high to grow flowers on a commercial basis. I spent the last 2 days of my visit in a hotel in Accra. The first morning, fresh sliced pineapple was served at breakfast. The second morning there was no pineapple. Conclusion: no regular supply. Then the idea was born: if it is not possible to grow flowers, then why not to try pineapples?

"My next step was a tour. I visited several large fresh-fruit-salad producers in Europe. They all gave the same response: 'If there is fresh sliced pineapple available for a decent price we certainly are interested'. The next move was to learn

Outgrowers can make a good income if they manage their crop well

as much as possible about the pineapple market in Ghana. It seemed that 65% of the pineapple is of high quality and can be exported, while 35% is sold for a very low price on the local market. Information was available about slicing yields, the price of packaging, duties on sliced pineapples and airfreight prices. Also about the availability of the product in Ghana, and the level of market demand in Europe.

Testing the market

"These findings were so positive that I decided to start a small trial. I brought several small shipments of fresh sliced pineapples from Ghana to Holland. At least five fruit-salad processors checked the quality and taste and gave an indication of the price they would pay. The trial was so successful that the next step was to invest in a small slicery. I found a good location in Accra, and a manager who knew a lot about logistics, quality, time, etc. It took 2 months to build the slicery. It started operation in February 2000, employing 40 people. Tongu Fruits Ltd. (TFL) was born.

Contract problems

"After 3 months it became evident that it was almost impossible to make good contracts with local growers to buy pineapples for the slicery. TFL wanted to buy the 35% of low-price pineapples that did not comply with export standards, but were good enough for the slicery. The problems faced were:

- TFL agreed a price with the farmers – who suddenly raised the price, claiming that the pineapple was used for export, so TFL should pay the export price instead of the domestic price.
- TFL agreed to collect the fruit, but when the lorry arrived the farmer had already sold it to someone else.
- The quality of the fruit was often poor.

"It was clear that TFL could not rely on supplies from local farmers. We could not assure a regular supply to our customers.

Starting a pineapple farm

"The solution was to start a pineapple farm. We made use of PSOM, an investment instrument of the Dutch Ministry of Economic Affairs. This facility provided something between 6 and 8% of the total investment. In this way, Tongu Gold Farm Ltd. (TGF) was born in Sogakope, in Volta Region, close to the border with Togo. The farm provided employment to 120 people. In February 2001, we built a new building next to the farm and moved the slicery there from Accra.

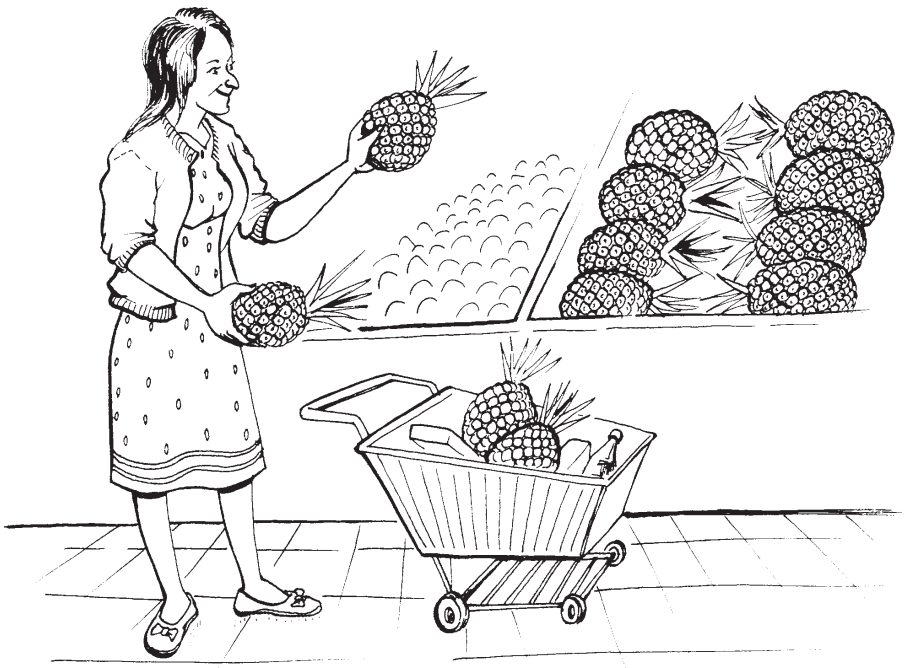
"TGF faced various start-up problems:

- TGF had to provide electricity itself, even though the government had promised to take care of this.
- Despite promises from the district government, the roads were in bad condition. TGF had to spend a lot of money to improve them.

Responding to market challenges

"The first year (2001) was not profitable. Turnover grew in 2002, but higher fuel prices still resulted in a small loss. The first 9 months of 2003 were okay; TGF produced a small profit. But in October 2003, things started to change.

"The variety of pineapple grown on the farm was Smooth Cayenne. This variety competed on the market with the Del Monte variety Gold Sweet (MD2). Del Monte had done a perfect job in marketing. All the years they sold MD2, the quality was very good: bright yellow outside and inside, with good taste, and always available. After the licence for this variety expired in 2002, a lot of suppliers from South America and Hawaii started planting MD2, entering the market in 2003. At the same time, the quality of the Ghanaian Smooth Cayenne had gone down dramatically, affecting its reputation in the market. The result was that the Smooth Cayenne was kicked out of the European market. So TGF decided to change its variety from Smooth Cayenne to MD2.



The right variety, and careful handling, are crucial for top-quality pineapples on the European market

Ensuring a supply of planting materials

"We visited potential suppliers of MD2 over the world. These suppliers are known as "in-vitro laboratories". An in-vitro laboratory multiplies pineapple plants. Conditions in this lab are like in a hospital: everything must be very clean and free of diseases. The first step is to identify some nice, healthy plants. From these plants you isolate the growing-points. These growing-points are brought into the laboratory, where they are kept for some time to see if they are free of diseases or problems. The multiplication can then start. This method quickly produces a lot of very good quality, disease-free plants. It works for different types of plants: Brazil used it to double the sugar content of its sugarcane, and breeders have raised banana yields by 30%.

"TGF started an in-vitro laboratory in Ghana to multiply the MD2 variety. This lab employs 40 young women. They do a very good job, and because they earn their own income they have become emancipated and more independent. The parent material for multiplying MD2 plantlets came from a lab in Europe. In 2004 and 2005, the TGF lab produced more than three million MD2 plantlets. TGF uses some of these plantlets on its "shoot farm", and sells the rest locally in Ghana.

"A shoot farm is a farm where plants are grown so the shoots can be harvested. The shoots are then planted on the pineapple farm. The shoot farm guarantees that the shoots are always the same size, thus assuring a uniform, high-quality crop. Furthermore, the total costs are lower than with conventional planting.

"In 2004 TGF started a shoot farm to grow shoots for MD2 pineapples for export and processing. This whole operation was co-financed by Cordaid. Their interest was to start an outgrower programme with local farmers. After several rounds of discussion, we developed a business plan, specifying the timeframe, the money needed to start the project, the project sustainability, the basic principles of cooperation between TGF and the outgrowers, the costs of the training programme to be covered by Cordaid, and the costs covered by TGF. It was envisaged that by the end of the project, the outgrowers would have learned enough to continue either as outgrowers or as independent farmers. Cordaid provided TGF with a grant and loan to cover its costs.

Contract farming programme

"The contract farming programme has two phases:

1 **Training of outgrowers** The potential contract growers work 4 days a week at the shoot farm. This is practical training in sourcing, farm management, fertilizing, etc. On top of this, there is one day of theoretical training about crop management, bookkeeping, marketing, etc. We have just finalized the theoretical and practical training, and are now shifting to outgrowing.
2 **Implementation of the outgrowing** After a year's training and when they have passed an exam, the outgrowers can start growing pineapples by themselves. TGF provides the outgrowers one acre (0.4 ha) of ploughed land. Four

days a week they work at the farm so they can earn a living. One day a week they work on their own plot. TGF sells them on credit 20,000 MD2 shoots and all the inputs they need. The outgrowers must offer their total MD2 production to TGF. TGF guarantees a price that covers all their costs. If the outgrower manages his crop well he can make reasonable profit. After the costs of shoots and inputs are deducted, TGF pays 50% of the profit in cash to the outgrower, and puts the rest in a savings account for the outgrower. After 3 years, the outgrowers can decide to be 100% on their own: they can access their accounts and start their own farms. Or they can collect their money and use it for something else. If the outgrowers start their own farm, TGF will market their products.

"This approach minimizes the project's risk. TGF's core product is sliced pineapple. The best and easiest way to produce this is to buy from local farmers. But TGF will keep its own farm for security reasons. If you want a secure supply, it is not possible to rely only on contracts or buying from other farmers, so it is better to depend on outgrowers for half your supply, and on your own farm for the rest. This means you can use the best fruits for export, and still make a good price on the second grade by making pineapple slices or juice.

Position of farmers in the chain

"Initially the farmers will be no more than chain actors supplying to TGF. They will have to follow TGF's instructions. However, after some years of outgrowing, the farmers will be capable of taking their own decisions. They will be educated enough to become crop specialists, expand their farm and earn a decent income. They might even want to have direct influence on marketing and prices.

Benefits for farmers

"TGF's current project will benefit a total of 120 farmers in 5 years' time. Every month, two outgrowers will start their own farm. How much they benefit financially depends on their own efforts. Apart from the salary they earn working on the shoot farm, outgrowers may earn a profit of €600 a year. The benefits go beyond income, though. Some of the outgrowers are illiterate. During the training, they are encouraged to learn to read and write – skills they will need as independent outgrowers. Also, outgrowers learn to become farmers with a business approach. This also motivates them to send their children to school. Another impact is that due to TGF's presence, the government devotes more attention to the area.

"To get a good view of the social benefits, TGF has started a social impact study in cooperation with Cordaid. The study aims to measure the changes in the villages and communities after the start of the outgrower programme.

"The shoot farm and the outgrowers have now developed well. The next investment will be to build a new in-vitro laboratory. The demand for plantlets is so

A business planning approach

1. Develop a business idea.
2. Define a combination of product and market.
3. Find a market for the product.
4. Assess the quality and quantity available of the product.
5. Make sure the price is competitive.
6. Calculate the profit margins.
7. Define the product's source and location.
8. Once the location is identified, check the infrastructure, banking, political situation, land issues, labour, etc.
9. Write your business plan.
10. Make a small trial to identify the problems and pitfalls.
11. Review your business plan.

high that a bigger lab is needed. The new lab will start producing in February 2006. It will provide employment to 150 young women, and will produce ten million plantlets of various species a year. Some 30% will be for Africa – such as MD2 pineapples, banana and sugarcane. The rest are destined for the European market."

Lessons

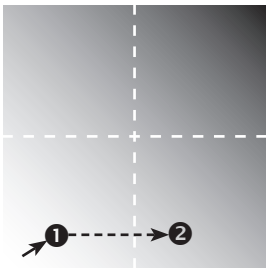
Here are some general lessons from TGF's experience.

Africa and Europe are different business environments Firms investing in Africa may be forced to take over functions normally performed by the government (improving roads, providing children's education) or other organizations such as banks (providing credit) or the employees themselves (transport to and from work).

Europe is a buyers' market: the customers determine the price of products and whether to buy them. Africa is a sellers' market: there is a shortage of many types of goods, so it is always possible to sell, and sellers determine the prices.

Employer and employees have different expectations TGF's staff seem to want a patron–client relationship with TGF – reminiscent of the relationship between chiefs and people in West Africa. They expect the company to provide a range of benefits that a firm in Europe would not feel obliged to provide. For example, they expected the firm to raise salaries when fuel prices rose (even though salary levels had already been negotiated), workers who moved to town expected the firm to pick them up from their new homes, and the workers wanted TGF to repair the road and to provide irrigation water for their private plots.

Chain movements



The farmers have entered the value chain as chain actors ❶.

If they form a cooperative, they may be able to develop into chain partners ❷.

The firm has provided many of these benefits, but cannot possibly cover them all. Wages are lower in Ghana than in many other countries, but these additional expenses push up costs. Buyers of the product in Europe are not willing to pay a premium to cover the additional costs, so the firm cannot be competitive if it agrees to all its workers' demands.

These different expectations can lead to misunderstandings and conflict between the workers and the firm. For example, the firm needs to invest to start production, but then needs to recoup that investment by making a profit. The workers often fail to recognize that the investment must be repaid – they see it as a sunk cost.

The farmers improved technical, business and management skills Their increased savings allows them to better control the chain, and may enable them to become a chain partner.

Development projects and businesses have different approaches Development projects start off with a problem – poverty among a certain group of people, for example – and try to find solutions to that problem. Businesses start off from a completely different point – the market for a product. They then seek a suitable location to invest money to produce and market the product.

Development organizations can play important roles Development organizations and employees' unions can play important roles in launching programmes and in facilitating interaction between company and community. In TGF's case, Cordaid played a key role in establishing and funding the outgrower scheme.

TGF has encouraged its workers to form a union that can act as a partner in dialogue. The union officials can help educate their members in how to work with a private company – for example, on the importance of turning up to work on time, on rules on hygiene, behaviour, sick leave, rights and responsibilities. It can also work in the communities the workers come from.

More information: www.verdelpcs.nl/tongu/ or contact Aad den Heijer, info@heijerconsultant.nl

Jatropha herbal soap: From project to commercial venture

IT IS DIFFICULT TO make a living in semi-arid Africa. But one crop, jatropha, shows promise for farmers in these areas. This perennial shrub is originally from tropical America, but is now widespread in Africa, and grows well in the drier parts of northern Tanzania. It is easy to establish, grows relatively quickly, and produces seed for up to 50 years.

The Maasai and other agro-pastoralists have planted jatropha for many years as a windbreak and living fence. But the seeds are also valuable. They contain a viscous, non-edible oil that can be used to make candles and soap, as a raw material in the cosmetics industry, for cooking and lighting, or as a fuel. The seed cake is high in nitrogen and can be used as fertilizer.

Beginning in 2000, Heifer Project International, an international NGO, promoted the commercial use of jatropha as part of a project to improve the incomes of rural women in the Arusha and Manyara regions. The NGO commissioned Kakute Ltd. (a small-scale enterprise active in appropriate technology dissemination) to manage this project. Kakute provided groups of women with seeds, seedlings and cuttings, and offered them technical assistance and extension on how to grow them. It also trained them how to process the seeds to make oil and soap. Over a dozen groups of women in Arusha and Manyara regions have become involved in production and processing jatropha, benefiting more than 500 households.

The project trained the women to make soap, but since the end of the project in 2004, fewer now do so. Some sell soap in the local markets, but most sell seeds or oil to Kakute.

The jatropha shrub grows well in dry areas and on infertile soils

The jatropha industry now has two distinct segments:

- The women's groups produce jatropha seedlings, plant and tend the crop, harvest the seeds and crush them to extract the oil.
- Kakute produces herbal soap from jatropha on a commercial basis. It buys seeds from the women, extracts the oil by hand, and mixes it with caustic soda and materials to make bars of soap. It then packages the soap and distributes it to retailers: supermarkets, pharmacies, dispensaries, kiosks and natural products shops.

Tanzania's jatropha industry is less than a decade old. The women manage to make some supplementary income from the crop. But their position is precarious, especially after the end of the development project that started the industry off. They are price-takers, and have little involvement in decision making about production or trade.

Kakute, their sole outlet for the wider market, still produces on a very small scale. But the firm is overstretched: it tries to handle both production and marketing. Until recently, no feasibility analysis for herbal soap production had been done, and Kakute had no business plan mapping out its future in the industry (though it is now doing a feasibility analysis for possible expansion). Kakute has twice-yearly meetings with retailers to discuss marketing issues and contractual arrangements, but mechanisms to govern the chain are not yet in place.

On the regulatory side, the herbal and medicinal qualities of jatropha soap are yet to be certified by the relevant government agencies.

How can the women benefit on a sustainable basis, and how can this fledgling industry be put on a sound commercial footing?

Chain analysis

Match Maker Associates Ltd., a development consulting firm, conducts training on value chains in the vicinity of the Kakute factory. It became interested in the jatropha industry because it seemed to have potential for growth. Match Maker contacted Kakute, and agreed to do an analysis of jatropha soap as a case study in one of its courses.

With guidance from Match Maker, the course participants identified the various actors in the chain and their functions, analysed the constraints and opportunities for each function, calculated gross margins, and identified business solutions. They also did a detailed analysis of how to develop the value chain in ways that would optimize the strategic collaboration among the various actors, and advised on chain governance, market assessment and distribution of economic gains.

Kakute and other key actors attended the training sessions when the course participants presented their findings and recommendations.

Upgrading the chain

The recommendations focused on ways that Kakute can collaborate on a win–win basis with other key actors, including the women's groups. The following upgrading strategies have been recommended:

Upgrading processes The production process for soap making should be upgraded in light of expected growth in the market. At present Kakute produces around 2 tons of soap a year (67,000 pieces of 30 grams each), generating around €15,000. It should expand and modernize its soap-making functions under one roof (instead of the current two locations). It should make its procurement more efficient, organize delivery schedules with the women's groups, and negotiate contracts with them instead of the current ad-hoc procedures.

Upgrading products Kakute should improve its products in various ways:

- **Standardization** It should standardize its herbal soap and ensure that it complies with government regulations.
- **Packaging and labelling** Kakute should improve the soap packaging, especially for products targeted to higher-income markets. It should also develop a branding strategy for its products.
- **Product diversification** Customers said they wanted a broader choice of soap products with different aromas. A wider range of aromas would appeal to consumers who buy toilet soap. Kakute could make these using essential oils, and could also tailor-make orders.
- **Quality control** This is very important, especially if Kakute continues to make soap at more than one location.

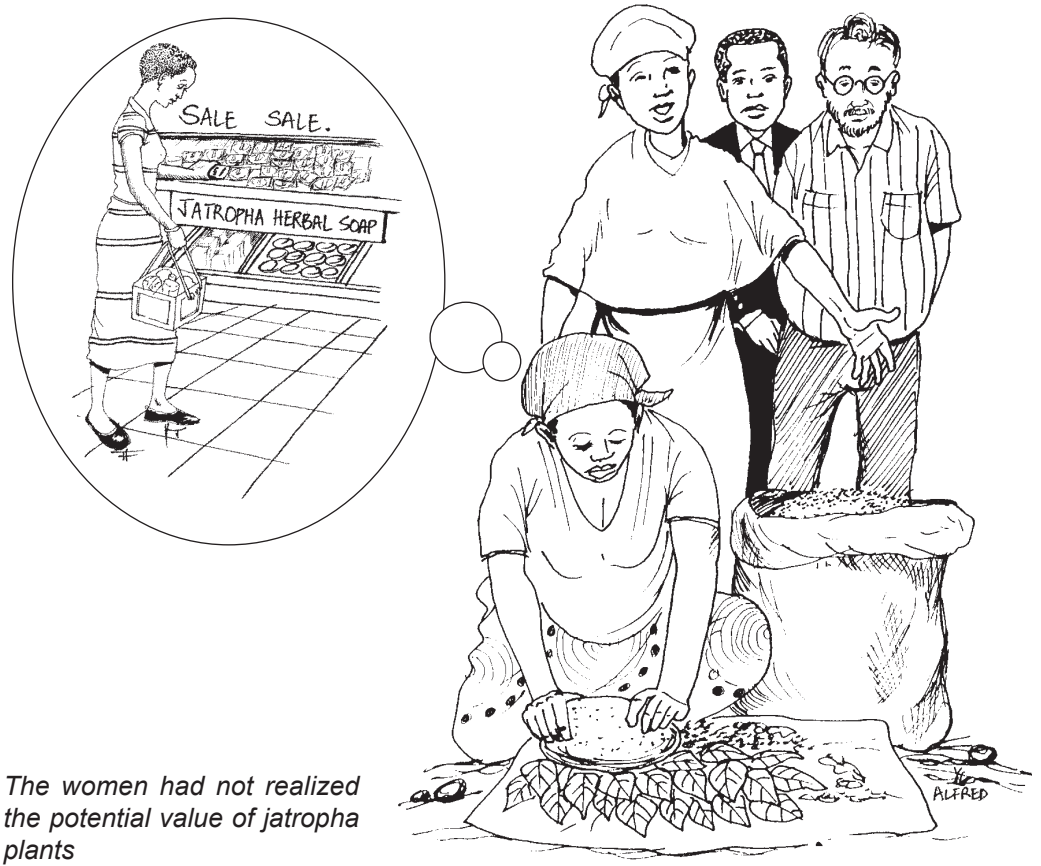
Upgrading functions Recommendations include the following:

- **Location of activities** Kakute should explore the advantages of decentralizing all activities up to oil extraction, and centralizing the soap making. This would ensure product consistency and ease the planning of deliveries. If aspects of production are subcontracted to the women's groups, then strict quality control is needed.
- **Sources of raw materials** Large-scale growers are becoming interested in the jatropha's potential as a source of bio-diesel. One of these is such as Diligent Tanzania Ltd. (see box below). Kakute should seek supplies of seed and

Bio-diesel from jatropha

A new venture in northern Tanzania is the large-scale production of jatropha to make bio-diesel. Biofuels are an attractive option if (as seems likely) the price of petroleum stays high. The European Union has stipulated that 5% of the diesel consumed should come from renewable resources. Various firms are seeking ways to comply with this new rule, and jatropha is one of the crops they are investigating.

This will pose a challenge to small-scale growers and soap makers, who may find it difficult to compete with large-scale producers.



The women had not realized the potential value of jatropha plants

oil from such producers. It should also consider expanding into other areas where new women's groups could supply it with raw materials.

- **Export markets** Kakute should solicit contracts with international outlets such as specialist toiletry stores.
- **Feasibility study** Kakute needs to improve its understanding of the market and the implications of these upgrading strategies. To do this, it should undertake a feasibility study of soap making as well as develop a business plan and investment profile.

Building engagement

Creating a value chain will entail the following:

- Kakute will have to specialize in soap making. It should bring on board agents to market its products.
- It should strengthen its retailers' forum as a way of analysing the market.
- It should forge strategic collaborations with women's groups and other suppliers to ensure a constant supply of raw materials. Engaging with the wom-

en's groups will be a challenge, since they do not yet have the capacity to act collectively. But it is in Kakute's own interest to build on the relationship it already has with the groups.

Kakute could build its engagement with the groups by helping them organize themselves into an umbrella organization that can represent their interests in the chain. This will minimize Kakute's costs of dealing with the group. It is also in the women's own interest because an association would be able to negotiate more effectively on their behalf.

It is in the interests of both Kakute and the women's groups to draw up a contract making the groups Kakute's preferred suppliers.

Position of the women in the chain

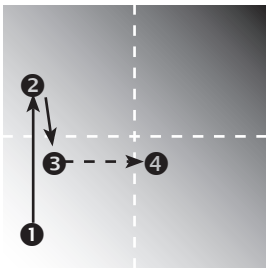
The aim of the original project was to pilot a model of linking women's groups to reliable markets. The women started growing jatropha and processing it. But when the project ended, they began to fall back to their original position as chain actors – as producers of seedlings and oil, rather than of soap. Kakute has taken over the main role in making soap.

Match Maker's recommendations provide an opportunity for both Kakute and the women's groups to strengthen their positions in the chain. The implications for Kakute are outlined above. The women will be able to benefit by becoming chain partners, but only if they manage to organize themselves into an effective association that can negotiate with Kakute. They will need assistance to do this.

Lessons

- **Dangers of a project approach** A project approach to developing value chains is detrimental if it is ill conceived, and if not enough time and resources are devoted to it. In this case, the women's groups were left out too soon, so had little chance of maintaining their position in the chain.
- **Business development support** Identification of upgrading strategies should be followed by a **feasibility study and business planning**. Business planning is a powerful instrument, especially when facilitated in a "do-it-yourself" way: the people who are responsible for the upgrading should themselves take the lead in the business planning.
- **Involvement of all actors** Value chain analysis and upgrading strategies should be internalized by all the main actors in the chain. Often only the chain leader is actively involved. In this case, the women's groups have participated only by providing information. They have not had the chance to internalize the results of the analysis or its implications for their position in the business.
- **Support organizations** Although value chain development should be led by the private sector, cooperation and coordination with relevant support organizations is a key to success.

Chain movements



Through the original development project, the women started growing jatropha ❶ and processing it to make oil and soap ❷.

But after the end of the project, they stopped making soap, selling their oil instead to Kakute ❸.

They will have to become more organized if they are to strengthen their position in the chain ❹.

- **Market-driven** Chain upgrading must be market-driven. Upgrading is essential if changing market needs are to be met. Changes may be needed in the product, process or function; usually, a combination of all three is needed.

More information: Match Makers Associates, www.mma-ltd.com or contact Peniel Uliwa, puliwa@raha.com

Reviving Mozambique's cashew industry

CASHEW IS THE MOST important nut crop in the world – beating almonds into second place. In the mid-1970s, Mozambique was the leading cashew producer, accounting for over two-fifths of world production. But the country's long civil war took its toll: orchards and processing plants were neglected, and output tumbled.

By the end of the war in the early 1990s, new investment was badly needed. The state cashew company was broken up and sold off to Mozambican firms. The government had supported the local cashew-processing industry by imposing a variable surtax of 18–22% on exports of raw nuts. But in a controversial move, the World Bank forced the government to liberalize the raw cashew trade in 1995. The tax was reduced, first to 20%, then to 14%, and exports of raw nuts soared. The local industry found it impossible to compete with traders selling raw nuts to India, where the industry is subsidized. As a result, 10 of the 15 processing factories closed, and more than 7000 workers lost their jobs.

Under pressure from local business people, the government reinstated the export tax on raw nuts in 2001. This has opened an opportunity to rebuild the local processing industry.

In the same year, an entrepreneur named Antonio Miranda refurbished a processing plant in Nampula Province in northern Mozambique. With assistance from TechnoServe, a US-based NGO, he installed new equipment that produces larger numbers of whole kernels (see box on the next page). This plant produces nuts equal in quality to those produced in India and Brazil.

About a dozen medium-scale factories around the country now use this technology. They buy inputs, market their products as a group, and monitor the all-important quality of their output. In 2005 they launched a cashew brand called "Zambique".

Cashew is almost exclusively produced on small farms, and provides income for hundreds of thousands of Mozambican families. Farmers usually sell raw nuts to traders, who then export them to India for processing. But the farmers can get much better prices by selling to local processors, or by processing the nuts themselves. Small-scale cashew processing is very labour-intensive, and employs large numbers of women in Mozambique.

Some two-thirds of Mozambique's cashew trees are over 25 years old, so yields are low. The orchards are susceptible to bush fires and to pests and diseases,

Cashew

Originally from Brazil, the cashew tree was brought by the Portuguese to Mozambique and India in the 16th century. The tree produces a curious fruit: a fleshy "apple", below which hangs a kidney-shaped nut. The "apples" can be processed to make jam, syrup, soft drinks, wine and spirits, but the nuts are the main export product. In small-scale factories, the nuts are steamed, shelled by hand, and then pre-graded to ensure a high percentage of whole kernels. These pre-processed kernels are sent to factories for further grading, packaging and export. The international demand for cashew kernels is high, and the market is growing.

Whole cashew kernels – eaten as snacks in the developed world – are worth far more than broken nuts. Special equipment and careful handling throughout are needed to preserve quality and minimize the number of broken kernels.

especially powdery mildew. This disease can cut yields or even cause total crop failure. Cashew farmers have very little capital and limited access to credit, so they find it difficult to invest in their orchards.

Despite these problems, cashew offers potential in Mozambique, especially for smallholders. Much of the recent investment in Mozambique has been in large projects that have benefited only a few. Developing the cashew industry offers a way to benefit much larger numbers of people.

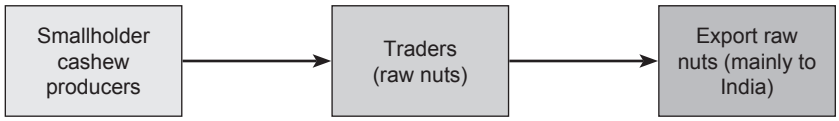
The CASCA project

SNV's Support for the Cashew Sector (CASCA) programme aims to help people start small-scale village processing plants around medium-sized factories such as Mr Miranda's, and to improve the quality and increase the quantity of cashew nut production by smallholders. These small plants sell their output to the factories, which select, grade, and vacuum-pack the nuts, then sell them to importers in Europe.

CASCA works in Nampula province, where two-thirds of the province's 3 million people depend on subsistence farming, and as many as 80% are involved in cashew production. This is one of the poorest areas of Mozambique: access to basic services such as potable water and health care is limited, and transportation, communications and market infrastructure are poor to non-existent. Cashew offers real hope for these people.

The main objectives of CASCA are:

- To assist farmers to increase the production of high-quality cashew nuts.



The cashew chain before CASCA

- To support local entrepreneurs to establish ten new small-scale cashew-processing units, so generating income and employment for women and men in one of the poorest areas of Mozambique.

Chain analysis

Recognizing cashew's high potential to alleviate poverty, SNV began exploring the possibility of intervening in the cashew sector. It studied the economic, technical and social viability of interventions to promote the processing of cashew nuts at the community level. The CASCA programme is the result of this analysis.

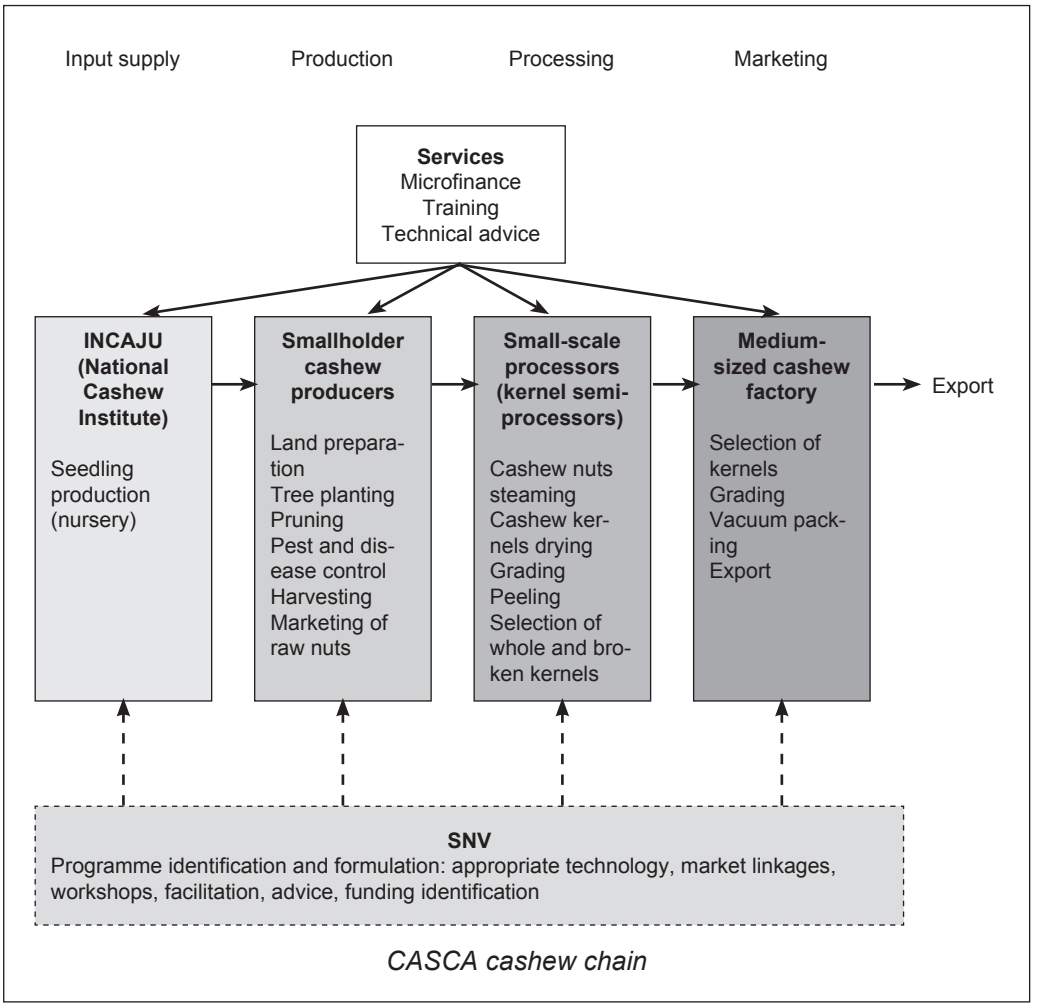
Preparatory phase

In the first one-year preparatory phase, SNV formulated the CASCA programme and facilitated various activities, including:

- Selecting a suitable intervention area for piloting small-scale processing units.
- Assessing processing options.
- Identifying potential stakeholders.
- Developing a basic business plan addressing the overall viability and sustainability of CASCA.
- Negotiating programme funding.
- Formalizing partnership agreements within the programme.
- Preparing to launch the programme.

Implementation phase

In the second phase of the CASCA programme, SNV provides advisory services to the implementing partners ADPP and AMODER (two local NGOs), which are involved in various segments of the value chain. It facilitates relationships among the various stakeholders, and is building the capacity of the NGOs. It has trained them in market research and gender issues, helped them set up the processing units, improved their fundraising capabilities, and assisted with monitoring and evaluation.



CASCA cashew chain

Outcomes

CASCA had made significant progress by mid-2004:

- The cashew processing units now employ about 100 workers, managers and technicians, all from local communities. The minimum wage is about €42 per month, in an area where the average per capita income is only €58 per year. The employees spend their money locally, boosting other businesses in the district.
- More than 1000 farmers – most of them women – have planted improved cashew trees.
- A total of 800 people have attended courses on various aspects of cashew production (identifying high-yield varieties, preventing bush fires, pest and disease control measures, etc.) and processing (unit management, quality control, and other technical aspects). As a result, the yield and the quality of cashew have improved, with producers being paid better prices.

CASCA beneficiaries and partners

CASCA serves a large number of rural cashew growers and processors, and collaborates with a range of partners.

Beneficiaries

- Over 1000 smallholder cashew producers.
- 10 small processing units, employing a total of about 100 women and men.

NGO partners

Two local NGOs deliver training and micro-finance services to producers and processors on a long-term basis. They implement the CASCA programme and receive capacity development support from SNV.

- **Development Aid from People to People (ADPP)** Based in Monapo District, Nampula province, ADPP runs a training school that offers courses to farmers on practical skills they need to manage their farms, either independently or in collaboration with other small-scale producers. Through CASCA, ADPP provides technical courses for the processing unit managers on quality control, equipment maintenance, etc. It also trains cashew farmers, who are mostly women.
- **Mozambican Association for Rural Development (AMODER)** This is a microfinance institution based in the capital, Maputo. It identifies, promotes and finances local project initiatives. As part of the CASCA programme, AMODER offers low-interest loans to the processing units, and manages the funds received from HIVOS, the Dutch donor agency.

Medium and large private enterprises

- **Miranda Caju factory** This medium-scale cashew-processing factory is owned by Antonio Miranda. It buys semi-processed kernels from the small-scale processing units, grades them and packages them for export. Miranda Caju pays 20% more for raw nuts than farmers typically receive from traders, and pays 15–20% more for whole, white, clean, well-dried cashew kernels.
- **Global Trading** This Dutch cashew broker buys packaged kernels from Miranda Caju and imports them to the Netherlands.

Technical assistance

- **TechnoServe** This US-based NGO provides technical assistance to Miranda Caju and the small scale processing units, and advises on equipment, product quality standards, etc.
- **National Cashew Promotion Institute (INCAJU)** is a government institute established in 1998 with the objective to revitalize cashew production and processing. It links the CASCA programme with other government agencies. It plays a vital role in helping to create a more favourable institutional environment for agro-business ventures like CASCA.

Donor

- **HIVOS**, a Dutch development agency, provides funding to support CASCA's activities.

Cashew processing employs mainly women

- The processing units have reliable local supplies and are able to sell semi-processed kernels to the factory at fair prices (currently €3.24/kg for whole kernels and €2.19/kg for broken ones).
- With women playing a dominant role in the production and processing of cashew, the programme has clearly had a positive impact on the empowerment of women in the programme area.
- The interventions also had a positive impact on the establishment of local enterprises (processing units) as well as the lager agro-industrial plants at provincial level all being relevant targets for the continued broad-based private sector development in rural Mozambique.

Position of smallholders in the chain

The smallholders who do not work in the processing units are still "chain actors". They have not taken on any additional activities in the chain. Nor have they increased their participation in chain management. But they have benefited in other ways:

- They have more marketable produce; they have become regular, reliable suppliers.
- They have considerably more income than before.
- They have improved their cashew orchards (increased natural capital assets).

- They have learned better production techniques (increased human capital assets).
- They cooperate with each other and with the small-scale processing plant (increased social capital assets).

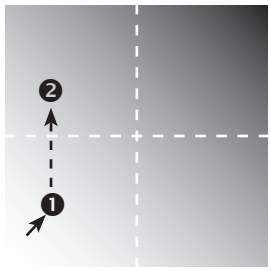
Some of the smallholders work for the small-scale processing units. They benefit from increased income and new employment opportunities. Such livelihood transitions are vital if rural Mozambique is to develop further.

The small-scale cashew processing units are run by local entrepreneurs who own and control the activities and manage their units.

Wider benefits

- Many national and international organizations recognize CASCA's achievements in alleviating rural poverty. Although at first few believed the programme would succeed, other organizations are becoming involved in rebuilding the cashew sector. They have offered to join CASCA to provide other services, such as training for processing cooperatives and associations.
- INCAJU is also aware of the importance of the CASCA programme, and plays a crucial role in lobbying for more favourable policies and regulations. INCAJU and the government have recently expressed interest in replicating the CASCA programme in other provinces. SNV is frequently invited to workshops in other provinces to address potential stakeholders who wish to become involved in small-scale cashew processing.
- The government is now more sensitive to the situation of small-scale cashew producers. It is helping farmers to rehabilitate their cashew orchards, and is promoting research on new high-yielding varieties and more effective pest and disease control measures.
- One of the most important long-term benefits of the programme is the increased entrepreneurial capacity in Nampula province. This should increase local people's confidence and encourage them to develop other economic activities.

Chain movements



Those smallholders who have remained in cashew production and not started processing nuts have improved their position within the chain actor quadrant ❶.

Farmers who are also involved in the small processing units have become chain activity integrators ❷.

Risks

Political The government may abolish the export tax on raw cashew – though there are no signs of this at present.

Socio-economic World markets determine raw cashew prices. A bumper crop in India means falling prices in Mozambique. Farmers may switch to other activities, and stop maintaining their trees. The processing units depend on just one buyer, but this is unavoidable at this early stage. Micro-credit is an important component of the programme, but also has inherent risks.

Financial and management AMODER offers loans to the processing-unit owners so they can build their businesses. But their lack of familiarity with loan schemes and their limited management capacity may affect the units' profitability. To reduce these risks, the programme offers management training and monitors the units closely – in particular to ensure that the loans are indeed invested in the enterprises.

Chain A number of essential linkages have been established in a short time. If one of the chain segments collapses – or if one of the actors (or the business development service agencies) leaves – the chain will be endangered. Its survival will depend on the resilience of the other actors in the chain, and their flexibility to find solutions quickly.

If, due to one or a combination of above factors, the medium-sized processing plants were to fail, the farmers and small-scale plants that rely on them would lose their market.

More information: www.snvmz.org or contact Antonio Quinze, aquinze@snvworld.org

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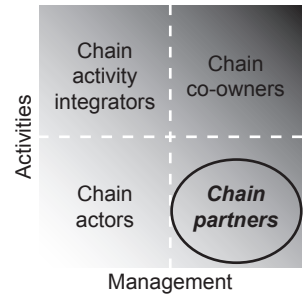
Chain partners



Chain partners are specialized in farming and exert influence over the management of the chain. These farmers start out offering a reasonably attractive product to the market; they have developed basic assets and farm management skills. However, they may feel unable to control their relations with the outside world. For instance, they may sell to visiting traders – a new one each season. This leaves them uncertain whether they can sell their products, and at what price. These farmers want to exercise greater influence in the chain – they need to develop the abilities such as negotiating prices, developing technologies, setting quality standards, managing logistics, providing just-in-time deliveries, etc.

To this end, they opt for a partnership strategy based on shared interests and mutual growth. By linking up with a buyer, the farmers can increase their business security and gradually improve and expand their businesses. They want to make themselves an attractive business partner so that the buyer will be willing to pay better prices, listen to their demands, and invest in them.

In the following case studies we see examples of how farmers have improved their capacities to manage the chain:

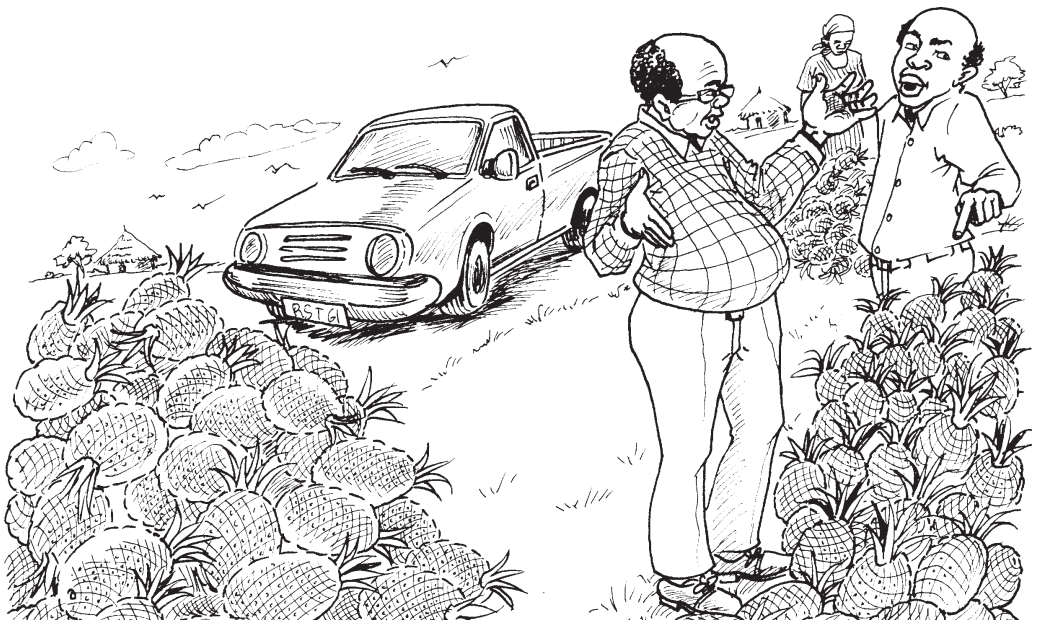
- Getting Mozambican pineapples to market
- Forging partnerships between Tanzanian sugarcane producers and millers
- The Cheetah story: Helping smallholders in Malawi access the paprika market
- Honey, the liquid gold of the North Rift Valley in Kenya
- Developing mango market linkages through farmer field schools in Kenya
- Learning from challenges: Sunflower contract farming in northern Tanzania
- Organic coffee from Kilimanjaro
- Farmer field school networks in Western Kenya.

Getting Mozambican pineapples to market

MOUNDS OF UNSOLD PINEAPPLES rotting in the fields: that's a disaster for the farmers of Chibabava, a district in Sofala Province in central Mozambique. But it is also an untapped opportunity. If a market for the fruit can be found, the farmers will be able to benefit from the district's good transport links: the main road from Maputo (the national capital) to the port of Beira passes through the district.

Pineapples are the main cash crop in the district. Farmers also raise cashew as a cash crop, and grow sorghum and maize for subsistence, but dry years bring a risk of market failure and severe food shortages. Pineapple grows well: the district produces around 35,000 tons a year, split between two growing seasons. But farm-gate prices tumble at harvest time: farmers may get only a cent a kilo – €0.02 for a 2.5 kg fruit – at the peak of the season – if they can find a buyer at all. As a result, many fruit are left to rot in the fields.

They could fetch more if they are transported further away or could be processed nearby. The same fruit may be worth €0.40–0.75 at the local markets at the start and end of the harvest season.



The market could not cope with the flood of pineapples at harvest time – so traders would offer rock-bottom prices, and farmers left fruit to rot in the field.

Many of the district's pineapple farmers are organized into five associations. These associations have about 400 members, who farm a total of about 1000 ha of land. Together, they produce about two-thirds of the pineapples grown in Chibabava. About one-third of the association members are women. The associations are the only commercial farmers' organizations in the district. The members usually sell fresh pineapples directly at local markets, or to small-scale traders who sell them locally or in the nearby town of Muxungue, or bring them to Beira or Maputo.

SNV started work with the associations in August 2004. It aimed to help the members generate a sustainable income as well as improve the associations' organizational abilities. SNV chose the pineapple sector because it is the only crop with short-term potential to improve incomes. The amount of pineapples grown in Chibabava makes it worthwhile to develop markets and explore the possibility of processing farm produce in the district.

In the short term, the farmers and their associations wanted to get a reasonable price for their fruit. In the longer term, they wanted to find more profitable markets, add value by processing the pineapples, and spread their risk by diversifying their marketing and processing options.

The associations asked SNV for three types of assistance:

- Training and capacity development in leadership and organization development.
- Facilitation of market linkages.
- Identification of opportunities for pineapple processing that the associations themselves could do on a small scale (such as sun-drying), or in a plant that they might part-own, or in partnership with a larger processing plant.

SNV's intervention evolved into an action-oriented and integrated capacity development approach (see box on the next page). It is based on extensive consultation with the associations and other actors, and adjusts over time as more is learned and new opportunities emerge.

Training and capacity development

In 2005 SNV began training the association leaders and a small group of the more proactive and entrepreneurial farmers. The courses have covered leadership; development of commercial agro-business associations; planning and administration; business planning; marketing, bulking, quality control and certification; and maintaining institutional linkages.

The last subject is important because the associations cannot do everything themselves: they need outside support, information or inputs if they are to identify and exploit new markets successfully. The training takes place in parallel with coaching and learning on the job.

It remains a challenge to include women in the training because the vast majority (over 95%) cannot read or write.

Action-oriented, integrated capacity development

SNV's work in Chibabava is an example of an action-oriented, integrated capacity development approach. Here are some key features of this approach.

- **Action-oriented** The approach places local realities and the needs of the farmer associations at the centre. It involves gradually exploring and learning together with farmers to minimize the risks and ensure that efforts are sustainable.
- **Integrated capacity development** It attempts to improve the associations' economic performance at the same time as strengthening their internal organization and institutional linkages. This is because one will not work without the other: a strong organization would be of little value without a strong core business, and business interventions may not be sustainable if they are not embedded in and owned by strong associations.
- **Contextual analysis** The approach links local poverty and development constraints to their root causes – which may be outside the local area. Examples are external opportunities (such as alternative markets), other economic sectors (power supply, in this case), and the regional, national and international context (e.g., weak national institutions, market opportunities, best practices for production, processing and marketing).
- **Partnerships** The approach strengthens institutional linkages (e.g., to gain access to markets and processing opportunities, or to develop organizations) and promotes concerted efforts by a broad range of actors (e.g., lobbying for power supply).

Market linkages

SNV has helped the associations forge sustainable markets in various ways.

- **Links with a responsible buyer** It linked the associations with a trader based in Manica, the neighbouring province. This trader has his own transport facilities, and has already bought about 35 tons of pineapples and exported them to nearby Zimbabwe. In 2005, the trader indicated he was willing to sign a long-term contract with the associations to buy 3–7 tons a week at a fixed price of €0.13 per kg (about €0.40 per fruit), a big improvement over the usual farm-gate price. The trader is also willing to offer the association members services such as free training on improved technologies to raise productivity and quality. This relationship has provided the farmers with an initial entry point into the wider market.
- **Seeking export markets** SNV has helped the associations explore alternative markets, such as the international "fair trade" and organic markets, and the potential to ship to the Middle East. These possibilities are still being explored. This work has also highlighted the need to strengthen the national organization responsible for export quality and certification.

Several national and international buyers have begun offering higher prices than the trader mentioned above – but without the additional training services. So the associations are confronted with a dilemma – to continue with their existing trading partner, or to take up these new (but riskier?) opportunities. They realize they have much to learn about competitive business in international markets.

Exploring opportunities for agro-processing

Processing offers the associations opportunities to add value to their produce – though this obviously depends on the type of processing, how it is organized, and how the product is marketed.

SNV has supported the associations in the following ways:

- **Feasibility analysis of a large processing plant** A large pineapple processing plant in Muxungue could have a major impact on the town and the surrounding district. On behalf of the associations, SNV arranged through PUM (a Dutch organization providing senior experts' advice) to send a fruit-processing expert to Chibabava in late 2005 to do a feasibility study. Preliminary analysis has revealed one major obstacle – the lack of an electrical power grid – but a donor has promised to fund the extension of the electricity grid to Chibabava within the next 3 years (see box below). The harvest peaks during just 4 months each year is another constraint to the feasibility of a large-scale pineapple processing plant.
- **Other options for pineapples** The associations and SNV are also exploring alternatives that do not require electricity, such as solar drying, and improvements on the supply side (grading, storing, packing etc.) that could benefit partnerships with existing processors.

Results

What are the results of this work?

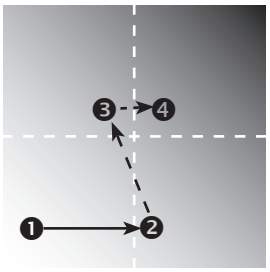
- **Increased income** The association members have profited from increased prices (up from €0.01 to €0.13 per kilo), as well as a more reliable income (a contract to supply up to 7 tons of fruit a week).
- **Position of the smallholders in the chain** The associations have begun to move from being mere chain actors towards the beginnings of a chain partnership. They are exploring the possibility of processing their output, so may have the opportunity to move towards activity integration too.

Lobbying for electricity

The lack of an electricity grid is a big constraint to the development of Chibabava – and not just for agro-processing. SNV and the farmers' associations have consulted with local businesses, banks, health and education organizations about the feasibility of linking the district to the national grid. As a result, Danida and the Danish embassy have committed to start tendering and other procedures, so there is now a very good chance that the district will be connected to the grid within the next 3 years.

This shows that organizing a diverse group of local stakeholders to articulate their needs in a persuasive way can convince outsiders (in this case, donors and provincial authorities) to invest in a key development intervention that will benefit all.

Chain movements



Beginning as chain actors ❶, Chibabava's pineapple producers have started to improve their management capabilities and negotiate partnerships with other actors in the value chain, moving them towards the chain partnership quadrant ❷.

The associations may also start small-scale processing of some of their produce. This implies the associations will need to identify new markets, new partners, new quality control systems, etc. Therefore they may first move to the chain integrator segment ❸. When they have further developed their management skills they might evolve to chain co-owners ❹.

- **Capacity development** The association leaders have developed new skills through training and on-the-job learning. They are now better able to manage their associations, as well as to identify new markets and explore processing opportunities.

Looking to the future

- The gradual approach of exploring and learning together with farmers has worked out well so far, and will be continued. There have been some initial benefits without too much risk. It is worth exploring additional income and value-adding opportunities.
- The sharp peaks in pineapple production twice a year make it difficult to market the fruit. They may also reduce the viability of a processing plant. One way to overcome these problems might be to find ways to even out the harvest peak so fruit is available for a longer period, or even throughout the year.
- Farmers traditionally clear a field from the bush, grow pineapple on it for 5 years, then abandon the field and shift to a new plot. If pineapple production expands further in Chibabava, new, more intensive production systems will be needed that include rotations to maintain soil fertility.
- Few women pineapple growers have attended training, and they play little leadership role in the associations. It is necessary to increase their involvement in both these areas.
- Solutions to marketing problems may come from other development sectors, based on partnerships with other actors. This is shown by the problem of electricity supply in Chibabava. Solving such problems may require collaborating with a wide range of actors. Such collaboration could be formalized in a broader local economic development framework (see page 176), which may lead to much greater benefits for the whole area.
- Documenting the experiences provides evidence of the communities' progress towards commercial production and improved livelihoods. It also produces

valuable input into the policy and institutional changes that are needed if people throughout Mozambique are to improve their livelihoods in the long term.

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Forging partnerships between Tanzanian sugarcane producers and millers

Privatization in the mid-1990s has changed Tanzania radically. With the move from a state-led to a market economy, many formerly controlled agricultural industries needed to find ways to survive, expand and grow. This is the story of how sugarcane outgrowers in the Morogoro region overcame a series of crises and were able to strengthen their position in chain management.

Morogoro, in central Tanzania about 200 km west of Dar es Salaam, is one of the main sugar-producing regions of the country. From the 1960s to the early 1990s, Morogoro's farmers acted as cane outgrowers for government-run sugar mills. The mills had their own farms, but they could not supply all the mills' needs. Under the outgrower scheme, farmers grew the cane; the mills provided seed cane on credit and the services of tractors for land preparation. Workers from the mill would harvest the cane and take it for processing. All these services were deducted from the amount paid to the farmers.

When the mills began to be privatized in 1994, the outgrowers realized they needed an organization to represent their interests. Three associations in Morogoro were formed: the Kilombero Cane Growers Association, Ruembe Outgrowers Association, and Mtibwa Outgrowers Association. When privatization was completed in 1997–98, these associations became the outgrowers' legitimate representatives.

The associations have various functions: (1) they act as spokespersons for the farmers; (2) they source funds to extend as loans to the farmers; (3) they provide education and training on improved cropping practices; (4) they seek markets and better prices; and (5) they promote environmental conservation. Members fund their activities by contributing between TSh 200 and 250 (€0.14–0.18) per tonne of cane harvested. The three associations have a total of 14,000 members.

In 2000, an apex organization, the Tanzanian Sugar Cane Growers Association (TASGA), was formed to represent the interests of all three associations. TASGA represents the associations in national and international forums, and tries to reduce the associations' costs and improve their effectiveness, for example by sourcing funds to buy fertilizers and herbicides, negotiating loans with banks for the association members, commissioning feasibility studies on irrigation and infrastructure improvements, and providing leadership training.

Value chain activities

The Morogoro outgrowers are smallholders, owning an average of 1.4 hectares each. They are organized into production groups, which in turn make up one of the three associations. Most of the outgrowers hire tractors to prepare their land, though a few hoe by hand. The association members farm a total of 22,000 cane plots, covering about 17,000 ha.

Each association has a sales agreement with the sugar companies. At harvest time, a harvesting schedule is drawn up and the amount of cane to deliver each day is determined. A joint committee fixes the cane prices for the season. Mill employees cut the cane and load it onto lorries, but this is changing: the associations now have loading equipment, so load much of the cane themselves. Truckers transport the cane to the mill, where it is weighed at the company's weighbridge, and samples are collected for laboratory analysis.

The growers are linked with the millers through their associations and by existing contracts. They are reliant on the millers: there is no other market for cane in the region. The millers sell most of the sugar they produce locally, but exports small quantities to the European Union, where it fetches very high prices. Some 10% of the 165,000 tonnes produced in the Mtibwa and Kilombero outgrower schemes in 2004/5 was earmarked for the export market. In this year, Tanzania earned €10.3 million in export sales.

Tanzania's five major sugar millers are grouped into the Tanzania Sugar Producers Association.

The Sugar Board of Tanzania is a government entity that includes representatives of the millers and outgrowers. It has various functions: it oversees the implementation of the Sugar Act of 2001, arbitrates on behalf of its representatives, oversees a development fund to support outgrower infrastructure, research and training, and exports sugar to the European Union on behalf of the millers (it receives a commission for this service). The Board is also financed through a levy on imported sugar, contributions from the sugar millers and outgrowers, and from rental properties.

The Sugar Act of 2001 requires that all sugar millers and outgrowers be registered and licensed. Fines are imposed if millers buy from unregistered outgrowers, or if farmers sell to unlicensed buyers.

Low prices and mistrust

One of the main problems in the cane industry has always been the very low cane prices offered to the farmers. Most of the smallholders are poor and find it difficult to recoup their production costs. Other problems have included lack of skills in crop husbandry; a lack of capital to invest in expanding their enterprises; and the fact that their plots are not surveyed – pushing up the cost of loans.

The relationship between the associations and the sugar millers has been characterized with mistrust for some years. The outgrowers feel that their cane is not

Relationships between the growers and the millers used to be poor

graded honestly, that the weighbridge is tampered with, and that the millers often delay payments.

Many of these problems existed because there were no effective mechanisms for farmers and millers to resolve problems. For example, from 1999 onwards, the millers frequently delayed payments in violation of their contracts with the associations. The situation was particularly critical in Mtibwa, where some farmers had to wait 6 months or longer before they were paid.

The farmers were forced to take drastic action. They surrounded the company premises and prevented the employees from leaving until they paid up. This happened repeatedly – no less than seven times. Most such protests resulted in timely payments to the farmers, but clearly did not solve the underlying problem.

Resolving disputes, building partnerships

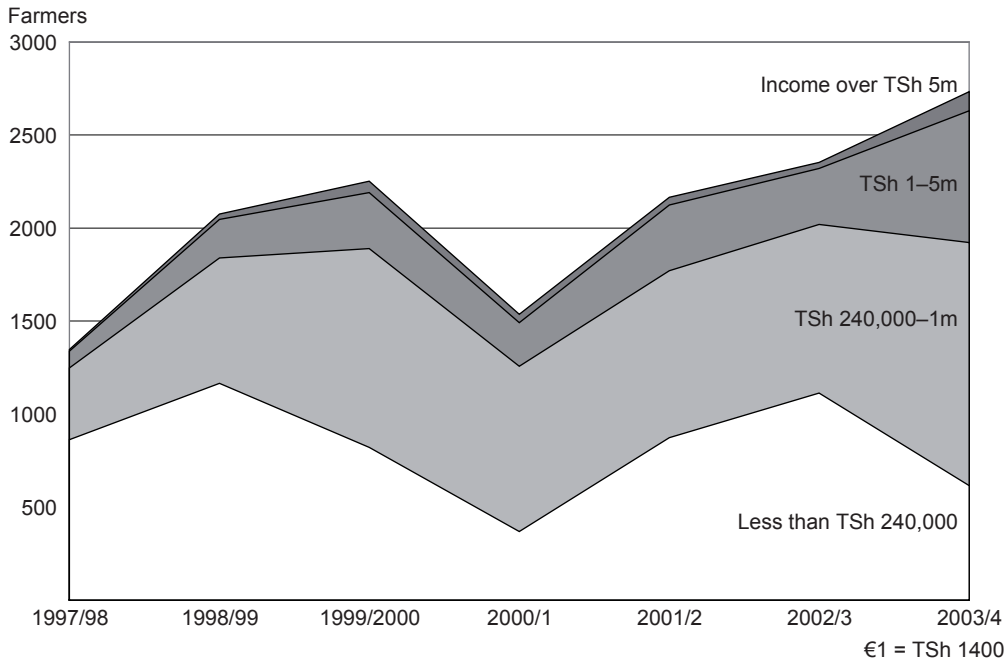
The implementation of the Sugar Act has created a mechanism for resolving these issues and building trust among the various players. For example, in the 2005–6 cane season, there was a standoff over prices between the millers and the associations. "No better cane prices: no harvesting of outgrower sugarcane", was the slogan. Within 2 months, an agreement was reached at Kilombero. At Mtibwa, the Sugar Board facilitated talks leading to the signing of memorandum of understanding.

Together, the associations, the millers and the Sugar Board have managed to put in place a series of mechanisms – contracts, forums, consultations and stakeholder meetings – to discuss thorny issues and come up with settlements. No outside intermediaries have been needed. The partnership works, though it consumes a lot of time and effort, so there is still room for improvement.

The government has provided six extension staff to assist the outgrowers, and the milling company has employed an expatriate outgrower manager to assist the farmers.

The partnership has produced various benefits for the farmers.

- **Financial** The outgrowers now get more for their cane. The number of growers in Mtibwa with revenue below TSh 240,000 (€178 a year, or about €0.50 a day) has fallen from 43% in 1997/8 to 22% in 2003/4. The number earning more than TSh 1 million (€710) has jumped from less than 100 to over 800. Over 2700 Mtibwa farmers now harvest cane – twice as many as 6 years previously. Their average revenue from sugar was over TSh 1,300,000 (€1014 a year, or €2.78 a day).

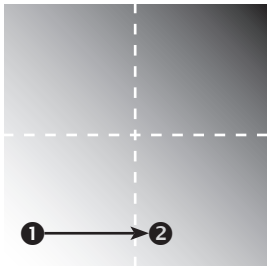


Income from sugar earned by farmers in Mtibwa Outgrowers Association

The intervention has greatly improved relations between growers and the millers – and has created a mechanism to solve problems in the future

- **Social** Now they are paid on time, the farmers can afford to weed their cane fields at the right time, buy fertilizers and pay casual labourers – increasing job opportunities for others. They can also pay school fees, so their children's schooling is not interrupted. The farmers are helping build two community secondary schools, and they are able to construct better houses for themselves.
- **Management** Farmers used to complain of malpractices at the weighbridge, but there is now an agreement to check its accuracy every 3 months. Every farmer's load of cane is sampled and analysed to determine grades. Haulage, loading, transporting and offloading are coordinated closely with the mill's crushing capacity to avoid delays and stoppages. Both the miller and the outgrowers realize they have a symbiotic relationship: their prosperity depends on each other. The outgrowers have some bargaining power because as a group, they supply over half of the cane milled. The farmers have some influence over the management of the chain: prices, amounts of cane supplied to the mill, and decisions made by the company. The payment system has improved: payments are now never delayed by more than 2 months. Relations

Chain movements



The outgrowers started as chain actors ❶, with little influence over management. They now have control over many management activities, particularly in negotiating prices and supply quotas ❷.

between the farmers and the mill management have improved markedly.

Challenges and the way forward

- **Domestic market** The government has given the Mtibwa sugar millers some 30,000 ha of land to grow sugarcane and raise livestock. This poses a threat to the outgrowers: they fear that the company will be able to flex its financial muscle in cane growing.
- **International market** The European Union is in the process of ending the preferential trade status of Tanzania and other countries selling sugar. It is expected that this will lead to price cuts of 39% within 2 years. Tanzania may lose €11 million a year in exports.

Tanzania can meet these challenges in two ways.

- The industry can diversify and modernize to make it competitive in regional markets.
- It can also exploit the domestic market: Tanzanians now consume only 9 kg of sugar each a year, the lowest rate in East Africa. This implies there is opportunity to expand the sugar industry if the national economy continues to grow. The farmers have established an infrastructure fund to enable them to expand production. Each farmer pays TSh 500 (€0.36) per tonne into this fund, which is used to improve accessibility to the cane fields.

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The Cheetah story: Helping smallholders in Malawi access the paprika market

Cheetah Malawi Ltd is part of the Dutch-owned Cheetah group of companies, which operates in Zambia (since 1994), Malawi (1995) and Mozambique (2001). Cheetah started paprika production in Malawi with smallholder farmers in 1995 as a way of spreading its political, financial and geographical risks into a new country. With its large tobacco production, Malawi seemed ideal for the introduction of this new cash crop. Paprika can be grown in the same areas as tobacco; the two crops are from the same botanical family, and they are grown in similar ways.

Paprika is another name for sweet pepper. It looks like a hot chilli, but lacks the pungency. It is used to make oil (used as a natural food colorant) or ground into a powder and used as a spice. Cheetah delivers mainly to the oil extracting industry, but has its own powder plant with a state-of-the-art laboratory in Zambia.

The trade in paprika is based on its colour, which is measured in a laboratory. The oil extractors have stringent colour requirements, so Cheetah de-seeds its paprika and exports the dried flesh, which has better colour. Nearly all the paprika grown in Malawi is exported to Europe, South Africa and America.

When Cheetah started in Malawi, the smallholder sector was relatively small, but it grew rapidly after tobacco production was liberalized. The firm first introduced paprika to larger farms in various areas in 1995. The following year, smallholder farmers nearby started growing the crop as well. Their line of thinking was, "if the estate makes money with it, we can make money too". More than 15,000 smallholders in northern and central Malawi now grow paprika under contract with Cheetah. The smallholders grow an average of about 0.25 ha, producing about 85 kg of paprika, earning €60 each season. Better organized farmers plant larger areas – an average of about 0.8 ha, yielding about 640 kg, worth €425 a season.

Malawi currently produces about 1.1 million kg of paprika (expected output in 2006) – less than 1% of world production. Cheetah trades 90% of Malawi's output. The country has the potential to produce about 7.5 million kg of paprika, of which Cheetah hopes to trade about 3 million kg. To reach Malawi's full potential, other serious promoters, investors and buyers of the crop are needed in the country.

Paprika is normally grown in rotation with maize, soybeans, groundnuts or beans.

Malawi's change from a dictatorship to democracy in the early 1990s has made loan defaults by farmers a serious issue. During election campaigns, politicians frequently try to attract votes by offering to waive loans. Naturally, this encourages farmers to default, ruining the credit facility. Over 10 years, all the major micro-credit facilities have closed, and few smallholders can now get an input loan.

Extension and procurement

Cheetah provides extension services to farmers through paprika clubs. Each club has 20–25 members, who elect a chairman, treasurer and secretary.

Cheetah employs extension officers who are allocated to specific areas. They organize meetings with the paprika clubs and provide technical know-how to farmers, government extension workers and NGO staff. Each Cheetah extension officer is responsible for distributing seed, providing extension, and procuring paprika in his area. The extension officer coordinates a number of field assistants: these are local farmers with several years of experience with the crop.

Extension messages cover sowing, transplanting, field management, harvest and post-harvest management. Quality issues are emphasized, and all lead farmers and field assistants are trained how to grade paprika. For Cheetah it is very important to keep in contact with the farmers to control the quality and quantity of output. Without such controls, Cheetah will lose its export market. For this reason, Cheetah contracts with the farmers, offering them a minimum guaranteed dollar price before they start sowing.

Cheetah treats smallholder farmers as business people. This means the farmers need to have enough information to make sound business decisions before they start growing paprika.

During procurement the extension officer and paprika clubs (or the associations into which the clubs are grouped) together decide where to set up a buying depot (open 6 days a week) or collection points (open a few days a month). Farmers are welcome to deliver their paprika either individually, in club or association to the company warehouse in Lilongwe. Club and association deliveries of over 500 kg attract a bonus of 5%. The extension officer makes the payments to the depots, but club committee members can also collect their members' money from Lilongwe. Cheetah subsidizes the bus fare.

Facing problems

Cheetah and the farmers have faced several problems. These include:

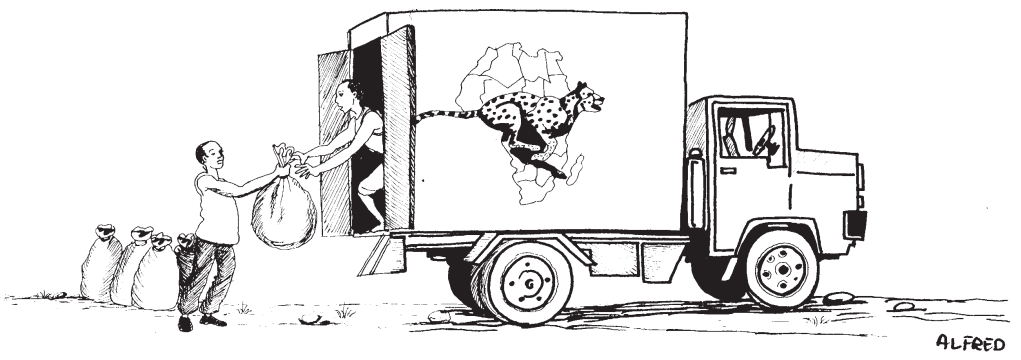
- **Communication** Cheetah's extension officers had too little contact time with the farmers to get to know all the issues. They typically have one meeting in the morning, then must rush off to another somewhere else in the afternoon. They may visit a particular group of farmers only once every month or so. That means they have little time to get to know the farmers and their concerns.

- **Market structure** Traders and middlemen were disturbing the procurement. They told false stories about Cheetah not buying in a particular area, then offered the farmers low prices – sometimes as little as half the price Cheetah was offering.
- **Procurement fraud** Some Cheetah employees have paid farmers less than the correct amount for their produce. One trick was to buy A-grade paprika from the farmer but tell him it was B-grade – then pocket the difference. Another was to pay the farmer for less than was actually received.
- **Efficiency of payment** Payments to farmers were often delayed because of poor planning by extension officers.
- **Registration and identification** Farmers are often registered under different names – for example, because their names are spelled in different ways in various documents. There are no identity cards available. This makes it difficult to track suppliers, and means that farmers have been able to default on credit. Cheetah's computer database has 55,000 names, but only 15,000 actually deliver paprika to the firm.

Cheetah is dealing with these problems through various initiatives – some of them supported by Cordaid through its "access to markets" focus. This is a good example of how a private sector company (Cheetah, in this case) can work together with an NGO (Cordaid) to improve the situation for both farmers and the industry.

Extra extension level

From farmer meetings, Cheetah realized there was need for more transparency and better communication. The firm has introduced a network of field assistants, who are elected by farmers from the area. These field assistants are prominent local farmers with several years of experience with paprika. Each one is responsible for looking after 300–500 farmers. The field assistants are not employed by Cheetah, but receive a small allowance, get a bicycle and stationery, and report to the firm's offices every first Monday of the month. Their incentive for helping

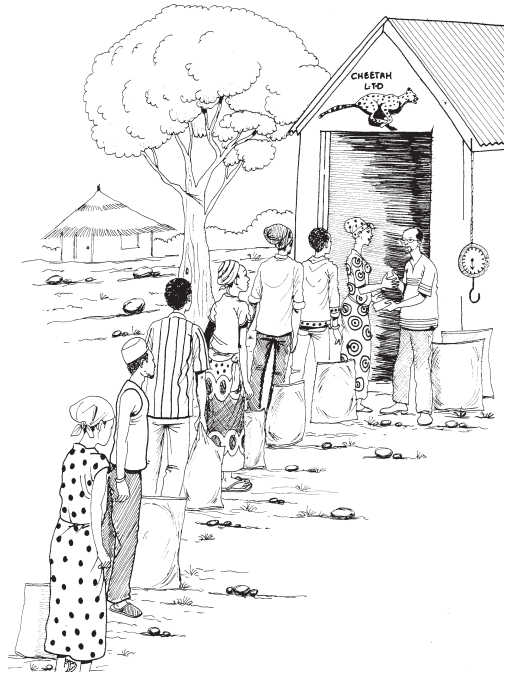


Farmers bring their paprika to the collection points – or to Cheetah's depot in Lilongwe

farmers? Cheetah pays them a bonus, depending on the amount of paprika produced in their area. This bonus can be substantial: up to €250 a year, in a country where the GNP per capita is only €145.

If farmers are not happy with the performance of their field assistant, they can elect another one. They are free to do so at the end of every season in October–November, before the next season starts. Cheetah has no influence over the farmers' choice.

The field assistants provide more detailed feedback than was possible through the extension workers alone. Communication between Cheetah and the farmers has improved, and the firm is better able to respond to issues as they arise.



A new computer system gives farmers a printout showing details of what they have sold. That reduces misunderstandings and fraud.

Computer technology

It may seem strange to try to improve transparency by introducing a new computer program in a country as poor as Malawi. But this has proved very effective. Cheetah has developed a program that prints out a detailed seller-sheet for each farmer who sells paprika. The sheet shows information such as the bag number, quality, price, deductions, cash advances and levies for each farmer. Cheetah's extension workers have explained to farmers how to read and understand this sheet. The farmers now have a record of what they have sold and what they are owed, can ask questions about their deliveries and payments, and are much less likely to be (or feel) cheated by Cheetah's own staff.

This program has brought benefits for Cheetah too. It gives the firm better insight and control over what it is buying. It prevents downgrading and under-weighing. Each bag is given a unique number, so can be traced throughout the process. Cheetah now has a full tracking and tracing system, not because of its European clients, but because of its producers.

Along with the information from the field assistants, the computer system has enabled the firm to generate data which can be used for management decisions. It provides weekly updates on quality and quantity per area, as well as depot stocks. This helps cut transport costs and product losses. Trucks now return to the depot with full loads rather than half empty.

The program has also shown that women are better paprika farmers than men. Only 22% of the farmers selling paprika are women, but they produce 35% of the crop sold.

Paprika Association of Malawi

The Paprika Association of Malawi (PAMA) was formed by the Export Promotion Agency of Malawi and got its first funding from Danida. It is now supported by the European Union. It has grouped the paprika clubs established by Cheetah into associations.

Each year a buyer–seller meeting agrees on prices for the season and sets modalities and standards for buying, transport and packaging. This ensures that the quality and quantity are what the market requires.

PAMA has established standards for the industry, which will reduce confusion among farmers, as well as with other buyers in the market. Standards on grading (4 grades have been agreed), purchasing methods and administration are important for a new and growing industry.

PAMA's involvement has also helped create transparency and reducing fraud against, or by, farmers. All issues raised by farmers are directed to PAMA for consideration. This gives farmers a feeling that they are treated fairly.

As is perhaps inevitable, PAMA faces constraints. Many of the farmer associations lack cohesion: most farmers do not feel committed to them. (This is one reason Cheetah provides every farmer with an individual seller-sheet.) PAMA's management is also relatively weak, and has limited knowledge of the paprika market.

PAMA is trying to cover its operational expenses by introducing a 5% levy, but it is clear that farmers will not pay it unless the government makes it mandatory. The farmers seem to want to benefit from PAMA's services, such as extension and price negotiations, without having to contribute to it. It is important for the farmers and for the industry as a whole (including Cheetah) that PAMA develops into a capable, effective association.

Costs and benefits

Farmers have benefited in various ways from these developments. They now have better access to the market because the collection points are closer to their homes. The price negotiations have raised the average price they receive by about 11%. Paprika is currently a better cash crop than burley tobacco, and more farmers are likely to start growing it.

Cheetah has not benefited directly, but stands to gain in the long run because the paprika industry is slowly but surely growing and maturing. Volumes are increasing, and higher prices paid to farmers will stimulate production. Greater

volumes mean that Cheetah can reduce its extension cost per kilogram it buys, allowing it to raise the purchase price further.

Furthermore, PAMA monitors procurement procedures, so increasing the amount and quality of information coming to Cheetah management about the performance of the firm's buying staff. This has contributed to more transparent dealings and less fraud.

Lessons

What lessons can be drawn from Cheetah's experience? Here are four.

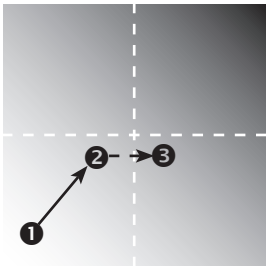
- **Communication at the field level is very important** Field assistants provide detailed reports about the crop and farmers' concerns. They have improved the efficiency of crop collections, and it is now easier to get messages to the farmers, resulting in good-quality paprika.
- **Access to markets improves production** Siting the collection points carefully (and in agreement with the farmers) reduces the farmers' transport costs. That means more farmers are willing to grow the crop, as they know who and where the market is.
- **Computer technology creates transparency** Cheetah's computer program has enabled the firm to evaluate production better, monitor buying, track batches of paprika and trace any problems. The seller sheets give farmers much better information about what they have sold.
- **Other crops affect the market** Tobacco prices have an impact on paprika production: if the tobacco price falls, farmers switch to growing paprika. Shortages of maize, the staple food in Malawi, mean that farmers plant maize to eat rather than non-traditional crops such as paprika.

Challenges and ambitions

Identity cards Cheetah hopes that the introduction of a "chip" card with biometrics (photo, fingerprints, and identity information) for payments will help reduce problems in identifying farmers and cut the default rate. This new status item in rural areas is promoted by the Reserve Bank of Malawi. It will change the way Cheetah makes payments, and it will reduce the risk of running around with cash in the bush.

Building the capacity of PAMA PAMA requires more managerial skills as well as better market information on which to base price negotiations. PAMA is currently run on an ad-hoc basis, which is unsuitable for a newly established industry. PAMA and Cheetah are bound to have different interests during the buying season, but the two organizations help each other during the growing and buying seasons. PAMA informs Cheetah of problems at depots or collection points, enabling Cheetah to respond quickly. Farmers find that their problems are dealt with quicker. Problems arise when PAMA tries to be the most important

Chain movements



As a result of Cheetah's work, farmers who previously merely grew their crop and sold it ❶ have taken on new activities in the chain (such as grading) and have increased their influence over operational issues such as crop collection ❷. Communication, transparency and trust have improved.

Through PAMA, farmers have gained a larger voice in the industry, and can influence the price structure of paprika. This has moved the farmers towards the "chain partnership" quadrant ❸.

If PAMA is not able to strengthen its effectiveness, the farmers risk sliding backwards to their previous position ❷.

player in Malawi, even though it lacks market insight and information. This often results in confusing information going to the farmers.

Farmer cohesion in their associations is poor, since farmers are unwilling to follow instructions that do not benefit them immediately.

Co-operation with NGOs Cheetah wants to work with NGOs to develop the full potential of the paprika industry. Many different areas need investment, but cannot currently be financed by existing players. Examples include training of trainers, capacity building, funding of research, and establishing added-value processing and direct partnerships with producer associations. NGOs are important at the initial stage of establishing a sound foundation for the industry. When volume is achieved, their support is no longer required for the core activity, but may be vital for other new activities. The role of NGOs is not to get involved in trading, but to focus on linkages with the private sector if the market is a problem.

More players in the market Cheetah currently has an overwhelming share of the paprika market, but it believes that other competitors are desirable for the industry to grow. The government, NGOs and donors now see a near-monopoly situation, which they find difficult to support. Malawi has potential to produce enough volume of paprika to support 3 or 4 large processing and trading firms, as well as various smaller ones.

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Honey, the liquid gold of the North Rift Valley in Kenya

Pastoralism is the way of life for many people in West Pokot district, in the arid North Rift area of Kenya. But cattle, goats and camels are not the only animals that people here keep. Some of their livestock are small and brightly coloured, and alight gently on flowers to sip nectar rather than crushing them under their hooves.

Bees are important in West Pokot. In some parts of the district, nearly every family has a beehive. Honey is not only an important food; it also has many other uses: in medicine and brewing, to pay dowries, in rituals and ceremonies, and as a food preservative. It is given as gifts, sold for cash, or bartered for other items.

Owners harvest the honey twice or three times a year. Most of the producers are men, who may own anywhere between 5 and 40 hives. Relatively little honey is sold, but there is potential to expand this market, according to a 2004 study by SNV on alternative livelihoods in the area.

Women play only a peripheral role in selling the honey, but this role is increasing, especially where new technologies have been introduced. Some women now have their own hives – they may have inherited them, bought them or received them as a donation.

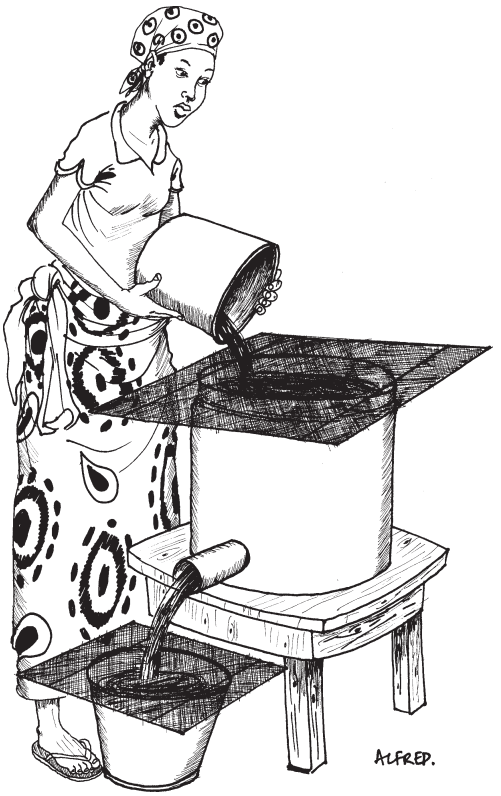
Honey Care and PADO

Honey Care, a private company based in Nairobi, works with groups of beekeepers throughout Kenya. The company collects, processes and packages honey for Kenya's leading supermarkets. Honey Care sometimes finds it difficult to fulfil orders from its customers because of a limited supply of good quality honey. The firm has even had to source honey from neighbouring countries to make up this deficit. Honey Care needs to improve its supplies if it is to maintain its position as a market leader.

PADO (the Pastoralists Area Development Organization) is a community-based organization that represents and serves many of West Pokot's farmers. PADO helps the farmers build their management capacity and improves their access to markets for livestock, honey and handicrafts. Farmers frequently ask PADO for advice on marketing honey. Production has been good recently, so farmers have stepped up such requests.

Chain analysis

A value chain analysis by SNV in April 2005 found that the beekeepers process their honey using very crude methods. They scoop honey, comb, wax, brood and pollen from the hive and mix it all together. The process is not hygienic, and the honey is so crude that it has no chance of being competitive in the market. One producer greeted the study team, then checked the honey by dipping an unwashed hand in it. The honey is typically stored in containers made of wood and leather, or in plastic buckets. For sale to consumers, it is poured into all kinds of recycled bottles – whisky, mineral water, Ribena and tomato sauce – or even soap containers.



Simple technologies can improve the quality of honey

The study found that a large, complex distribution network, dominated by middlemen, moves honey to the market from distant areas, especially during periods of scarcity. The markets are both formal and informal, though the informal market is larger. Most of the few existing producer groups are not organized properly.

Most buyers are unable to meet the demands and volumes required by the supermarkets. The buyers have to go to Tanzania and southern Sudan to buy honey. This is despite the fact that districts in the North Rift produce organic acacia honey that can command premium prices.

Getting the North Rift's honey onto shelves

There was a clear opportunity for honey from the North Rift. SNV identified Honey Care Africa as a partner in a process that would see West Pokot honey on supermarket shelves in Kenya's cities.

Honey Care staff visited West Pokot to map where honey was available. They also made an initial assessment of the pricing structures and honey quality.

Honey Care then brought in equipment such as buckets for storing honey, and trained the farmers how to harvest honey from log hives, and how to handle and store it properly. The firm then started initial trials: buying 1.4 tonnes of honey from West Pokot, processing it and putting it on the shelves of Nakumatt, one of the major supermarket chains in Kenya.

This process of training and initial trial has taken 3 months. Honey Care hopes to buy 10 tonnes of honey from West Pokot over the next year, and to gradually raise volumes over the following 3 years so more farmers in the district can benefit.

The farmers have improved their handling somewhat, so have been able to increase their price per kilo. Prices used to be between KSh 40 and 80 per kilo, depending on quality, availability and other factors; farmers can now sell to the private sector at KSh 91–115.

PADO has established a collection centre where the honey is tested for quality and is stored under hygienic conditions. The organization has a revolving fund, supported by Cordaid, that enables it to buy honey from individual farmers. The organization adds a mark-up to sustain and increase this fund.

These efforts are gradually increasing the farmers' influence on the chain. Better handling already gives them some leverage as they can attract more discerning customers and negotiate better prices.

PADO has asked SNV for assistance in drawing up a marketing plan for honey. The organization would like to add more value to the product so it can exploit other local retail markets. SNV intends to do a complete business plan with PADO as a way of strengthening the farmers' influence in the chain.

Lessons

Business opportunities equal motivation Farmers are motivated if they see a business opportunity: the faster they can translate it into cash income, the greater the motivation for learning and innovation. Only a short time ago, West Pokot's beekeepers could only dream of putting their honey onto supermarket shelves. Once they have seen it there, they have started thinking of ways to make their product even better. PADO has asked SNV to help develop a plan to do just this. This plan envisages farmers adding value to their product and exploring other local retail outlets.

Entrepreneurial attitudes are important right from the start It is not only the farmers who need to cultivate this; intermediary organizations which aim to create a difference in the chain must also be entrepreneurially minded.

Involve the private sector early on The immediate involvement of Honey Care translated into faster results and practical solutions to problems.

Ensure that the private sector is committed The best private sector partners are those who share the principles and values of development. This does not mean they should neglect the bottom line; rather, it means they should be willing to go in for the long haul, and to support the production base.

Build on what the farmers already know Quick results come from dealing with commodities that the already farmers know, as opposed to coming up with entirely new products. It is easier and less risky to improve existing products and penetrate new markets than to develop entirely new products for new markets.

Challenges and ambitions

The aim of the collaboration between SNV, PADO, Honey Care and the beekeepers is to forge sustainable business linkages between producer organizations and the mainstream buyers. Over the next 3 years it is hoped that 3,000 beekeepers will benefit directly from four districts in the North Rift.

Traditional beekeeping is a male preserve because the log hives are mounted high in trees and are harvested mainly at night. Improved technologies should enable more women to become involved. Supporting linkages with credit providers will also help boost women's role in the industry.

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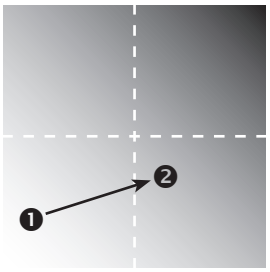
Chain movements



The beekeepers used to produce and sell a low-quality product, ❶. They have improved the quality of their honey by improving production and storage methods. They have also improved their management of the chain: through PADO, they have become involved in bulking the product and marketing it ❷.

Developing mango market linkages through farmer field schools in Kenya

SWEET AND DELICIOUS – mangoes are a popular fruit in Kenya, as well as in Europe and the Gulf. Demand is high, and supplies are inadequate. So why are Kenya's farmers finding it difficult to take advantage of this opportunity?

Quality is one reason. Pests such as the mango weevil – a larva that tunnels into the flesh of mangoes making them unfit to eat – are a serious problem. So is poor post-harvest handling: mangoes are easily damaged, and it is important to treat them carefully and keep them cool.

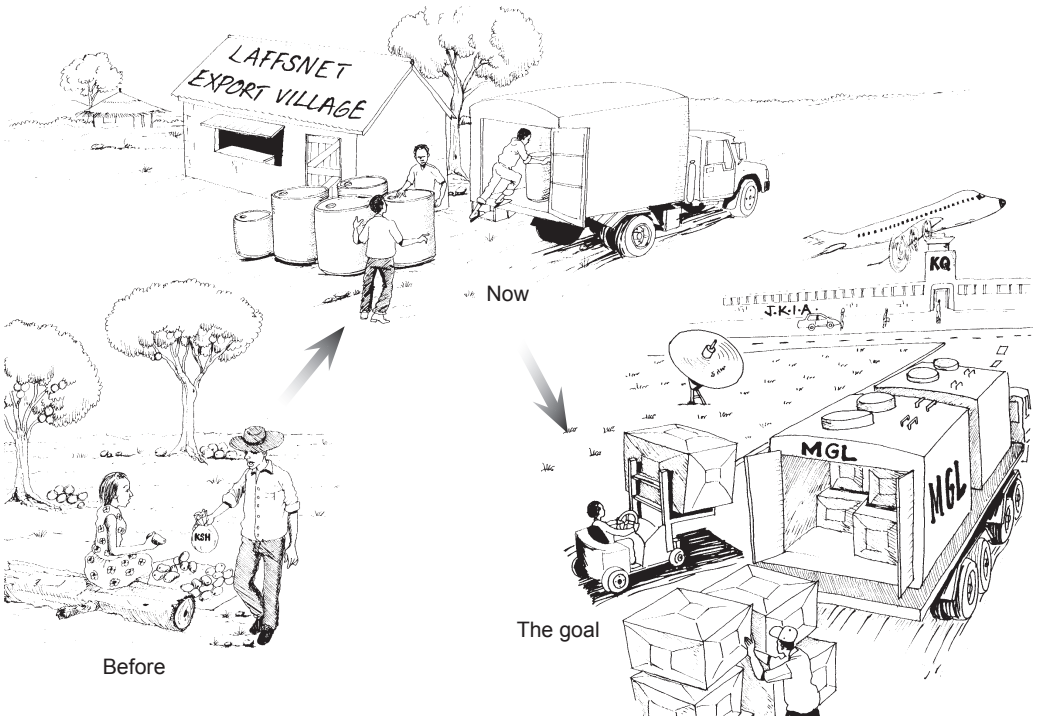
Production constraints include poor farming methods, the high cost and low use of inputs, the old age of trees, price disincentives, weakened and uncoordinated marketing channels, limited adoption of improved technologies, lack of investment by farmers, and a lack of disease-free planting materials. Underlying these problems are limitations in the extension service advising farmers.

Processing constraints include a lack of capital, poor infrastructure and inadequate cold storage facilities, a preference to dispose of fruits in raw form, inadequate information on the market and available technologies, lack of promotion and support for processing on-farm, and a lack of a clear policy framework on the development of tree crops. There is an oversupply of fruit during the peak season, leading to low prices. Linkages among producers, exporters, agro-processors and consumers are poor, resulting in high transaction costs.

Mangoes in Kenya

Kenya is only Africa's ninth largest producer of mangoes, but ranks second in terms of exports (after South Africa). The Middle East is the main export market for Kenyan mangoes, where they compete with fruit from India and Pakistan. A few mangoes are air-freighted to Europe from Nairobi. Mango exports are worth around KSh 150 million a year (around €1.7 million), accounting for only about 5% of total production. The low export volume is partly because export prices are lower than local market prices.

Most of Kenya's mangoes are produced by some 100,000 small-scale farmers. Each farmer has only a few trees, so produces and sells very small amounts. The farmers typically sell to brokers, export agents or local traders. These tend to be unreliable trading partners: they offer low, unstable prices, and take an unpredictable amount of produce. Farmers are not organized for bulk handling and



The evolution of the mango value chain in Tana River and Lamu

transportation, so they and the buyers cannot benefit from economies of scale. The farmers feel exploited, and would prefer longstanding commercial relationships with buyers who are able to buy in bulk at reasonable prices.

Tana River and Lamu, in Coast Province, are Kenya's leading mango producing districts, with 8,230 ha out of the country's 15,000 ha under mango production.

Farmers sell mangoes in various ways:

- They sell small amounts of fruit directly to consumers at open-air markets and by the roadside.
- They sell to brokers who visit the farmers. These brokers in turn feed wholesale markets (such as Kongowea in Mombasa or Wakulima in Nairobi), local retail shops and supermarkets.
- They sell at central collection points where producers, brokers, traders and middlemen meet and trade wholesale volumes. The fruits are sorted, graded, packaged and transported for sale to institutions, grocery stores and supermarkets.
- Agents and brokers buy mangoes at the farm gate and deliver to Milly Fruit Processors Ltd. This firm makes various products: mango juice concentrate for export, canned juice that is sold to tourist hotels and Unilever (K) Ltd., and a locally popular soft drink (Picana). The state-of-the-art plant at Mtwapa, 12 km north of Mombasa, can handle 30,000 tons of fruits a year. It also processes pineapples, grapefruits, oranges, passion fruits and tomatoes into fruit concentrates.

- Some individuals have set up cottage industries producing mango juice for sale to the tourist industry. These are key suppliers to tourist hotels in Mombasa.
- Some farmer groups have invested in mango drying and juice extraction; they supply hotels and street vendors.

Intervening in the chain

Recognizing the fruit's high growth potential, Kenya Business Development Services (KBDS) (a USAID-funded programme) and two government agencies (the Ministry of Agriculture and the Coast Development Authority) decided to focus on improving the production, processing and marketing of mangoes. They introduced a new approach that emphasizes commercialization in production, marketing and provision of support services such as extension. The Coast Development Authority in collaboration with Fineline Systems and Management Ltd. were commissioned to implement this approach.

A study of the mango sub-sector identified constraints and appropriate business development services, and led to the design of market interventions. The study found that smallholder farmers were unorganized, isolated, and detached from commercial market opportunities. They understood the benefits of collective organization, but they lacked the initiative to form producer groups. Such groups were needed to improve the producers' market position in terms of quality and quantity, as well as increase their bargaining power and leverage over buyers. A strong, dynamic producer network would also streamline the mango supply chain.

Developing and honouring contracts between farmers and firms used to be a problem. Tempted by higher prices offered by "briefcase exporters" and predatory brokers during the peak seasons, many farmers broke their contracts. The major firms, in turn, expended limited effort to sign contracts with farmers, or to help them form groups. The firms clearly saw the benefit of doing this, but they lacked the capacity to nurture such groups into reliable entities that would be capable of honouring their commitments.

The Food and Agriculture Organization of the United Nations (FAO), the Coast Development Authority and KBDS introduced a "farmer field school" approach to tackle these issues. Farmer field schools are an agricultural extension methodology that empowers farmers' groups to understand their production environment, identify production problems and develop solutions internally. Farmers analyse problems as a group, solve problems together, and learn by doing so. The field schools are held on the farmers' own land.

The field school approach was used to help the farmers learn various aspects of mango production, processing and marketing. The training covered:

- **Production:** mango production and orchard management, pests and diseases, and induced flowering to reduce seasonality.

- **Post-harvest handling** and processing.
- **Marketing.**
- **Credit:** establishment and strengthening of micro-credit facilities.
- **Networks:** formation of district farmers' networks to coordinate the mango sub-sector, deal with production, processing and marketing, and improve the bargaining power of mango farmers in marketing their produce.
- **Extension:** the need to pay for extension services.

Chain upgrading

The farmers formed district-wide networks as a result of this training. These networks in turn attracted firms such as Cirio Del Monte Ltd. as a market for fruit juice concentrate. Other players have come in too: the United Nations Development Programme and the Poverty Eradication Commission will provide small-scale processing plants to the networks so they can process mangoes into concentrate, which they will supply to Del Monte.

Building engagement

The farmers have greater access to demand-driven extension services, resulting in increased productivity as well as product quality. The networks are registered as legal entities and can sign contracts with bulk mango buyers. Traders and brokers buying mangoes have to go through the networks, which has increased the farmers' bargaining power and pushed prices up. Fresh markets have opened through contracts with new buyers. The buyers have also benefited, since their transaction costs have fallen.

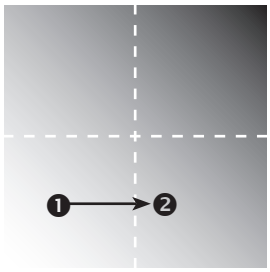
The facilitating agencies established microcredit schemes to ensure the programme could continue after the donor funding ceased. The networks in both districts opened bank accounts and started raising funds from registration fees (KSh 2500, or €28 per group) and monthly subscription fees (KSh 200, or €2.25 per individual member). They hope to raise KSh 2.2 million (about €25,000) so they can buy a lorry.

Outcomes

The farmers have made significant gains from the improved supply chains and linkages with buyers. Prices have risen in the last 2 years from KSh 0.30 to KSh 5 per fruit (from less than half a euro cent to 5 cents). Production and marketed volumes have more or less doubled, and quality has improved significantly.

Many development agencies used to avoid the Tana River district because of security concerns. The mango project has shown it is possible for outsiders to work in this area, so there is increased interest to implement other projects there.

Chain movements



Before the intervention, farmers were chain actors: they were disorganized, had little bargaining power, and had limited control of marketing and processing ❶.

Through the project, they have signed contracts with the buyers, so are moving into a chain partnership ❷.

Lessons

- **Farmer field schools** can be used as a participatory tool to promote market linkages. They ensure sustainability, and both private and public sectors are willing to support them.
- **The public sector, NGOs and donors** may have to take the initiative to promote pro-poor market linkages. The initial social costs involved may make it impossible for farmers or the private sector to act on their own.
- **Private-public sector partnerships** are easily achieved through the farmer field school approach since it offers a participatory, inclusive approach to marketing initiatives.

Challenges

The project was implemented in one division in each district. It has benefited about 2,000 farmers. Its positive impact has raised the hopes of other divisions and other farmers – but donor funding will be needed to support the start-up costs for further up-scaling.

Much was achieved during the 2-year life of the project. But continuity is threatened because the institutional structures are still very young. Brokers and traders who have been dislodged from the supply chain may compete or interfere with the new marketing arrangements.

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Learning from challenges: Sunflower contract farming in northern Tanzania

FARMERS HAVE TO ADAPT in order to survive. The farmers of Mwada Ward, 140 km west of Arusha in northern Tanzania, know this from bitter experience.

Up to the 1980s, Mwada was a major cotton-growing area. The smallholder farmers there used to sell their cotton to the Rift Valley Cooperative Union, which provided them with all their inputs and marketed the cotton they produced. When it collapsed, the farmers were forced to sell to private traders. These proved unreliable partners: they offered such low prices that the farmers could not make any money, and sometimes did not turn up to buy, leaving the farmers with large stocks of unsold cotton.

So the farmers looked around for other sources of income. The local soils are light sandy loams, good for growing oilseeds. So the farmers started planting peanuts, sesame – and sunflower.

The crops produce well, but in terms of markets, things have not improved much. The farmers still sell their produce at the farm gate to middlemen who collect small amounts from each farmer. The farmers have no control over prices, weights or measures. Instead of using kilograms, the traders use over-filled bags as the unit of measure (see also page 22). The farmers are forced to take whatever price they can get, and bow to the traders' dictates. Demand and prices fluctuate wildly, depending on the season and yields. Sometimes the farmers are still unable to sell their produce.

The traders transport the sunflower and sell it to processors in Arusha, Moshi and Dar es Salaam. Small-scale processors in Babati town also buy sunflower through the same middlemen, process and sell it to wholesalers or consumers in Babati. Most of the farmers cultivate 1–3 ha of rainfed land. They are not organized into producer groups, and have no direct link to the processors. Extension services, credit facilities and other types of support are poor or absent.

Supporting sunflowers

Faida MaLi, a non-profit organization working on market linkages in Tanzania, analysed the sunflower seed market and the problems faced by farmers and buyers. Sunflower processors complained that their seed supply was unreliable, while farmers were planting low quality varieties and did not have an assured market outlet for their produce. Faida MaLi decided to help the farmers find

better markets. The idea was to link them with reliable buyers under long-term business agreements. This intervention proceeded along the ten basic steps of the Faida MaLi market linkage approach (see page 178).

Part of Faida MaLi's analysis was to identify potential buyers (Step 1 in the approach). Faida MaLi found that most companies are not interested in working with small-scale farmers and do not have the capacity to set up outgrower schemes. But more important, they have little interest in developing the capacities of farmers in the first place.

However, Hai Investments, a firm based in Arusha, heard of Faida MaLi's activities in oilseeds. Hai Investments was involved in gemstone mining and the petroleum business, but became interested in sunflower processing.

Faida MaLi assisted Hai Investments to develop a business plan. The company decided to set up two small plants to process 8 tons of seeds per day. A memorandum of understanding was drawn up, stating that Faida MaLi would facilitate the linking and contracting process with the sunflower farmers.

Faida MaLi did a detailed location survey to map out specific villages with suitable agro- ecological conditions. The district and village governments helped mobilize farmers in these villages. Faida MaLi organized about 180 interested farmers into three groups so they could benefit from economies of scale and market their produce collectively. The farmers were trained on contract farming schemes, how to negotiate and make sure the contract covers everything (seeds, transport, etc.). Faida MaLi also helped the farmers to calculate their costs so they would know the price they would need to be profitable.

The farmers discussed the contract arrangements

Faida MaLi also helped Hai Investments draft a contract for the outgrower scheme. The firm discussed this draft with the farmer groups. The farmers were able to negotiate changes in some of the contract conditions: for example, rather than the farmers' having to transport the produce to the city, the company would come and collect it at village collection centres. The fixed price was set at TSh 120 (€0.09) per kg. This was a good price for the farmers because it gave the farmers certainty: market prices would fluctuate between TSh 50 and 150 (€0.04–0.11), depending on the season.

Faida MaLi played a crucial role: to ensure a smooth and transparent business engagement, and to build trust among the farmers and between the farmers and the firm. Hai Investments signed production contracts with the farmer groups. Every farmer signed an annex to the contract indicating how much he would grow. Each farmer agreed to pay to Faida MaLi 5% of the value of what they sold to Hai Investments, while the firm also agreed to pay Faida MaLi a 10% commission on the amount it bought. It was important for both the company and the farmers to understand the essence of ownership and commitment to the partnership.

Season by season

The first season went well as far as contracting arrangements were concerned. However, yields were well below expectations (only 5 tons), and incomes low (around TSh 608,400, or only €440) because many farmers, despite joining the group, did not grow the crop, and others planted only test plots for fear that the company would not honour the contract – like other traders before. Despite the shortfalls, the company liked the arrangement – it was highly committed to the contract scheme. Farmers started to trust the company when it came back in the second season.

The second season saw more farmers joining the scheme. Seven producer groups with 104 farmers (75 men, 29 women and 5 primary schools) produced 137 tons of sunflower, worth TSh 16.5 million (€12,000). The price per kilogram stayed at TSh 120 (€0.09) – still a competitive price on the market.

During the harvesting season a problem arose. A buyer from Dar es Salaam came, offering double the price. The buyer could offer these high prices because he mixes the sunflower oil with bad quality, unpurified, imported oils. Faida MaLi warned the farmers that the new buyer could not be trusted. Still, two of the seven farmers groups decided to sell to him, breaching their contract. The buyer bought 7 tonnes and never appeared again.

Hai Investments was disappointed and decided to withdraw from the contract for those groups who had sold on the side. But now they had nowhere to sell. They came to the Faida MaLi for help. Faida MaLi advised them to talk to the company and if possible, negotiate new terms. Through Faida MaLi's mediation, Hai Investments agreed to buy the crop, but at the prevailing low market prices.

Yields were very high and Hai Investments had too little working capital to buy all the produce. Faida MaLi facilitated access to a commercial short-term loan to

help it manage its cash flow problems.

In the third season the farmers negotiated with the company to pre-finance production activities such as ploughing, the supply of higher yielding seed with high oil content, and weeding. The farmers paid 40% upfront into a group savings account to be used as collateral, while the company covered 100% of the production costs, to be recovered from farmers' sales after harvest. A total of 572.5 acres (232 ha) were ploughed, all through the pre-financing scheme. Over 500 farmers (410 men, 122 women) joined the scheme.

Unfortunately, the seed did not germinate well, leading to very poor crop stands. Faida MaLi mediated once more in this conflict and advised the group leaders to report the issue and discuss it amicably with the company, based on the stipulated contract conditions. They reached a consensus: the company visited the fields to check on the crop, and then supplied better quality seed and harrowed the fields.

The weather was very dry, leading to total crop failure in many places. Only 49.4 tons were harvested, and the farmers could not repay the loan. The situation was made worse when the market was suddenly flooded with cheap imported cooking oil, rendering locally processed oil uncompetitive. Faida MaLi facilitated Hai Investments to boost demand for its oil by promoting it at a trade fair in Arusha.

Despite this, in the **fourth season**, the company decided to pull out of the sunflower business, sold off its remaining stocks, and closed the factory. Most of the farmers stopped growing sunflower, while others had to sell again to traders.

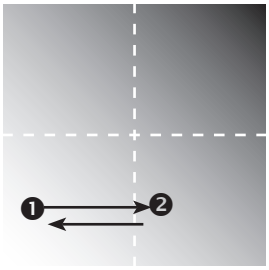
Outcomes

The farmers were disappointed about losing this business opportunity. But they were satisfied about the experience itself. They could count various achievements:

- Their incomes had gone up within a short period because of the better market and higher prices: TSh 120 (€0.09) instead of the prevailing price of TSh 70 (€0.05) per kilogram.
- They could plant improved sunflower varieties and produce quality seeds. Their yield per unit area rose from 180 kg/acre to 480 kg/acre (from 440 to 1000 kg/ha).
- They were better organized into groups and had acquired basic managerial and business skills. Five of the women farmers now participate in local government councils.
- The intervention created jobs: each family employed at least two casual workers to supplement the family's own labour.

Despite Hai Investment's withdrawal, the farmers were satisfied with growing sunflower, and they requested to be linked to a new buyer. Faida MaLi has already identified another interested buyer based in the city of Moshi.

Chain movements



The intervention helped the farmers to develop from chain actors ❶ into chain partners. The farmers were able to negotiate contract conditions and influence the management of the chain by negotiating for the company to collect the seed from village collection points, demanding high-quality seeds, having their fields re-ploughed, and getting production loans ❷.

However, now that Hai Investments is out of the sunflower processing business, the farmers are back to being chain actors ❶.

Faida MaLi must also improve the farmers' capacity so they can identify new market opportunities without depending Faida MaLi's services.

Lessons

- **Build farmers' entrepreneurial capacity** The farmers did not have the capacity to find new market opportunities by themselves. Without Faida MaLi's assistance, the farmers would stay as chain actors. Bringing the farmers into the process at an earlier stage, particularly during the initial sub-sector analysis, might have avoided this problem.
- **Choose partners who are committed** The crop being promoted should be the main source of income for the company. Hai Investments had other businesses to attend to (gemstones, petroleum), so investment in marketing and promoting sunflower were not a priority for it after a losing season. The facilitator should avoid building linkages with start-ups or companies that are new to a particular line of business.
- **Ensure all sides are committed** Initial commitments are crucial for building engagement, and to ensure continuity and expansion of the scheme. All parties must honour contracts. Total commitment by the company and farmers is a prerequisite for success. Side-selling by farmers to other buyers is a problem, as is a sole buyer that can dictate unfair conditions.
- **Choose commodities carefully** Realize that a crop with a single buyer poses high risk that needs to be compensated for by a higher price. Alternatively, crops need to be identified that have several buyers to reduce risk.
- **Be prepared to mediate** One of the most important roles that Faida MaLi played was to mediate conflicts. In situations where contracts are not honoured (e.g., farmers side-selling, companies not delivering inputs on time), the market facilitator must spend a great deal of time to re-establish trust between the partners.

More information: www.faidamarketlink.or.tz or contact Tom Sillayo, tom.sillayo@faidamarketlink.or.tz

Organic coffee from Kilimanjaro

VOLATILE PRICES, HIGH INPUT costs, high overhead costs, unhappy coop members – these are problems familiar to many cooperative managers. The managers of the Kilimanjaro Native Cooperative Union (KNCU) knew they had to do something to stop even more of the union's members from selling the coffee they had produced to private buyers rather than to the coop.

KNCU's solution? Go organic. The organic and fair trade markets offer better prices than the regular coffee market. But penetrating these markets is not simple: they have strict conditions, and it is necessary to develop linkages with different players.

The coffee chain

KNCU's 120,000 smallholder members are grouped into 90 small groups or primary societies. Individual farmers grow coffee, harvest the cherries, remove the pulp that covers the beans, then wash, dry and grade the beans. They bring the dried beans to their primary group, where the amount each farmer brings is registered. The coffee is then taken to KNCU's curing factory, where the beans are further processed, graded and packaged. Each batch is labelled so its origin can be traced. The primary groups are paid according to the amount of coffee processed. Most of the coffee is exported to the USA, and a small amount is sold as a finished product.

KNCU's management organizes the exports and negotiates the farm gate and export prices. The difference between these prices is intended to cover the coop's overhead costs.

Organic coffee fetches higher prices – but must overcome many hurdles before it can be certified

Founded in 1929, KNCU is the oldest cooperative in Africa. It was originally set up by the government in a rather top-down way, with limited participation by the farmers. This legacy is still reflected in a feeling among members that the management does not take their interests fully into account. This gets worse when world market prices drop, causing farm gate prices to fall. The farmers complain about the coop's high overhead costs. They feel that the formula used to calculate prices is unfair and they have limited involvement in "their" coop. Many started selling to private buyers who offered better prices. The coop was in a crisis.

Converting to organic

KNCU learned through its contacts that going organic and obtaining "fair trade" certification would open new opportunities to access better markets. For support it approached Epopa, a private consultancy company that specializes in marketing organic products.

Epopa's approach is to work with a small group of farmers and use them as a catalyst for innovation. The idea is that other farmers will see their good practices and higher incomes, and will want to learn from them and join in the project.

KNCU did not have organic expertise, so Epopa assisted the farmers convert their farms to organic production. Epopa conducted mobilization meetings with primary society members. Seven primary societies, with 1700 farmer members, were selected based on their willingness and readiness to join the project. The soils and microclimate on the slopes of Mt. Kilimanjaro are ideal for coffee production, but the farmers were applying high doses of synthetic fertilizers and pesticides. These inputs were expensive, and converting to organic production took quite some effort. At first, some of the farmers were sceptical about making a profit, while others did not comply with organic farming standards. For these reasons, two of the seven primary societies, with about 500 members, dropped out.

Each of the five remaining groups has a permanent technical field officer. They are supervised by a manager who is responsible for making sure that the organic standards are kept to. The Epopa consultant spends an average of 4 days per month coordinating the project activities. This includes technical advice, training, field visits to identify problems, and searching for solutions.

Epopa also implemented internal quality control procedures, paid the certification costs, and found new markets.

- **Certification** Epopa agreed with KNCU to share the costs of organic certification. The certification procedure requires a 3-year conversion period: in the first year, Epopa paid 100%; in the second year, 50%; and from the third year onwards, KNCU paid 100%. During this period Epopa trained KCNU's technical staff, who in turn trained the farmers how to farm organically.
- **Internal control system** Epopa has helped the farmer groups get organic certification. The farmers have had to stop using synthetic inputs, relying instead solely on naturally available inputs and environmental restoration

principles. Epopa facilitated this conversion and developed an internal control system to ensure that farmers comply with it.

- **Marketing assistance** Epopa has linked the KNCU management with potential buyers. It surveyed the market provided market information to enable the management to adjust to market dynamics. Epopa takes the management to trade fairs where they can meet with interested importers and strike business deals.

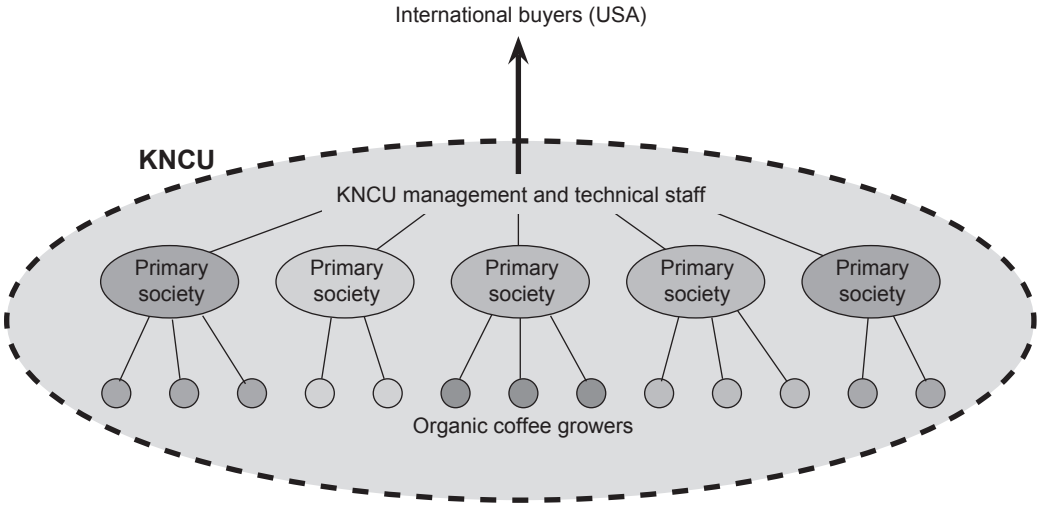
Epopa does not take part in the chain itself. Rather, it facilitates the links between KNCU and the rest of the chain, hoping that during the 3 years of the project funding these links will grow and become sustainable.

In the second year, KNCU applied for and was granted certification under the US Department of Agriculture's National Organic Program. In 2004 the cooperative exported about 40 tons of organic coffee to three firms in the USA, at a price of TSh 400–500 (€0.28–0.36) higher than the conventional price.

Outcomes

The intervention has resulted in many benefits:

- **Quality and price of product** The quality of the members' coffee has risen through the conversion to organic production. This has led to higher farm gate and market prices. The farmers make more money and are more motivated, and the cooperative earns more revenue.
- **Lower costs** Now they no longer have to buy synthetic inputs, the farmers' production costs have sunk, and they have revived neglected fields.



Structure of the Kilimanjaro Native Cooperative Union

- **Increased competitiveness** KNCU has increased its competitiveness and is now able to compete with the local private traders by offering higher farm gate prices to its members.
- **Stronger market position** With organic coffee as a unique selling point, the position of the coop in the market has improved.
- **Strengthened capacity** The coop staff are capable of ensuring compliance with organic standards, and the management has become more responsive to the needs of its members.
- **Environmental benefits** Abandoning the use of synthetic chemicals has helped restore nature and enhance biodiversity.

Challenges and the future

The farmers' interest in organic agriculture has been driven by their need to make a profit in the short term. Yet the switch to organic farming promises to have many environmental benefits that will continue into the future. In the short term, the switch may lower yields and discourage farmers. The conversion period offers a good way for farmers to adjust since they can get higher prices for their produce.

As farmers come to appreciate the benefits of organic farming, more can be expected to join the scheme. Including them is possible because it would not significantly increase the costs of the consultancy or KNCU's overhead.

The intervention has improved KNCU's responsiveness to its members, and has enabled the coop to seek new markets by itself. The technical staff can now provide training and control quality on their own.

Even after phasing out, Epopa still keeps an allowance to provide support to its former clients. This enables it to address minor problems that might threaten long term sustainability. The idea is not to make an abrupt exit without providing some limited support.

Organic coffee is not the end of the road for KNCU. The coop is now moving into finished products and tourism, further diversifying and strengthening the income base of its members.

Lessons

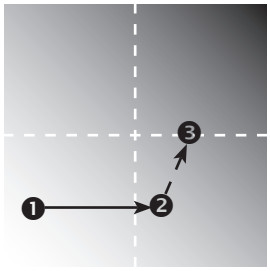
- **Transparency** More transparency within the cooperative would help to improve the image of the cooperative among the members. There should be clear communication between the management and the farmers' groups on issues such as delayed payments and price differences among the farmer groups.
- **Seeing is believing** Initially farmers are understandably sceptical about new ventures. They need assurance about the market and trust before the

real business starts. Many would like to see the benefits first before they join in a project.

- **Difficulty of including poorer farmers** Poor farmers initially do not meet the minimum requirements of joining in projects like this. But they can qualify later on as the project expands.
- **Need for short-term benefits** Farmers adopt an innovation if they can get quick returns. If there is only a small difference in the price of organic and conventional coffee, farmers are less likely to see a reason to join even if the longer term benefits are apparent. A number of farmers dropped out during the lengthy conversion period.
- **Competition helps** The presence of private traders within the project area forced the KNCU management become more responsible to its members.

More information: www.epopa.info or contact Rainard Mjunguli, ray.mjunguli@agroeco.net

Chain movements



The coffee farmers of KNCU started off as chain actors, with little control over their marketing or over the coop that supposedly represented them. Their only way of influencing the market was to sell to private traders rather than to the coop ❶.

The intervention has strengthened the coop's linkages with the market and control over the prices it obtains. It has also made the coop management more responsive to the members' needs ❷.

The coop is now moving into vertical integration by diversifying into finished products and tourism ❸.

Farmer field school networks in Western Kenya

Small-scale farmers in Western Kenya produce mainly for their own use, and tend to sell any surplus quite close to home – often less than 30 km away, according to a study by the Kenya Agricultural Commodity Exchange (KACE) commissioned by FAO. Many farmers sell at the farm gate, or in open-air or roadside markets.

Cities such as Mombasa, Nairobi, Nakuru and Kisumu offer a very high potential for farmers to market their surplus. So do smaller towns and the export market (especially for fruits and vegetables). Farmers grumble that they have limited market outlets for their fresh produce – while at the same time supermarkets such as Uchumi and Nakumatt complain that supplies are inconsistent in terms of both quantity and quality.

Identifying the problem

Since 1996, FAO has supported farmer field schools in three districts (Bungoma, Busia and Kakamega) in Western Kenya. This work has been in close collaboration with the Ministry of Agriculture's district offices, and has been funded by IFAD. The programme has provided field schools with grants to carry out experiential learning activities on agricultural production.

Initial phases of the programme succeeded in helping farmers orient themselves towards commercial farming, but individual farmers had limited opportunities to market their output. Selling as individuals resulted in fluctuating prices and high transaction costs such as transport. The situation can be summarized as follows:

- **Poor access to reliable and competitive produce markets**, coupled with low and fluctuating prices as a consequence of underdeveloped and inadequate market outlets and limited market information.
- **Unexploited market opportunities** because farmers lack the know-how and skills to take advantage of value-added activities such as grading, cleaning, sorting, packaging, storage, bulking and processing. Poor access to marketing services and facilities is also a major limitation.
- **Poor understanding of supply and demand among farmers**, and how these forces create markets.
- **Limited financing and credit facilities**, so farmers have no capital to invest in jump-starting business-oriented farming. Part of this problem is that many

Farmer field schools: A successful approach to organizing and empowering farmers

A "farmer field school" is an agricultural education and empowerment approach often used in extension programmes. Groups of farmers learn together; they study their production environment and constraints, and identify and develop solutions to problems. The approach emphasizes joint problem analysis, learning and problem solving. All the activities are done in the farmers' own fields.

The field school approach has been very effective to help farmers to test and develop improved farming practices and to support each other through their groups. It provides farmers with tools and skills they need to improve their farm production. It is also very effective in empowering farmers and developing transparent leadership.

The field school approach has been introduced in various African countries by FAO since the mid-1990s. It is now widely applied throughout the continent in a broad range of enterprises. Field schools are currently running in 27 countries in Africa, with support from a large number of organizations.

Successful field school programmes have markedly improved production in both food and cash-oriented enterprises. But surpluses create a new need – for better marketing linkages and strategies, and to reorient production to meet market demands.

In Kenya, Tanzania and Uganda, this has led to the formation of field school networks to bring the members into commodity or producer associations so they can improve their agri-business linkages. In Mali, groups of field schools have formed apex organizations, organized around value chains.

farmers tend to look for grants and not to consider loans. However, most loans offered to farmers in Western Kenya carry high interest rates, so present them with significant risks.

- **High farm input costs**, coupled with poor distribution services and long distances to input outlets have resulted in low use of farm inputs. Inputs come in bulk packages that smallholders cannot afford. Good quality seed is hard to find. Many outlets sell fake seeds, and input suppliers play on this to promote their own varieties.
- **Lack of effective organizational and managerial capacity** to meet the demands of agribusiness development. There is no one who can identify and access service providers in agribusiness and establish linkages with the private sector.
- **Poor access to current market price information** on any commodity.
- **Poor communication among members of field schools** and between field school groups, resulting in the failure to use their marketing power by selling as a group.

Individual field schools were not able to share information and best practices among themselves. They needed ways to increase their competitiveness in the market.

The majority of the field school members sell small amounts of surplus produce. They do not deliberately plan to grow crops to satisfy particular consumer require-

ments. Many farmers tend to sell similar produce, flooding the market during the harvesting season. They are forced to be price takers, as they have limited access to market outlets and information. They add very little extra value, though simple grading, product differentiation and convenience packaging are becoming increasingly important, especially for the urban consumers.

Another problem in Western Kenya is that field school members are the victims of the current "hot commodity". Farmers tend to plant what they hear is a good commodity, without checking the market for it. Sometimes farmers in other areas with different growing and marketing conditions pass on news about these commodities.

Chain activities

Most of the field school members in Western Kenya are still in the process of organizing themselves into commodity marketing or common-interest groups under a field school network. They are yet to have a significant influence on pricing structure and other value chain activities – though they do appreciate the potential to do so.

Interventions

Farmer field schools were initially formed to address agricultural production concerns. But it quickly became clear that members needed sell their extra output they were now producing, so had to strengthen their agri-business linkages. Most of the field schools have evolved to meet these new challenges and opportunities.

After the initial stage of the field school programme ended, the graduates wanted to carry on. So they formed networks in 2000 (Busia) and 2001 (Bungoma and Kakamega). Farmer field school networks now exist in ten districts in Kenya. Most of the networks also act as intermediary or apex organizations linking farmers to service providers, markets and information.

On the upstream side, the field schools have been linking farmers to suppliers of seeds and fertilizers. They have also forged ties to extension and research agencies to learn about and test new technologies with commercial potential. The Kakamega field school network, for instance, has been taking orders to buy bulk seed from the Western Seed and Kenya Seed companies. This should give its members low-cost, quality. The Bungoma network has opened its own input supply centre, which sells good-quality seeds and fertilizer at below the market price, in small packs that farmers can use and afford. The Farm Inputs Programme Support, a USAID-funded service provider has been a major partner in this process. Some of the field schools have also supported initiatives in accessing credit and agro-processing activities.

On the downstream side, the field schools have started to link members to major buyers of fresh produce, such as supermarkets, hotels and restaurants and even

export markets, especially for fruits and vegetables. The Kakamega network, for example, has facilitated a marketing arrangement between its members and supermarkets (Uchumi, Nakumatt) and grocers in Nairobi through an intermediary market facilitator, the Kenya Agricultural Commodity Exchange (KACE). KACE links producers to non-traditional market segments without increasing their transaction costs. In the Coast Province, field school activities resulted in improved mango quality, leading to a contract to supply Del Monte (a large fruit exporter and processor) with concentrated mango juice (see page 79).

Adding value is becoming increasingly important. Farmer field school networks in Western Kenya have been collaborating with local service providers in bulking, cleaning, drying and packaging of maize and other grain legumes to supply major flour millers. Similarly, the Kakamega network has collaborated with service providers on bulking, cleaning, drying and packaging orange-fleshed sweet potatoes. It has also procured five hand-operated stainless steel shredders so members can produce dry sweet potato or cassava chips. The price of good-quality dry chips in Nairobi through KACE is seven times higher than of the fresh produce. In addition, the chips can be stored longer until a buyer is found who is willing to offer the right price. The fresh product, on the other hand, can spoil during storage and transport.

Interventions to add value are promising for the networks as they reduce risks as well as increase commodity values. Continued efforts in this area help force the networks to sell as a group, open markets for the farmers, and increase their net income from commodity sales.

Registering the right way

When they were established, all the field school networks were registered as community-based organizations with the Ministry of Culture and Social Services. But this form of registration does not allow them to operate as a legal entity, so they are disqualified from buying and selling on behalf of their members, or registering with brokers such as KACE.

Some of the networks have sought legal advice on the most suitable form for registration. The Kakamega network concluded that the requirements of the Cooperative Act meant that it would not be suitable to register as a cooperative. So the network was advised to register as a limited company.

Chain upgrading

Progress in transforming and re-orienting production to market-driven demand has been varied among the farmer field schools, enterprises and market outlets. Most of the field schools and their members are still chain actors. But in Western Kenya, efforts are more advanced because of efforts of various development partners: training in "farming as a business" (through FAO), market development facilitation (KACE), resource mobilization and business development.

New and critical focus areas include building capacity in marketing, agribusiness development and farm management. Training modules on marketing linkages, "farming as a business" and other topics have been developed, and are being improved and incorporated into the field school curriculum.

Lessons

The field school networks, especially in Kakamega, have been undergoing a major learning process as they have moved from chance marketing to more organized and formal marketing channels. The Kakamega network learned a major lesson when it experienced major problems in fulfilling a contract with KACE. The network could not estimate the amount of sweet potatoes its farmers had in their fields. As a result, the farmers harvested one-quarter of the number of bags they needed, and they had to ask the Busia network to help make up the shortfall. The Kakamega network realized it needed better data, so developed a crop inventory database to enable it to decide what trading offers and arrangements to make.

Other problems occurred when some Kakamega network members provided shipments of mixed varieties and poorly graded tubers. The members have since received training in sorting and grading.

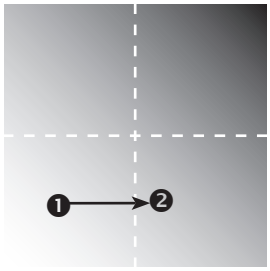
More serious was the transportation issue. The network hired a closed truck, leading to high temperatures in the load during transport. When the truck took too long to reach Nairobi, its load started to deteriorate. In future the network will hire an open truck. In the long run, it wants to acquire its own truck to overcome transport problems.

Despite these problems, KACE was still interested in working with the Kakamega network, and expressed interest in a new delivery of fresh sweet potatoes and quality chips. In December 2005 the network was in a position to deliver 6 tons of quality sweet potato chips at KSh 85 (about €0.80) per kilogram to a miller in Nairobi – worth half a million shillings. Despite the glitches in the first contract, the network still believes it can fulfil a contract for KACE. Its "learning by doing" strategy is a key principle of the field school approach.

Challenges

The three field school networks in Western Kenya (Kakamega, Bungoma and Busia) show clear differences as a consequence of differences in leadership and financial and technical resources. The Kakamega network, for example, benefits from the presence of a Peace Corps market facilitator. While the Kakamega network is significantly ahead, it still has a lot to learn. The three districts will be receiving more major support through a second phase of the IFAD-supported field school programme.

Chain movements



Before the interventions, field school member farmers were in the segment chain producing mainly for home consumption and selling whatever surplus they produced. Field schools were not organized, had low bargaining power and limited control of marketing and processing along the different market outlets or channels ❶.

As result of the interventions by development partners and the networks, the field schools are now able to get into large contractual arrangements with bulk buyers, as well as engage in value addition, including processing. The production is more organized with a market-oriented approach, so is moving into chain partnership ❷.

Major challenges will include:

- Ensuring demand-driven market facilitation.
- Diversifying by seeking markets for other products.
- Continuing to search for value-adding opportunities. For sweet potatoes, these might include producing products such as fortified flour, *mandazi* (a sweet pastry), doughnuts, chapattis, *uji* (porridge) and juice, as well as buying mechanical chippers.
- Upgrading transport arrangements.
- Improving communication on market information among members of the field school networks.
- Improving the match between contracted amounts and the amounts delivered through crop surveys and the crop inventory database.
- Furthering understanding of the marketability and timing of commodities by working with marketing organizations such as KACE.
- Improving marketing strategies to eliminate unnecessary links in the chain.
- Setting up revolving funds to support new field schools and commercial activities by group members.
- Accessing capital to invest in inputs, farming operations and processing equipment.
- Training members on "farming as a business" and a general understanding of markets.

More information:

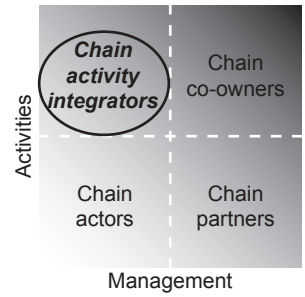
- *General: http://farmerfieldschool.net; Arnoud Braun, arnoud.braun@farmerfield-school.net; Masai Masai, shmasai@yahoo.com*

Farmer field school networks:

- *Bungoma: Peter Waboya, bungoma-umbrell@farmerfieldschool.net*
- *Busia: Nelson Rapando, buffin@farmerfieldschool.net*
- *Kakamega: Habakkuk Khaamala, kakaffsnet@farmerfieldschool.net*

5
Chain activity integrators

CHAIN ACTIVITY INTEGRATORS NOT only farm; they also have moved into other activities in the chain, such as processing, marketing, or exporting of produce, yet without exerting more influence on the management of the chain.



These farmers may start out by offering an attractive product to the market, and they have developed basic assets and farm management skills. But they may feel that they get little return from the market. They sell their product as raw material at low prices, while at the end of the chain the consumer pays a price that may be many times higher.

These farmers can increase their income by adding business activities – usually together with other farmers. They organize themselves (for example, in cooperatives) to bulk their produce, process it to some extent, and then sell it as a group. They may also purchase inputs as a group. This allows them to get a larger share of the revenues in the value chain.

In the following case studies we see examples of how farmers have integrated chain activities:

- Stepping back to move forward: Fruit juice in NW Tanzania
- Trading and milling to help HIV-affected households in Kenya
- Honey and beeswax value chain development in Same, Tanzania.

Stepping back to move forward: Fruit juice in NW Tanzania

Muleba Association for Agriculture and Local Industries (MALI) is an association of over 1800 farmers in Muleba District, in the Kagera region of north-western Tanzania. MALI runs a processing factory in Muleba, which produces juice from the farmers' fruit. The farmers bring their output to the factory on a set timetable. The factory workers receive and weigh the fruit, sort and clean it, cut it and extract the juice, measure the natural sugar content, add sugar and water, and pasteurize and bottle the juice. The bottles are cooled, labelled and packed into crates before they are marketed.

The association currently produces about 1500 crates a month – though it could double this if there is demand. It distributes its products directly to retailers in Muleba and Bukoba.

The factory produces various flavours: mango, pineapple, orange, mandarin, lemon and passion fruit. It has also developed a mango-pineapple mix, which is one of the most popular products in its range, and is attempting to blend more fruits and to introduce hibiscus (roselle) into its product portfolio.

The juices are delicious, and customers like them. But MALI is finding it hard to make ends meet. Here are the major problems it faces:

- **Competition** Since the association was founded in 1997, Tanzania has undergone significant economic changes. The national market has opened up, and juices from Kenya and South Africa have flooded in. The soft-drinks giants, Coca Cola and PepsiCo, have become more competitive and have penetrated even remote rural areas of Tanzania.
- **Packaging** MALI uses recycled glass bottles; workers sterilize them by hand before refilling them. The bottles are expensive, so MALI operates with a very small stock. There is no system of recycling bottles from retailers. When the bottles run out, the juice is packed in plastic bags – but this reduces the quality and shelf life.
- **Seasonality** Fruit production is seasonal, and volumes fluctuate from month to month, so the factory lies idle for significant periods during the year.
- **Costs and efficiency** With its high production costs, inefficient labour-intensive technology and limited volumes, MALI finds it hard to compete. Its only comparative advantage is its natural 'health' qualities.
- **Distribution system** MALI juice is sold within a radius of about 70 km from the factory. There is one sales point in the town of Bukoba (the capital of

Kagera region), and ad-hoc sales to Muleba-based buyers. The distribution system is weak, and there is no order acquisition and management system. Unsold inventory sometimes accumulates in the factory store.

- **Overstretch** MALI is active in all various stages of the value chain: processing, distribution and marketing. But it has limited technical, financial and human resources to perform all these functions.

The MALI association has over 1800 members

The History of MALI

How did MALI get into this predicament? To understand this, it is necessary to look back in time.

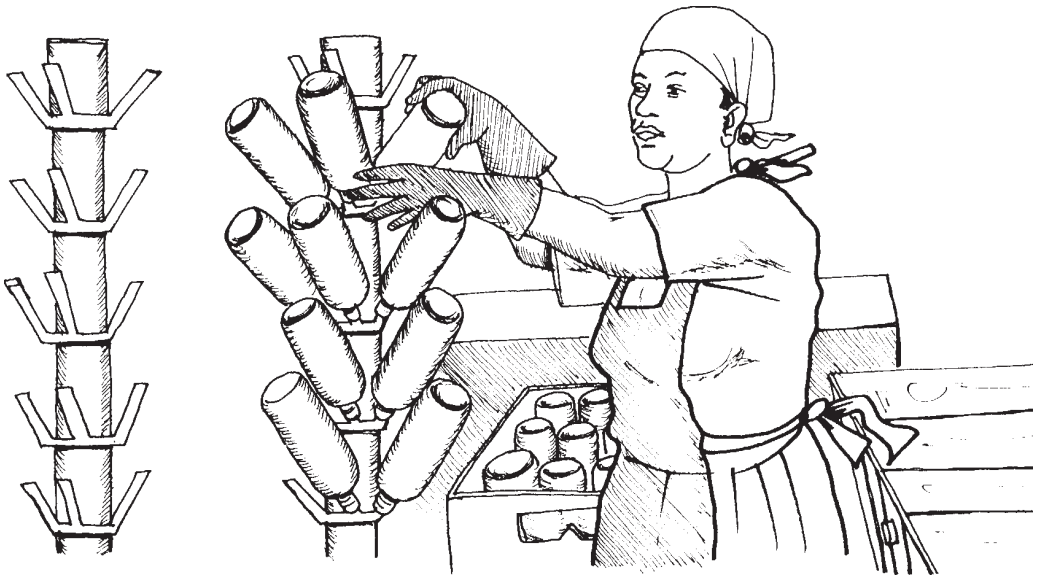
MALI was formed in 1997 as a project by Agency for Co-operation and Technical Assistance, a Belgian NGO. In 1999, guidance shifted to another Belgian NGO, Ieder Voor Allen, and in 2003 it moved to yet another, TRIAS.

When the project started in 1997, the focus was to improve the farmers' productivity. By 1998, the farmers were producing far more than the local market for fruit could absorb, so a fruit-processing factory was established. The juice was at first packed in plastic bags, but since 2001 bottles have been used.

TRIAS, the NGO currently supporting MALI, currently meets roughly two-thirds of MALI's processing, distribution and marketing costs. The NGO was considering a way to phase out this support so it could concentrate on extension activities, where it has greater interest and competence. This is not unusual among development agencies, which tend to tire of this kind of project.

From analysis to recommendations

This looming withdrawal put a lot of pressure on both TRIAS and MALI's management. They agreed to look for ways to reduce the subsidies gradually so the factory could become fully independent from a commercial point of view. So they engaged Match Maker Associates Ltd. (MMA), a development consulting firm, to do a marketing/value chain analysis and business plan.



The bottles are sterilized and then dried

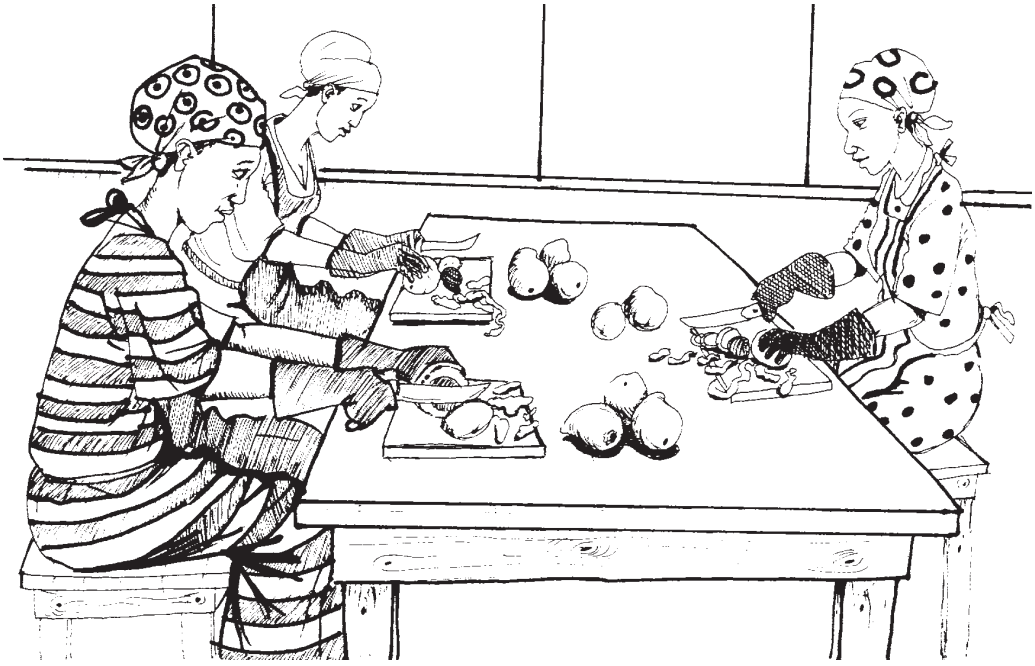
This study included a market scan for juice within and beyond the Kagera region, research on possibilities to diversify the products and improve packaging. It also identified other ways to generate income from product diversification based on what the member farmers can produce.

MMA recommended that MALI move from its present practice of trying to do everything, to one that depends on strategic collaboration among key actors. This move has to be deliberate, and has to be planned for and governed effectively. This is the essence of the value chain approach that emphasizes an understanding of the market dynamics and strategies to meet market needs. MALI should focus on its core competencies (producing juice) and acknowledge that other actors are better placed to perform other critical functions.

Refocusing of MALI's activities requires the ability to upgrade along three dimensions: process, product and function.

- **Upgrading processes** MALI should increase the efficiency of its internal processes to make them significantly better than its rivals. This means improving efficiency within individual links in the chain (e.g., increasing inventory turnover, cutting wastage), and between the links in the chain (e.g., more frequent, smaller and on-time deliveries).

  Challenges include rebuilding the MALI team, rescheduling the procurement and juice-production plan, designing a distribution system, and sourcing fruit from non-member farmers.
- **Upgrading products** MALI has to introduce new products or improve old products faster than its rivals. This could involve blending more fruits; introducing hibiscus juice, jams and marmalades; improving packaging and labels; and complying with certification standards.



The processing plant employs mainly women

- **Upgrading functions** MALI should increase the value added to its products by changing the mix of activities it conducts. For example, it could take on (or outsource) distribution, logistics and promotion. Or it could move activities to different links in the chain (e.g., from distribution to processing). It should use dealers (stockists who supply retailers) and distributors (who promote the juice in new areas), and get them to share transport and marketing.

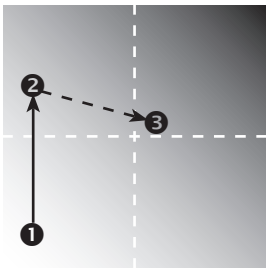
Building engagement

MMA advised MALI to outsource its distribution and marketing to distributors who are better positioned to link with retailers and consumers. These distributors have their own network of dealers and retailers, as well as storage and transport facilities. The distributors are licensed by big companies to distribute their products in a specific area. Some even have the capacity to organize promotion campaigns when they introduce new products. The advantage of a distributor–dealer network is that the distributor offers its dealers a product portfolio (a variety of products which MALI cannot offer), and has the financial strength to extend dealers credit for up to a month. Distributors are ready to share transport and marketing costs with companies like MALI, so also share benefits.

Financing growth

MALI's business plan has shed light on the factory's future performance. With financial support for investment, the factory should be able to break even after

Chain movements



Before MALI was formed, the farmers were chain actors, in the bottom left of the diagram ❶. With the establishment of the factory, they moved into activity integration ❷. But this has not proved profitable because of difficulties in marketing the product.

The solution is to outsource activities such as marketing and distribution, and to focus on MALI's core competence of producing fruit and making juice, and on managing relationships with the dealers and distributors in the chain ❸.

2 years. The factory will have the capacity to buy all the fruit produced by the association's member farmers. The farmers should see their incomes rise with a 12.5% increase in the price of their fruit. The factory will also need to buy substantial amounts of fruit from non-members. Other beneficiaries will include distributors, dealers and retailers. The factory should be able to create jobs for about 35 staff and 17 casual workers. More than 90% of these jobs are expected to be for women.

The factory requires substantial financing before it can generate enough cash flow to reach this breakeven point. An extra €316,000 is needed, which MALI is requesting from TRIAS and its other partners. MALI itself will contribute an initial €30,000. MALI will not be able to access commercial loans at this point, for several reasons:

- **Weak collateral** MALI is a medium-scale processing unit with low-cost equipment and limited fixed assets. The equipment has a very low resale value. Other ways of financing, such as hire-purchase or leasing, are not appropriate because the processing technology and equipment are not advanced enough. MALI's buildings are not movable and their location in Muleba is not attractive for most potential commercial buyers.
- **High risk** The shift from a development project to a business approach is a big shift for MALI. It will take time to change the mindset of staff and the association members. Finance houses are likely to be sceptical of investing at this stage, bearing in mind that the factory has not been profitable during its first 5 years.
- **Over-exposure of poor farmers** MALI is an organization of small-scale farmers, who have low incomes. Taking a commercial loan now would expose these members to unacceptable levels of debt.

Lessons and challenges

MALI and its partners have faced a steep learning curve as they have tried to bring the farmers' produce to the market. They are being forced to shift from a

subsistence approach to a business focus. MALI will have to stop trying to perform tasks where it has limited capability, and focus on its core competencies of growing fruit and turning it into juice.

Developing the value chain is necessary for this, but it is not enough. MALI has found that support mechanisms (financial, capacity building, an enabling business and policy environment) are vital to give it the ability to implement its strategies.

No amount of research can adequately capture the wide range of factors that affect the various options open to small businesses such as MALI. The future is in any case uncertain. So MALI's strategy must remain open to alterations. It will have to continue to monitor its business environment so it can respond to the challenges ahead.

MALI's efforts to upgrade are affected by the policy environment. It will have to fulfil food standards and safety requirements, register its brand, and acquire patents for its various blends. Support from the relevant authorities will be vital if these efforts are to succeed.

More information: Match Maker Associates Limited, www.mma-ltd.com, or contact Edmond Ringo, edmond@mma-ltd.com

Trading and milling to help HIV-affected households in Kenya

HIV/AIDS HAS HIT AFRICA hard. The disease strikes people in their prime working years hardest – the very people who feed their families, raise children and care for the elderly. People who are infected need nutritious food if they are to stay healthy enough to work. If they fall sick, their families are hit with a double blow: they lose their main source of income, and they must care for their sick breadwinners. People who die of the disease leave their families distraught and destitute.

Governments – short of funds and skilled staff – can do little to help. But Africa's communities respond generously. Extended families take care of orphans and the old. Friends and neighbours help by providing food, money and comfort. But try as they might, even these close-knit communities cannot cope.

The poor suffer most. They are concentrated in the slums that ring the big cities, and in semi-arid areas where growing food is difficult at the best of times.

Initiatives to provide support to people living with AIDS abound. Efforts to help them that rely on donor funding are not sustainable in the long run. So local community organizations are trying to find other ways – approaches that enable these people to earn enough to survive and help their sick relatives and neighbours.

Families of AIDS sufferers fight a losing battle to make ends meet

GROOTS Kenya (Grassroot Organisation in Sisterhood – Kenya), a local NGO, has been helping three self-help groups of women in different parts of Kenya face this challenge.

- **Tei wa w'o Self-Help Group** The Tei wa w'o ("true mercy") group comprises 10 independent sub-groups, each with about 30 members in Yatta Division in Kitui West. The area is dry, depends mainly on grain and livestock production, and is prone to persistent droughts and food deficits. It has a narrow economic base. Farmers tend to sell their produce at throwaway prices soon after harvest so they can pay off their debts and buy their immediate needs. They then buy back the same grain later at higher prices.
- **Mathare Mothers Development Centre** This centre is located in one of the most populated slums in Nairobi. It consists of over 30 self-help groups in ten "villages" within the slum. Most people in the area have very low incomes and find it hard to feed their families. Many are unemployed and have no other way of earning money.
- **Mwihoko wa Rironi Women's Group** The Mwihoko wa Rironi ("hope of Rironi") group is based in Limuru Division, 35 km from Nairobi. This is a densely populated rural area with very small farms (less than 1 ha) that cannot produce enough food for their owners' needs.

While each of the three groups is located in a very different part of Kenya, they all work in similar ways. Members of each group contribute cash, food and time to help families affected by AIDS. They earn money from trading. Some run merry-go-round savings schemes, where each member puts a small amount into a kitty each month; the pooled kitty is given to a different member in turn.

The three groups' biggest problem has been to make enough money to support their own needs, make sure that HIV/AIDS sufferers get enough nutritious food, and to take care of the families of the AIDS victims. They have been looking for business ideas to earn money.

One approach they have tried is to buy grain and sell it to people in the community. But they can handle only small amounts and the costs are high. The groups are still not well organized and have not established strong marketing links, so they cannot compete with local traders.

So the groups plan to expand their marketing operations and start grinding the grain to make fortified flour. They hope this will not only earn them money; it should also improve access to cheap, nutritious food. That should benefit the members' families, as well as people affected by HIV/AIDS.

Through GROOTS, the groups asked FAO to help them assess whether their ideas were feasible, profitable and sustainable, and to determine how they could develop viable grain marketing and flour processing activities. An agribusiness specialist helped each group:

- Review their options for businesses to engage in, focusing on areas where they already had some basic knowledge.
- Identify appropriate business strategies and targets, in terms of specific prod-

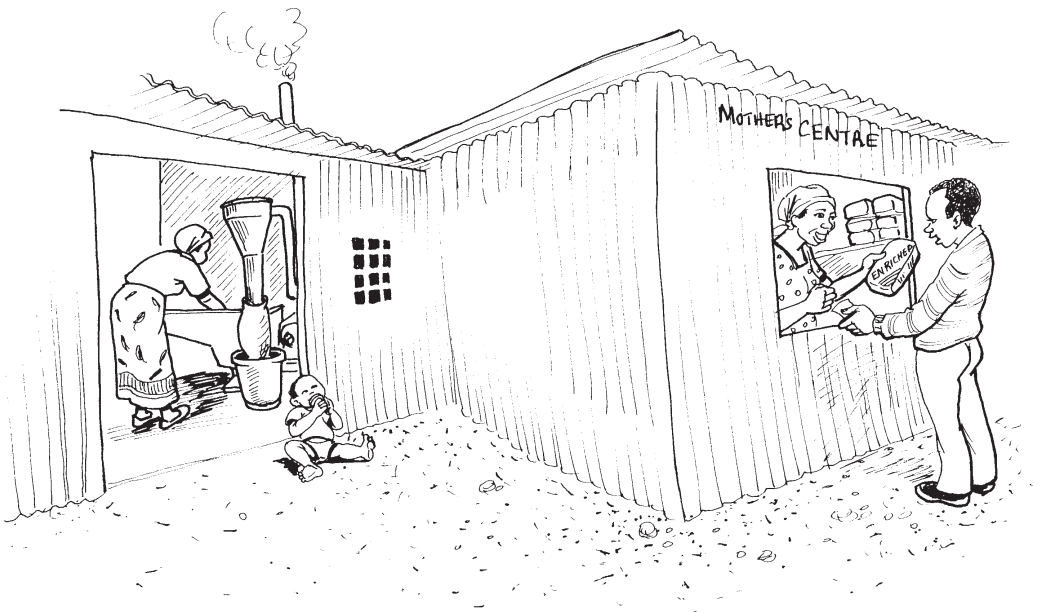
ucts and services, pricing structure, capital investment needs and cash flow projections.

- Identify technical and managerial skills they would need to run the business.

Each group has developed its own business plan. The **Tei wa w'o** group plans to establish a grain consolidation centre by buying grain (maize, sorghum, millet, beans, cowpeas, pigeonpeas, lablab, greens grams, etc.) at the beginning of the harvesting season. The group will then store the grain in a warehouse where economies of scale mean they can fumigate it more cheaply and effectively than if individual members were to do this. The group will then sell the grain in the local market when the prices are higher.

Tei wa w'o will try to sell the grain at low, stable prices so the poor can afford it. They hope to stay profitable and competitive by attracting a lot of demand, so maintain a high volume.

The **Mathare Mothers** plan to buy a *posho* mill (a hammer mill) to produce different nutritious product lines based on fortified flour (mixtures of maize and sorghum, plus grain legumes such as beans, pigeonpeas, green gram, cowpeas, etc.). Though there are already many *posho* mills in Mathare, most of them produce ordinary maize flour. The group's business edge is in packaging nutritious flour and pricing it for a niche market. They plan to sell to their members and families



A posho mill can make flour to sell, as well as nutritious food for the group members' families

affected by HIV/AIDS at a price that covers their costs plus risks; they want to retail to the larger community at competitive prices.

The **Mwihoko wa Rironi** group will buy high-quality maize at harvest time from the main growing areas, especially the Rift Valley. They will then resell the grain or mill it to make fortified flour, which they will sell locally at competitive prices.

The three groups plan to set up strategic alliances with other groups. The group that buys and consolidates grain (Tei wa w'o) will sell the grain at wholesale prices for milling. The Mathare and Mwihoko groups will be able to sell flour to groups that have no mill of their own.

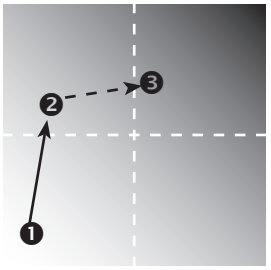
Chain management

The groups need to improve their managerial skills to operate their proposed businesses. Their business plans set out their capacity building requirements, focusing on developing their skills for running business as a group. A training programme was designed with the assistance of the agribusiness specialist and in collaboration with the group members. This programme is an adaptation of existing curriculum and materials. The modules cover the following topics:

- **Action learning** This is a learning-by-doing approach. It provides the group members with the skills they need to explore and clarify their problems, and helps them develop strategies they can put into action.
- **Leadership, management and group governance** This aims to strengthen group leadership, management and decision making. It also aims to ensure that the business is run professionally and democratically, is accountable to members, and with well-defined partnership principles.
- **Business management** This part of the training programme takes the group through different aspects of business planning, resource mobilization and implementation strategies. It also includes tailor-made management modules depending on the business, such as:
    - Marketing business development (grain marketing and warehousing)
    - Farming as a business
    - Developing agro-processing business (e.g., *posho* milling)
    - Savings and credit mobilization
    - Contracts, arbitration and legal entities
    - Post-harvest handling and value addition
    - Transport and logistics management
    - Pesticide management.

The group members have already attended training on some of these topics. They will cover the remaining topics in the next few months.

Chain movements



The business group approach provides entry points for the group members into the value chain ❶. The Tei wa w'o group has started trading in addition to farming. Mwihoko wa Rironi has added trading and milling. The Mathare women are not involved in farming, but have also started trading and processing grain ❷.

As they gain in experience, the groups could evolve towards co-ownership of the value chain. They will gradually establish business partnerships with other local actors as they are targeting the market in their communities. They are close to their final consumers, so be able to develop products that their customers demand ❸.

Outcomes

The groups have been able to identify the different upstream and downstream linkages – for example, their main sources of grain, transport providers, management requirements in processing, packaging and distribution arrangements, and so on. Each group will negotiate long-term agreements with its upstream and downstream partners.

The intervention is still in its early stages. But the group members have already gained confidence; they have realized that they can set up viable businesses and do not have to wait for handouts. Going through the business planning process has also allowed them to develop an entrepreneurial attitude, and they now appreciate that expanding slowly, in steps, will ensure social and economic sustainability.

Challenges

The groups are entering a business area which is dominated by well-established traders. The business plans had to take competition and sustainability into account. The intended strategic alliances between the groups should give them an edge as they compete with other traders.

The main challenge is in accessing the initial capital to buy the mills, warehouses and other equipment, as well as in purchasing grain.

Establishing a commercial milling and packaging facility is particularly challenging given that these are low income people with a weak socio-economic base.

More information: contact Susan Minae, susan.minae@fao.org

Honey and beeswax value chain development in Same, Tanzania

FOUR THOUSAND BEEKEEPERS, 35,000 hives, and a potential of over a million litres of honey and 20 tons of beeswax a year – impressive statistics for Same District, in the Kilimanjaro Region of northern Tanzania.

But in fact, Same – the largest and poorest district in the region – produces less than 200,000 litres of honey and only about 400 kg of the high-value wax. The district does not even appear on the national map of honey producers in Tanzania.

Understanding the honey sector

Why the poor performance? How can Same's farmers benefit from this promising but neglected opportunity? Two development organizations in the district – the Evangelical Lutheran Church of Tanzania (ELCT) and VECO Tanzania (Vredeseilanden Country Office of Tanzania, a Belgian NGO) have been grappling with these questions.

The two organizations have supported the development of beekeeping in Same since 2003. As a result of their work, the district's beekeepers realized they needed to organize themselves into an association. They founded SABEA, the Same Beekeepers Association, in June 2004.

ELCT and VECO Tanzania conducted studies with the beekeepers and other players in the sector in order to understand the sector. They found that beekeeping is dominated by elderly men. They build hives, site them, and harvest the honey. Young people are seldom involved: sons inherit hives only when their fathers die. Owners of many hives may hire other men (and sometimes women) to help site the hives and harvest the honey.

Women are involved mainly in selling honey from their homes or at the local market. They sometimes also attend meetings, prepare and clean equipment, and help carry equipment and the honey that has been collected. A few women own their own hives and do most of the work themselves, but the distance to many hives and the need to climb trees limits the involvement of women. Since honey is often used for medical and religious ceremonies it has to be pure. Women are traditionally seen as "impure", further limiting their involvement.

Much of the crude honey is sold to local brewers. Distribution is dominated by middlemen who buy directly from the farm or at local markets.

Few beekeepers add value to the honey by processing or packaging it. They say such processing is not needed because buyers are willing to buy the crude product at a reasonable price. But they are missing an opportunity: an unprocessed mix of combs and honey fetches only about TSh 1000 (€0.71) per litre, while the same amount of purified honey would bring more than three times this amount at the local market. Beeswax is also a valuable product, fetching almost as much as purified honey.

Chain management

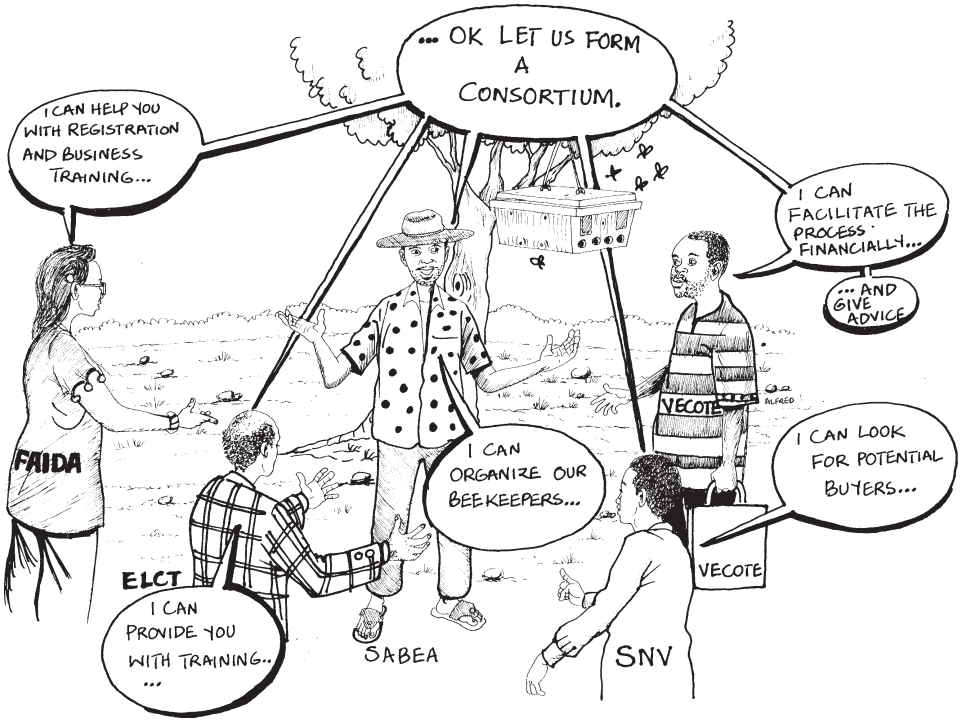
Honey production in Same is constrained by various problems:

- **Production problems** Farm chemicals can harm the bees and reduce honey output. Production methods restrict output, and traditional harvesting methods using smoke reduce the quality, since they leave unpleasant off-flavours in the honey.
- **Processing techniques** Beekeepers do not process their crude honey. They could earn much more by removing the high-value beeswax and selling it separately.
- **Low volumes** Honey volumes are currently too small to interest buyers. Improved beehives would make it easier to boost production, and individual beekeepers could bulk their honey and sell it collectively.
- **Unpredictable markets** There are no reliable honey buyers in Same. Few producers understand the market: the ELCT/VECO Tanzania study found that around 78% were uncertain about the market and complained of lack of transparency. On the other hand, traders and consumers do not know where to get a reliable supply of honey. This points to a clear gap between supply and demand, and so a huge potential for a successful intervention.

Building a consortium to promote honey

Two other organizations, Faida MaLi and SNV Tanzania, also have an interest in developing beekeeping in Same. In January 2005, they joined ELCT, VECO Tanzania and SABEA in signing a memorandum of understanding to support the development of a sustainable value chain for honey and beeswax. The roles and responsibilities of each organization were defined right from the beginning:

- **SABEA (Same Beekeepers Association)** is the main organizer of producers. It aims to coordinate the buying and selling of honey to markets outside the region; this includes processing, packaging, storing and wholesaling.
- **ELCT (Evangelical Lutheran Church in Tanzania, Pare Diocese)** provides group strengthening and organization support to the primary producer groups and to SABEA. It also provides extension on beekeeping in close collaboration with the local authority staff.
- **VECO Tanzania** provides financial, capacity building and advisory support to producer groups and to SABEA in partnership with ELCT.



Each member of the consortium offers its own expertise

- **Faida MaLi (Faida Market Link Company Ltd.)** trains trainers on farmer economic empowerment, subsector mapping and market linkages. It is developing special training materials for farmer groups on how to adhere to Fair Trade standards.
- **SNV (Netherlands Development Organization)** provides advice and facilitation to all actors involved in the consortium. It also facilitates collaboration with partners and acts as an "honest broker" with external parties such as trading companies.

The consortium holds regular monthly meetings to monitor progress and assign tasks to each partner.

The partners decided to implement the following activities jointly:

- Analyse the honey and beeswax subsector in Same and other related markets, as a start towards developing a value chain.
- Assess the capabilities of producer groups and SABEA, in order to plan how to strengthen these organizations and assess their ability to comply with "fair trade" standards.
- Improve the quality and quantity of honey produced.
- Investigate and design ways to link honey producers with potential long-term, reliable buyers.
- Build relationships with service providers who are not yet collaborators (such as microfinance institutions and local government).

Facilitators such as NGOs and the government can play a key role in bringing farmers and other partners in the value chain together

Improving the position of producers

The consortium's ultimate goal is to help the honey producers become owners of their product value chain. It should be possible to empower SABEA to make informed decisions and control the whole process, from production to sale in local markets.

The partnership is still in its infancy, but progress is already being made. Beekeepers are acquiring improved hives and other equipment on a cost-sharing basis. They are also strengthening the association and its component groups through frequent meetings, writing a constitution, and collecting contributions and data from members.

First lessons leading to more focused actions

The consortium partners have drawn some lessons from their work so far:

- **Women and young people** These currently play only a limited role in honey production and marketing. However, some communities are increasingly welcoming them into the business. The partners plan to discuss these issues with community members and introduce appropriate technology to encourage more women and young people to take up honey production.

- **Production skills** The lack of skilled management and harvesting techniques affects the honey quality. The partners are seeking ways to work with local artisans and other service providers, as well as a socially responsible trading firm that is willing to invest in quality assurance.
- **Spraying** Spraying close to beehives harms the quality of the honey. The partners are lobbying government agencies responsible for land and forestry to give beekeepers permits so they can access forest reserves. This should help solve the recurring conflicts between beekeepers and other farmers.
- **Processing** The Same beekeepers process very little of the honey they produce. They are not aware of the money they are losing because they do not separate the honey and beeswax and sell them separately. The partners hope to introduce modern harvesting and processing techniques (such as bee smokers and centrifuges). They also envisage that honey and beeswax exports will bring in more money than the current markets.
- **Improved hives** Introducing improved beehives aims to improve both the volume and quality of honey. But technical setbacks (such as using the wrong type of wood to make hives) have led to fewer swarms colonizing the hives. It is necessary to revise the design and monitor colonization closely.

Finding a reliable partner

Two of the consortium members, SNV and Faida MaLi, identified a potential buyer for the Same producers' honey and beeswax. This buyer, Honey Care Africa, has operations in Kenya (see page 75), and has recently opened a branch in Dar es Salaam. Honey Care staff have visited Same and met SABEA and its partners, and the firm has indicated its interest in buying honey from SABEA producers, and in developing a long-term business relationship. It has taken samples of honey and beeswax, and has made detailed suggestions on how to improve quality.

According to the plan of collaboration, SABEA will provide bulk table honey to Honey Care, while the firm will help survey the location of hives, provide harvesting equipment, and train beekeepers on harvesting methods. The firm plans to buy honey and beeswax at collection centres, and would like to work with a micro-finance institution to provide credit. The parties are now reviewing a draft contract.

However, Honey Care has raised two concerns:

- SABEA's organization is still weak, and its base in the producer groups needs to be strengthened.
- Many hives are too close to sprayed areas. Honey Care would like to see them at least 5 km away, preferably close to the district's forest reserves.

Sustainability

The consortium partners have different roles to play if they are to enable farmers to improve their incomes from honey in the long term. Key for this will be efforts to access export and "fair trade" markets.

Another crucial factor is developing a long-term relationship with the buyer with a price that producers will accept.

Ownership by the farmers themselves is important: the consortium members must not work on behalf of the farmers, but together with them.

Challenges

- Regional and international market prices for honey and beeswax are not necessarily better than local prices – even for "fair trade" and organic products.
- Exploiting other markets is likely to involve new costs (such as certification) that beekeepers have not so far had to consider.
- Some extension workers who are part of the consortium are also involved in honey trading. This is a conflict of interest: they may provide farmers with incomplete or distorted information about the market.
- The volume of honey currently available is not attractive to bulk buyers. Honey Care, for example, wants to buy at least 10 tonnes, while current production is less than 4 tonnes.
- Building trust within an organization and with partners is a long-term process. SABEA is a young organization, and information sharing (an indicator of trust) is still limited. There is a risk that SABEA may become dependent on other partners in the consortium.
- Despite the memorandum of understanding, the running of the consortium has not been smooth. The five partners have now recognized the need for one of them to take the lead.

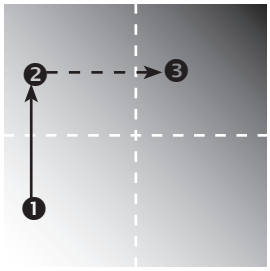
Ambitions

- SABEA and its partners aim to work with 250 farmers initially, and expand membership to about 1000 beekeepers within 3 years. At the same time, the consortium aims to forge unity with other beekeeping associations in northern Tanzania so they can take advantage of economies of scale.
- The consortium plans to develop a framework for collaboration with service providers (such as quality control and input supply services). This is necessary so producers and other actors in the chain can develop sustainable markets.
- Long-term, reliable buyers are vital if Same's beekeepers are to prosper. The consortium is investigating potential buyers, and will seek ways to link them to producers.

- Further investments are needed to help the beekeepers control product quality, introduce innovations, develop their communication skills, obtain market intelligence and make informed decisions.

More information: www.vredeseilanden.org/emc.asp?pageId=1034, or contact Jeroen De Wilde, jeroen@cats-net.com, or Nsanya Ndanshau, nndanshau@snvworld.org

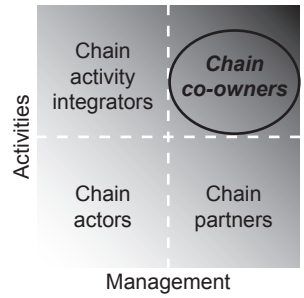
Chain movements



The consortium aims to help SABEA first strengthen its forward and backward linkages, for example by processing honey to improve product quality and gain a better price for the products. This is represented by a move from ❶ to ❷.

It also aims to improve SABEA's management, knowledge of the market and ability to control the chain – moving it into the chain ownership quadrant ❸.

6
Chain co-owners



CHAIN CO-OWNERS HAVE MOVED upstream in the chain, increasing both their activities and their influence to manage the chain. The farmers are not only specialized chain actors with an attractive product, basic farm management skills, some understanding of markets, and a willingness to innovate and take risks. As chain co-owners, they have also organized themselves into recognized, visible business organizations, capable of penetrating existing markets, developing new products or markets or diversifying their activities. They reach the end-consumer of their products, and with them they initiate a dialogue to dynamically improve the product, based on consumer demand. Such farmers' organizations are empowered to negotiate lucrative prices and earn a fair share from the chain.

In the following case studies we see examples of how farmers have become chain co-owners:

- Improving shea and empowering rural women in Mali
- Finding a niche for vanilla in Uganda
- Bringing Kaffa forest coffee to the German market
- Expanding dairying opportunities in Thika District, Kenya
- Linking potato farmers to restaurants in Uganda.

Improving shea and empowering rural women in Mali

Farmers in the Dioila area of southern Mali traditionally grow cotton for sale on a contract basis to CMDT, the government's cotton marketing monopoly. The area is ideal for various types of farming: it has good soils and enough water; services such as extension and credit are readily available for cotton production, and the region has roads, electricity supply and cotton processing plants. Local people are literate and are used to working together in producer cooperatives. They grow food for their own consumption as well as cotton for the market.

Problems began when the world price of cotton fell, and cotton processing and marketing began to be privatized. Farmers were faced with a new situation, and found that they could sell their cotton only at a loss. So they began to look for alternative sources of income. Cotton production and marketing were traditionally dominated by men, so the uncertainty in the cotton industry made it necessary to find new sources of income for their families. Women were in a particularly difficult situation because they are traditionally tied to their homes, so have few other income opportunities.

Hope from shea

SNV, a international NGO, sought ways to help local farmers affected by this uncertainty. It saw shea, a tree growing widely in West Africa, as a potential source of income. Butter made from shea nuts is used in cooking and to protect the skin (see box on the next page). Shea butter is a key ingredient in many traditional medicines. The trees are traditionally protected for cultural reasons, so are common in fields and the bush.

A Malian independent agricultural economist (consultant) analysed the potential of shea butter as an income source. He presented his findings to women who harvest and process shea, and to other local people, government agencies and other stakeholders. The women decided to follow up this opportunity.

The old method of processing produced low-quality butter that was difficult to sell

Traditional shea processing

Processing shea nut is a complex process. Traditionally, individual women collect the fruits from wild trees. They put them into large pits until they have time to process them. The fruits rot, leaving the nut inside. They clean off the flesh of the fruit, and then crush the nut to remove the kernels. They boil the kernels and then roast them over a fire to dry. They then crush the nuts in a mortar or mill to make a paste. They wash the paste in water several times to make an emulsion and separate the fat from the residues. They then filter the fat and boil it to remove the water. The fat cools and solidifies into butter, which they sell in the village markets.

This procedure has various problems.

- The processing results in a low-quality, yellowish-brown butter with a pungent smell. This can be consumed locally, but is difficult to sell in urban or international markets.
- The women have no control over the price, which is set by traders and their agents. The traders gather large stocks for sale in urban and semi-industrial markets – but demand is falling because of changing consumer preferences in the towns.
- The women can get only low prices, so they keep their best shea butter for their own use and sell their worst quality butter. This results in a vicious circle of low prices, bad quality, and mutual distrust between the producers and traders.
- There are no quality standards. The traders determine not only price but also how much to buy, under what terms, and when. They like to buy when the price is lowest and the women's shea butter stocks are highest. The women have no control over any of these transaction conditions.
- The production and processing has stayed the same for centuries. Unitl recently, there was no innovation, no targeting of consumers, and no way for either the women or the traders to improve the product or the way it was marketed. Short-term opportunism prevailed over long-term cooperation.

SNV contracted a local NGO to organize the women into groups to improve the quality of their butter and to start selling collectively. This would enable them to tap new markets and increase their income. The implicit goal was to empower women so they could gain more control over the entire process, from collecting the nuts to the sale of the product to urban consumers – in other words, to enable them to become chain owners.

The NGO organized 1500 women producing a higher quality shea butter into 40 community-based groups, which later formed a district union. These groups buy the improved butter from individual group members, then sell it to the union, which in turn sells it to other areas in Mali or exports it other countries in West Africa. The groups also buy traditionally produced butter from their members and sell this in the local area. By selling directly, they cut out traders from the chain.

The women improved the quality in several ways. Instead of allowing the fruit to rot in pits and drying the nuts by roasting, the women now de-pulp the fruit before crushing the nuts, then boil and sun-dry the kernels. This results in an odour-free, clean, white butter. This is a high-quality product that appeals to ur-

ban consumers and can be sold to the local and international cosmetic industry. It has to be sold quickly before it begins to degrade.

SNV invested in storage facilities and equipment for each group. The local NGO made information on market prices available to the women, so they could sell their butter when the price was right. This improved their bargaining capacity with traders.

SNV also attempted to facilitate access to commercial credit to give the groups some working capital. This effort failed, though: local financial institutions do not look favourably on loan applications from women, and the credit institution the women applied to did not attempt to help them. After some misunderstandings and frustration, the women decided to go ahead without credit.

Benefits

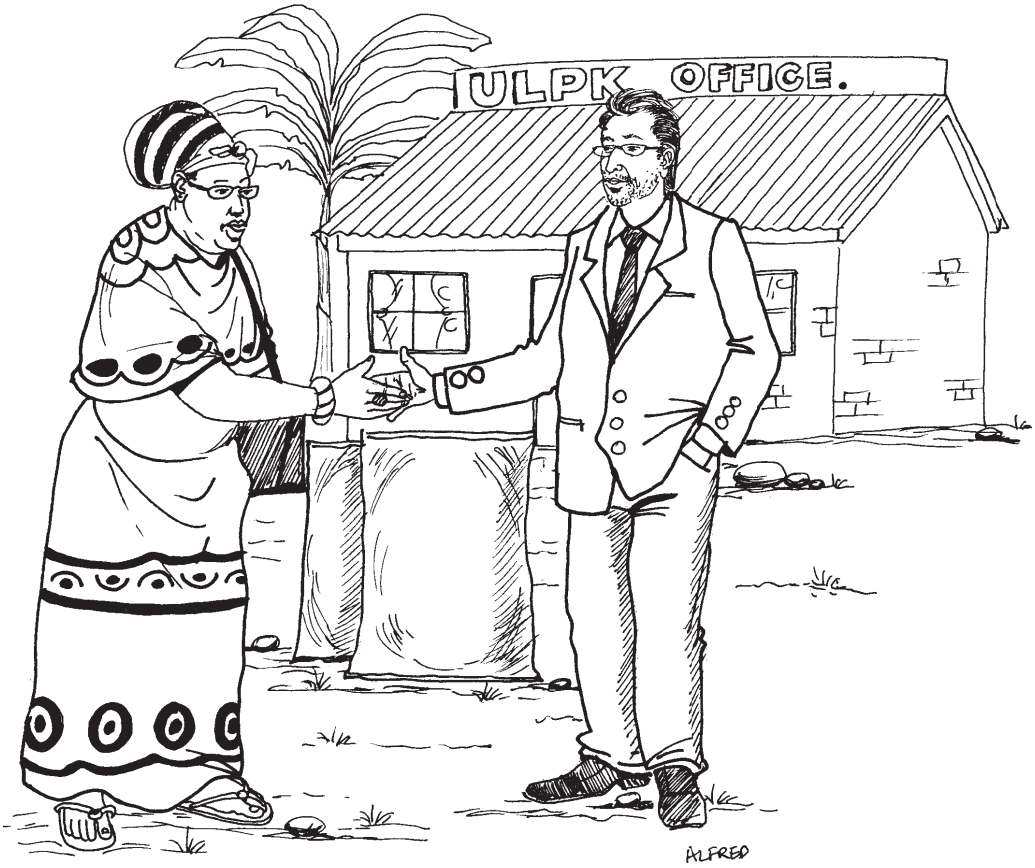
These quality improvements had a marked impact on the women's income. The women's stronger skills and negotiating position have enabled the union to more than double the price from CFA francs 300 (about €0.45) per kg for traditional butter to francs 700 (€1.07) per kg for the improved butter. The group members receive francs 500 (€0.76) per kg; the union retains the remainder to pay for its operations, as a reserve, and for social activities. The union sells about 15 tonnes of improved shea butter in a typical year.

Even though their individual incomes are still very modest, the women have benefited in other ways. They are now organized, control their production and trading activities, and enjoy recognition in the community and in their families as income earners as well as good wives and mothers. There are environmental benefits too: the new procedure (which is based on sun-drying) uses only a third of the firewood compared to the traditional technique.

However, the new technique has drawbacks: it takes 30–40% more time than traditional processing, and requires more discipline from the women members: they have to follow the procedures exactly in order to keep quality high.

Stepping into the chain

Despite all the benefits, the intervention was unsustainable. It was based on a short-term (4 years) project approach. When the funding ended, the women were unable to take over the activities themselves. Because of the project's short timeframe, SNV's partner NGO felt forced to step into the marketing chain itself. It took control of the marketing of the shea butter: it controlled transaction conditions, quality standards, innovation, and consumer targeting. But it failed to transfer this capacity to the women's groups. The management skills stayed within the local NGO. The women were passive clients of well-intentioned advice and direction.



The women make more money from the better quality shea butter, and they have started exporting high-quality processed nuts to Europe

The implicit goal was to make the women chain owners, controlling the whole process from producer to consumer. But what actually happened was forward integration – the women added collective marketing to their business activities, but did not gain control over the management of the chain. This is because the project design neglected the dimension of chain management. It tried to enhance the women's control over chain activities, but the women were not empowered on chain management issues.

Towards sustainability

The end of project funding jeopardized the many achievements. The women responded by hiring the NGO's commercial advisor as a staff member of the union. They were able to find enough money to pay half his salary. SNV helped the union obtain funding from a donor to pay the rest of his salary so they could continue operations.

The donor imposed two conditions:

- The union had to develop a sound business plan as an independent company
- It had to improve its knowledge and understanding of other actors in the chain, their role and constraints.

Doing this would allow the union to pursue partnerships with other actors such as traders, transporters, importers and quality certification agencies.

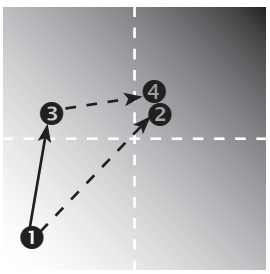
For the women's groups, this was the starting point of a new strategy for their chain positioning.

The women know they are still in a capacity strengthening process, so they decided to exploit only half of the resource potential they might reasonably exploit during the next 5 years. It is hard to get medium and long-term credit, so they have managed to negotiate a mixed credit-and-subsidy package on favourable terms with another local financial institution. This will cover all of their investment needs over the 5 years. It will also cover some of the union's operational costs, but the proportion will fall in steps, from 23% in the first year, down to nothing in year 4. The women expect to earn their joint earnings to rise from CFA francs 30 million to 58 million (from about €46,000 to €89,000) in 5 years.

The women have also decided to not share out the union's annual surplus, but to reinvest it into upgrading operations and to create an investment fund. The union expects its surplus to rise from francs 11 million in year 1 to francs 31.5 million in year 5 (from €17,000 to €48,000).

The union also initiated a multi-stakeholder team involving traders, middlemen, government agencies, transporters, and an exporter to interview all actors involved in their chain to identify their roles and constraints. The results were shared in a series of meetings involving many different stakeholders. These meetings allowed the women to address chain management issues, such as quality control of the product at various stages in the chain, information sharing on prices, final use of the products and emerging market opportunities.

Chain movements



The initial project tried to take the women's groups from being chain actors ❶ to chain owners, controlling the whole process from production to the consumer ❷. But it did not invest enough in the women's management capabilities, so while they started processing shea butter using the improved methods, they had little control over the value chain ❸.

Current efforts focus on helping the women organize themselves and develop their ability to manage the chain ❹.

Lessons and opportunities

SNV learned that NGOs can play an important role in the initial stages of a market development intervention – for example, in organizing groups of producers and in providing technical training. But it may be better to support the producers' groups directly at later stages of the intervention, especially to pay for key personnel (such as the commercial advisor in the women's union).

As soon as the economic viability, institutional sustainability and social equity conditions were set out in a business plan, the women began to be seen as credible economic actors and partners in the shea value chain.

The women aim to develop as a fully-fledged chain partner, consolidating their own business, increasing their influence on the management of the chain, and negotiating chain co-ownership with other actors upstream and downstream (e.g., in consumer targeting, information sharing and quality management).

One of the unexpected outcomes has been a new business opportunity. A Malian exporter advised the women to sell boiled, sun-dried kernels, rather than shea butter. He said they would be able to sell this easily to chocolate and cosmetics producers in Europe. A European importer wished to develop a direct partnership with the women's union. The union committed to deliver as many high-quality kernels as possible; trial exports are due to begin in 2005. If this business relationship is mutually satisfactory in terms of price, costs, reliability, etc., the European firm may be willing to invest in a processing plant in the Dioila area, as well as in research and development.

More information: http://snvworld.org or contact Bernard Conilh de Beyssac, bconilh@snvworld.org

Finding a niche for vanilla in Uganda

CHECK THE INGREDIENTS ON the next cake or tub of ice cream you buy, and you're likely to find the word "vanilla". This tropical bean is one of the world's most popular flavourings, and traditionally commands high prices in international trade. The main producers are Madagascar and Indonesia, along with Mexico and various Indian and Pacific Ocean islands. Uganda is a minor producer, accounting for only about 1% of world production.

In the first few years of the millennium, two cyclones devastated Madagascar's vanilla plantings, and political unrest further disrupted production. Vanilla prices soared. This offered an opportunity for Ugandan farmers to increase their share of the market in this speciality crop.

Vanilla in Kasese

Farmers in Kasese District, on the slopes of Mount Rwenzori in western Uganda, plant vanilla mainly as an intercrop with banana or coffee. The Kasese Smallholder Income and Investment Programme (KSIIP) has been working with these farmers to improve their vanilla production and marketing. The goal is to raise

Vanilla beans must be carefully selected and cured before they can be exported

From vanilla garden to buyer

Betty Basisa, a member of the Kisinga Vanilla Growers Association, harvests 10 kg of beans from her garden, and carries them in a basket to the collection centre in Kisinga. This centre is run by the Kisinga Farmers' Association, which bulks the produce and arranges with KSIIP to pick up the beans.

Annet Masika, a KSIIP staff member at the centre, checks the beans for quality. Are they mature? Are they the right length? Are they split or scratched? She sorts and weighs the beans, checks how much money Betty owes the cooperative, and calculates how much to pay Betty for her beans. She hands over the money, and Betty goes away with enough cash to pay for her daughter's school fees. Maybe she will be able to afford some new shoes for herself too.

Annet hires a truck to transport the bags of vanilla to the warehouse for processing. She invites Betty and other members from the farmer associations to help in the processing. The women dip the beans in hot water, then wrap them in cloths and leave them to "sweat" in a storeroom for several days. They then take them out to dry in the sun for 1–2 hours before returning them to the storeroom. They repeat this process several times until the beans have reached the correct moisture content and the vanillin flavour has fully emerged. The women then pack the beans into cartons, each holding 30–50 kg of beans, ready for export.

Annet also sends a sample of beans to the lab in Kampala for analysis. She forwards the report, along with another sample of beans to they buyer in the USA. The buyer checks the quality, and calls AMA to negotiate a price. AMA then arranges to air-freight the beans from Entebbe to Dulles Airport in Washington, DC. When the beans arrive in the USA, the buyer checks their quality and arranges payment.

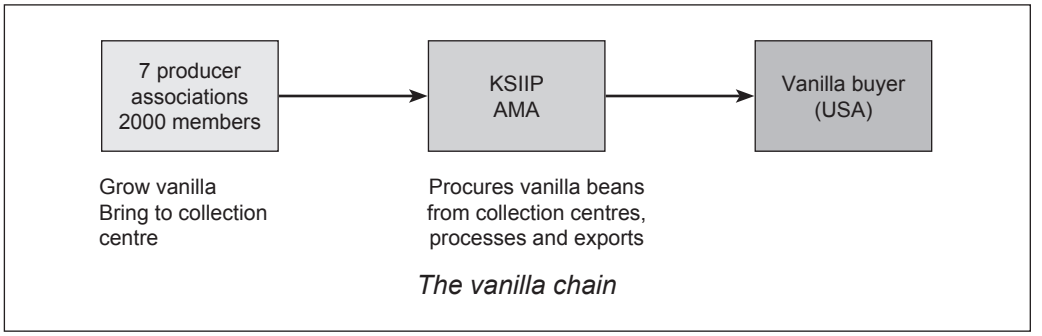
AMA controls the chain throughout the process. It provides the farmers with technical advice on crop production, training the plants and soil conservation, especially through establishment of demonstration plots. It also negotiates prices with the buyer and coordinates and trains KSIIP staff.

the farmers' incomes at least fourfold by increasing their productivity and selling selected high-value crops.

KSIIP is a collaborative effort between eight Kasese-based smallholder grower associations, Cordaid (a Dutch NGO), Highlow Supermarkt BV (a Dutch firm trading in horticultural products), two specialist horticultural consulting firms: US-based Fintrac Inc. and its Ugandan affiliate Agribusiness Management Associates (AMA).

Before the start of KSIIP, Highlow already enjoyed a good relationship with one farmers' association that grew hot pepper in Kasese District. The pepper farmers asked Highlow to help them buy equipment and bulk inputs. Highlow approached Cordaid and Fintrac for a loan facility for the farmers. Cordaid agreed, but asked Highlow to support a larger group of farmers and a wider range of crops.

Kasese's vanilla farmers grow the beans for export; they typically maintain 100–200 vines in a half-acre plot. The vanilla takes 2 years to come into production and can stay productive for 5 years. The farmers used to sell their beans to traders from



The vanilla chain

Kampala, 400 km away. They were at the mercy of these traders. They needed a reliable buyer with a processing facility nearby. Besides vanilla, the farmers also grow coffee and cotton, but these fetch very low prices. These farmers were already organized into seven associations that advise them on vanilla production and help other farmers to start growing the crop.

Fintrac analysed the vanilla value chain, and found that there was room to increase the productivity and profitability of the crop through improved technology and proper marketing. This would significantly increase the farmers' incomes. Fintrac/AMA discussed with the farmers' associations, vanilla buyers, the district government, and managers of an irrigation scheme in Kasese. All agreed to support the proposed programme, and KSIIP was launched in April 2004. Cordaid agreed to provide a loan to these associations; Highlow guarantees the loan.

The Ugandan government's Plan for Modernization of Agriculture emphasizes the rapid expansion of high-value crops to reduce poverty in the country. So KSIIP was supplementing the government's efforts.

Chain upgrading

KSIIP's staff in Kasese provide support for vanilla production (for example, they manage demonstrations of good practices), offer post-harvest services to maintain quality, and manage buying, processing and exporting of the product. KSIIP provides this assistance to more than 2000 members of the farmers' associations. In the two years since KSIIP was launched, more small-scale growers have joined the associations and have attended KSIIP's training.

KSIIP has negotiated a contract with each of the seven associations. The contract states that KSIIP will purchase all the vanilla beans that members produce, at the prevailing market price. The beans must be of high quality. KSIIP can provide advance payment to members of up to 25% of the value of beans each member expects to harvest. The farmers, for their part, agree to sell all their vanilla to KSIIP, and to conform to the required standards.

AMA helps the farmers learn how to process the beans. This is a complex and delicate task – one that must be done right in order to produce the highest quality beans that will command a premium price.

Monitoring and evaluation

KSIIP conducted an initial baseline survey of the farm families' economic situation. The farmers meet twice a year to discuss the programme and to provide feedback to KSIIP staff. The programme also monitors activities each year, and staff visit the field regularly to check whether farmers are using the recommended practices. These visits are a chance for farmers to explain why they have not adopted a particular technique, and allow staff and farmers to find solutions to problems.

Learning and innovation

KSIIP has established demonstration plots as field schools for farmers. KSIIP and each association organize field days to view demonstrations of good practices. Similar field days are held at the processing facility so farmers can see how their vanilla is processed, recognize the importance of quality, and realize the costs involved in processing.

Outcomes

KSIIP buys vanilla beans from farmers at the market price. Although AMA currently controls the value chain, it is seeking ways to strengthen the farmer associations.

The farmers have benefited in several ways. They are able to sell their vanilla to a reliable buyer close by, unlike the situation before where they were at the mercy of traders from distant Kampala. They can get advance payment for up to a quarter of the value of their crop. Whenever KSIIP makes a profit, the farmers receive a bonus.

KSIIP is building the capacity of the farmers in other ways. It links them with the national vanilla producers' association, which provides information about internal market prices. The KSIIP field staff are lead farmers from two of the associations; after the programme has ended (in 2009) these lead farmers will continue to offer technical assistance at a reasonable cost. And KSIIP is further developing its skills in vanilla processing.

Lessons

- Market analysis should consider historical data. The decision to expand vanilla production was based on high vanilla prices resulting from weather and political problems in Madagascar. The initial income figures were projected on high vanilla market prices. But these prices could not be sustained: a fall was inevitable. Decisions should be based on average figures, taking past price fluctuations into account.
- Uganda saw a strategic opportunity in 2003 to become known in the world

vanilla market. Now that costs have fallen, it must increase its productivity and keep production costs down to retain its market share.

- Marketing contracts should be negotiated between buyers and farmers. This is currently done by AMA, but AMA is expected to withdraw from the market at the end of the programme. It must transfer its skills and functions to the farmers' associations to avoid a collapse.
- Farmers should be involved in processing. This is an important aspect of capacity building.
- Farmers are able to adopt new practices if the benefits are higher than the costs involved.
- Modern communication is important for marketing. KSIIP has received several inquiries after potential buyers had visited its website (www.vanillamoon.org). These inquiries may lead to fresh market opportunities.
- Rural development programmes take time to achieve results. The few years in a typical project cycle is probably not enough.

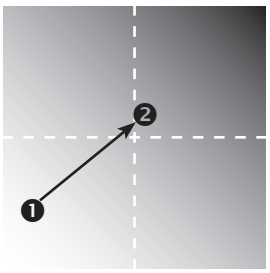
Challenges and ambitions

At the moment, AMA is involved as a chain actor (a processor, logistics organizer and exporter), as well as a chain service provider. There is a need to clarify its roles within the chain. Someone else needs to take over the chain actor role from AMA before the end of the programme's life. This may be either a private firm or the farmers' associations themselves. A business plan will be needed for this "new" enterprise.

Vanilla is a risky crop because of the price fluctuations on the world market. The programme must help farmers to diversify into new products (passion fruit is under consideration).

More information: www.vanillamoon.org or contact AMA, ama@infocom.co.ug

Chain movements



Before the start of KSIIP, the farmers sold their vanilla beans to traders. They had no control over prices, and did not do any processing ❶.

They have gained some control over the management of their value chain, and have started processing their produce. So they are beginning to move from being a chain actor towards chain co-ownership ❷.

Bringing Kaffa forest coffee to the German market

KAFFA, IN SOUTHERN ETHIOPIA, is the original home of coffee. Coffee still grows wild in the rainforest here, even though the forest has shrunk to less than 5% of its original size. Farmers harvest cherries from the wild bushes, and produce a rich coffee that is highly prized on the international market. Individual farmers manage between 1 and 5 hectares of forest coffee.

The Kaffa Forest Coffee Union (KFCU) is an umbrella organization for 17 farmer cooperatives, some more than 15 years old, that used to meet to discuss marketing problems, incomes, harvesting techniques, and quality. KFCU was formed in 2004 with assistance from SUPAK, an NGO promoting poverty alleviation in Kaffa.

KFCU started with over 4200 farmer members. By 2005, 9 new cooperatives had joined, bringing the total membership to more than 6600 farmers – about 20% of whom are women.

KFCU processes and exports coffee on behalf of its members. This produces more income for the members than if they were to sell their produce on the open market. KFCU ensures high product quality and is seeking new markets to spread risk and to improve members' incomes further.

The government encourages the farmers to produce better quality coffee. It supports this by facilitating access to export markets and by providing extension advice and training.

The coffee ceremony is an important part of traditional culture in Kaffa, the original home of coffee

Looking for markets

Finding suitable markets was important for the Kaffa farmers, especially at a time when local and world coffee prices were falling. In their search for a solution, SUPAK and Department of Agriculture officials consulted widely

How Ato Imito's coffee gets to Germany

Each morning, Ato Imito and his children walk the 2 km to his forest plot to harvest coffee. The bushes are scattered across their 2 ha of land, and it takes them the whole day to pick 50 kg of mature red coffee cherries. They carry the cherries back home, where Imito's wife, Abeba, prepares a coffee ceremony so the family can taste the results of a long day's work.

The coffee is dried on a raised bed to keep it free of dirt.

Imito and Abeba invite their neighbours to drink the coffee and discuss the latest news. The current coffee prices are high on the agenda. After the neighbours have gone, Imito and Abeba lay the rest of the cherries out to dry on raised trays, being careful to keep dirt away.

When the cherries are dry, Imito selects the best quality to sell, leaving the lower quality for sale on the local market. He takes a 30 kg bag of the best quality cherries to sell to the cooperative store, about half an hour's walk away.

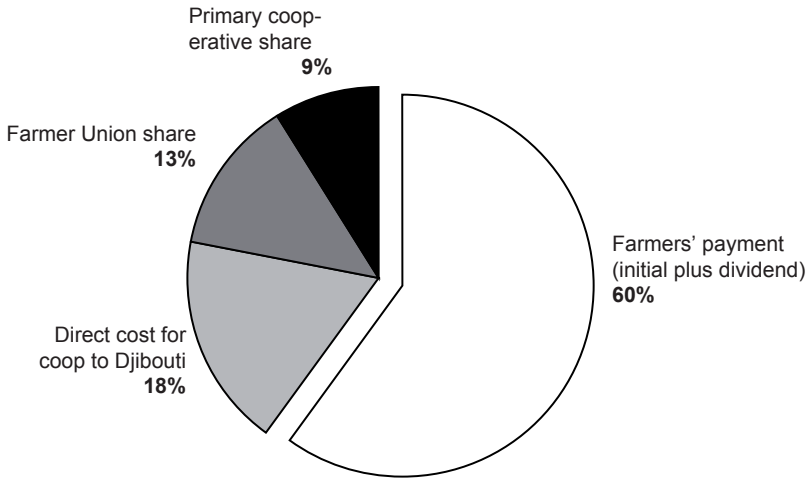
Ato Getachow, who runs the store, registers Ato Imito's 30 kg. Once he has bought 2000 kg from the local farmers, the Kaffa Forest Coffee Union will send a truck to bring it to the processing factory. There, the beans are processed and the best are selected for export. They are packed in 100 kg bags and taken to a warehouse in Addis Ababa, from where they are exported to Europe.

with the cooperatives, KFCU staff, government officials, and importers in Europe. They were able to identify a suitable premium market in Germany. In 2004, the union was granted a license to export coffee. Previously it had to export through another cooperative.

Chain management

The farmers dry, select and grade the coffee cherries they harvest. All export coffee is sun-dried and unwashed, because this fetches a premium export price. Quality is controlled throughout the chain. The development agent (the government extension officer) and the cooperative pay unannounced visits to farmers to check on the drying process. An expert from the agricultural department checks the beans brought by cooperative to the processing factory for moisture content and colour.

The farmers have indirect control over the price because the union negotiates a price (in dollars) with the importer in Germany. The farmers may receive a low price when they sell their coffee, but they collect a bonus every year (200% in 2003) once the coffee has been sold to the importer.



Distribution of income from wild coffee in Kaffa, 2004

Outcomes

In 2003, the local price of coffee was birr 9/kg (€0.85). KFCU was able to get double that (birr 18, or €1.70/kg) for the beans it exported. Farmers receive 60% of this for their crop – part when they deliver their beans to the coop, and part later as a dividend. The remainder pays for transport and other costs to the port of Djibouti, and the costs of running KFCU and its member coops.

In 2005, the KFCU exported 108,000 kg of beans, generating over €85,000 in revenue.

The farmers are owners of the union, which has already twice paid a dividend. The union controls chain activities such as logistics, processing, marketing and exporting. It negotiates prices, coordinates the producers, and organizes quality control throughout the chain.

Forest coffee produced in Kaffa

Year	Prepared for export (kg)	Exported (kg)	Sold locally (kg)
2003	36,000	36,000	-
2004	138,823	108,000	30,828
2005	203,400	108,000	95,400

Lessons

- If private sector firms willing to buy the product are engaged from the beginning, it is possible to build a value chain very quickly.
- The paperwork is important. Without an export license, KFCU had to export through another organization. It now has its own license, allowing it to get much better prices for its product.

The Kaffa Forest Coffee Union makes surprise visits to growers to check on quality

Coffee quality counts

Results of cup tests by independent laboratories in Germany. KFCU exports coffee from wild varieties grown in unmanaged forest – the very best quality.

Coffee variety	Where grown	Quality of coffee
Improved	Garden, full sun	Poor
Improved	Garden, shade	Poor +
Wild	Transplanted to garden	Good
Wild	Managed forest	Better
Wild	Unmanaged forest	Best

Challenges and ambitions

The KFCU has decided to improve its market intelligence by establishing a marketing office in Addis Ababa. This allows it to look for other clients in Europe and the USA that may be interested in buying Kaffa coffee.

A further possibility would be for KFCU to roast the coffee directly at its processing plant. A study would be needed to assess financial, technical, and managerial feasibility of such a venture.

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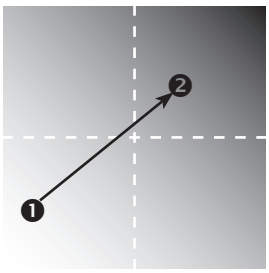
Chain movements



Farmers used to sell unprocessed coffee to traders, and had little control over prices ❶.

Through KFCU, they now not only process and package their beans; they also have a much greater ability to manage various aspects of the value chain ❷.

Partners pulling on the chain

KFCU's success is the result of collaboration with a range of private-sector, non-government and government partners. These include the following:

- **GTZ's Public Private Partnership** programme supported a study of market opportunities for the coffee union and provides funding.
- **Original Food** and **Kraft Foods**, two German companies, have undertaken to buy 36 tons of coffee.
- The **Amber Foundation** has improved the quality process.
- **GEO Saves the Rainforest** (a project associated with the magazine *GEO*) certifies the coffee.
- The **University of Bonn** has helped with improving coffee production and in forest conservation.
- The **Jimma Bonga Catholic Secretariat** provides training and distributes improved drying technologies.
- **Farm Africa** works on participatory forest management.
- The **Kaffa Rural Development Department** is helping on cooperative formation and extension.
- The **Rural Credit Fund** provides credit to the farmers.

It has been possible to mobilize assistance from such a large number of organizations for two reasons: the ready market in Europe for high-quality forest coffee, and the importance of conserving what remains of Ethiopia's rainforest and the valuable biodiversity it contains (including, of course, the wild coffee varieties).

Expanding dairying opportunities in Thika District, Kenya

Coffee used to be the economic backbone of rural Thika District, in central Kenya, so the collapse of coffee prices has hit farmers there hard. The situation has been made worse by the liberalization of the dairy and cereal markets. Milk prices were so low that farmers could not break even, and milk buyers bought only limited amounts when production was good. Small-scale farmers in the district were in dire need of alternatives.

The district's dairy farmers could sell their milk in three ways.

- They could sell fresh milk to local consumers for KSh 14 (about €0.16) per litre. The customers would pay either each day or at the end of the month.
- They could sell larger amounts to traders who would sell it in the towns. The traders paid KSh 14 per litre either each day or at the end of the week.
- They could sell to a large dairy products firm, which paid KSh 16 (€0.18) per litre at the end of the month.

Farmers complained that all three customers delayed their weekly or monthly payments, or refused to pay because the milk was "spoiled". The farmers realized that the traders were making a lot of profit – from KSh 6 to 15 (€0.07–0.17) per litre (not counting their costs), while the farmers were making only KSh 1–4 a litre.

Credit would have helped the farmers in this situation, but very few qualified for it because their businesses were not profitable. In 2001, for example, 88 farmers in one area applied for credit, but only four met the micro-finance institution's criteria. Faced with this dilemma, the farmers approached the government extension service for advice.

The NALEP approach

The National Agricultural and Livestock Extension Programme (NALEP) offered an ideal way to address the Thika farmers' problems. This programme works in 53 of Kenya's 70 districts. It provides free technical services on crops and livestock, as well as integrating crosscutting issues. Its strategy is to concentrate on a particular area for 1–2 years, and sensitize farmers there on an issue or technology. It typically helps the farmers to form "common-interest groups" to focus on a particular crop or technology, and coaches these groups in the necessary skills. Once the groups can manage themselves, NALEP staff leave them on their own so they can move on to other groups.

The programme recognizes the important role played by other extension providers, and strives to target the poor. It is easy to target better-off households. Serving the poorest is harder. NALEP realizes this, so it links farmers it cannot serve to other organizations that are better able to help them.

From understanding to intervention

When the farmers of Thika approached them, NALEP staff first had to understand the situation. So they conducted a survey to identify the problems and potential opportunities, and to set up indicators for participatory monitoring and evaluation. This survey showed the need to build the farmers' capacity in various areas so they could overcome production, management and marketing problems.

NALEP staff and others then outlined various options for the farmers to discuss and choose from. They used posters and other approaches to promote these and to elaborate the advantages of each, giving the farmers an opportunity to understand before they chose. The options covered a range of crop and livestock production, marketing and value addition.

Many of the farmers settled on dairy farming. They formed marketing-based common interest groups, and extension staff trained them in the various technical, management and leadership skills they would need, and worked with them on an action plan. The groups elected their own management committees – 40% of the committee members are women – to take them through their plan. NALEP also facilitated visits by the Thika farmers (on a cost-sharing basis) to other parts of the country so they could learn how other groups had solved similar problems.

The outcome: chain management

The Thika farmers organized themselves, had their premises inspected by public health officials, and obtained a license from the Kenya Dairy Board. They rented a stall in a town nearby and started collecting milk. Within a week they were able to sell 250 litres per day to the public – and there was demand for another 150 litres. They usually ran out of milk by 11.00 a.m. each day, so had to turn customers away. Demand was such that they had to strike deals with 600 more farmers, and even had to buy milk from wholesalers.

The farmers could now break even – something they had not done for a long time. To boost their production and increase their profits, extension staff helped them formulate their own feed ration rather than buying commercial feed. This made it possible for them to cut their production costs per litre from KSh 13 to KSh 10 (from €0.15 to 0.12). They also raised their sale price to KSh 18 (€0.20) at a time when the main buyer was offering KSh 17 (€0.21). The group has asked the extension service for help in improving their breeds to boost production further.

The farmers found they could diversify their product lines: they could sell not only fresh milk, but also *mala* (sour milk) and boiled milk. They started making

and packaging yoghurt for various market outlets. Women farmers began baking, cooking *ugali* (maize meal), and selling along with the milk. This in turn attracted new customers who wanted snacks with their milk. The groups' processing and selling activities have created jobs for other family members too.

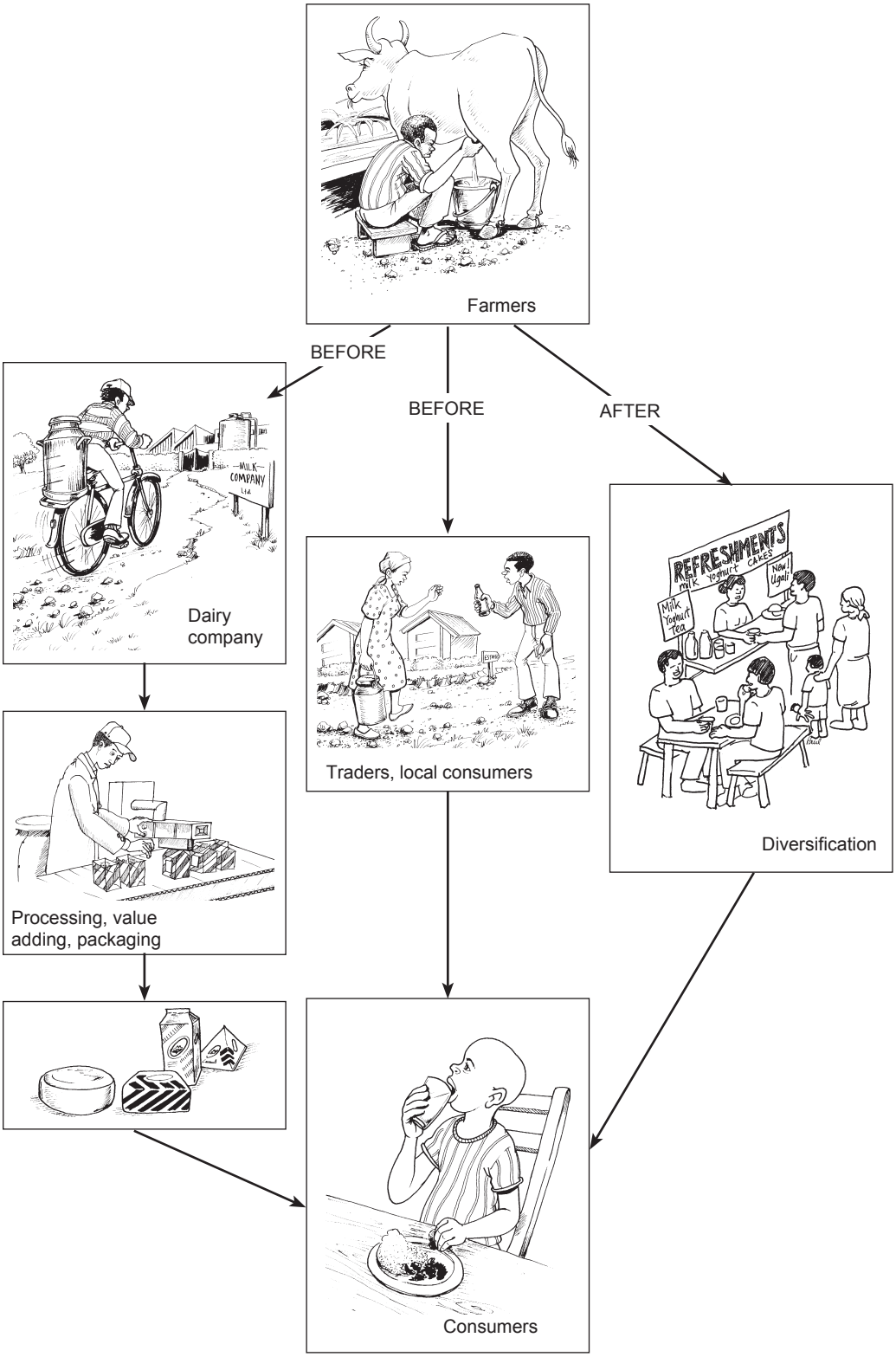
The large dairy products firm felt threatened by the grouping of 1000 Thika farmers – as most have stopped selling their milk to the firm so they can supply their own organization. It tried to woo the farmers back in various ways: by providing feed on credit, by grading roads, and by selling the farmers good heifers. But the farmers saw their own welfare as a priority, and the organization has held firm.

Why they succeeded

This is the **farmers'** project: they were involved all the way through, from baseline survey and problem analysis to planning and implementation. During problem analysis stage, they realized that most of the traders had only one function – transport – and made over 50% profit, while the producers languished in poverty. The analysis revealed that the large firm processed and packaged the milk before selling it – giving the farmers an opportunity to sell fresh milk at a lower price. The farmers also realized they had land and labour; what they needed was organization. And they were also able to diversify into selling other products to attract customers.

This sense of ownership is vital for sustainability. To ensure the farmers remain active, even after the extension staff depart, all the procedures are agreed upon – including the amount of time the extension workers will spend with the group. Training of leaders on their roles ensures good management all though and this has been an added advantage.

NALEP proposed various options; many of the farmers chose milk marketing



The product chain before and after the intervention

Benefits

- The farmers raised their income from an average of KSh 13 (€0.15) per litre to KSh 18–24 (€0.21–0.28) a litre.
- The farmers are fully employed, and they treat their farming as a business.
- The women earn money by making and selling food.
- The community as a whole has become more cohesive because of its collaboration on a common activity.

Lessons

- The Thika farmers' experience shows that it is possible to assist farmers by presenting them with opportunities and helping them choose those where they have the greatest comparative advantage.
- The "common interest group" concept can be used for other types of enterprises too.
- Organizations give the farmers a stronger voice, allow them to take advantage of economies of scale, reduce their costs, and enable them to access credit and attract training opportunities.
- Farmers can take on tasks such as procurement, processing and bulk packaging. They can also introduce technical innovations such as the introduction of new varieties or breeds. In time, such commodity groups can be transformed into bigger farmers' organizations with the capacity to export their products.
- A major challenge remains: how to bring other farmers (especially the poorest) on board so they too can produce for the market and improve their incomes.

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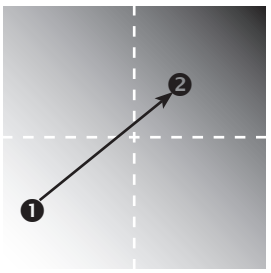
Chain movements



The farmers have added milk collection, transportation, processing, retail, cattle breeding, feed formulation and processing to their activities. They have also organized themselves, adding a wide range of management functions to their activities. From being chain actors ❶, they are now firmly in the chain co-owner quadrant ❷.

Linking potato farmers to restaurants in Uganda

Farmers in the southwestern highlands of Uganda and neighbouring Rwanda grow potatoes (known locally as "Irish potatoes" to distinguish them from sweet potatoes), mainly for food security. The low temperatures and absence of potato blight disease (which prevents production at lower altitudes) have allowed potato production to rise. But the area's steep slopes, difficult terrain and poor roads mean that transport and communications are limited.

The farmers traditionally produce and sell ungraded, mixed varieties of potatoes at the farm gate. They are poorly organized and have limited storage facilities, so sell most of their crop at peak harvest times. That means they get low prices, and have little incentive to invest in improved production.

However, with the rapid expansion of towns, particularly Kampala, food habits are changing, creating new market options for better organized farmers. One such group, the Nyabyumba Farmers' Group in Kabale District, has started selling graded, high-quality chipping potatoes directly to a fast-food outlet in Kampala. To meet the stringent quality parameters for this contract, the farmers have had to innovate in their production, organization and marketing. They have been able to do so because of effective support from research and development services, and because the group has invested its increased income in further improvements.

The Nyabyumba Farmers' Group

The farmers of Nyabyumba village have been growing crops such as potatoes, sorghum and beans for many years. In 1998, with support from local NGOs, they formed a group based on a farmer field school focusing on seed potato production. They joined the Uganda National Seed Potato Producers' Association in 1999, and for several years successfully produced potato seed. But by 2002, demand for potato seed began to fall as the market became oversupplied.

The main problem for the farmers was a lack of a decent price and market outlet for potatoes grown for eating (known in the trade as "ware potatoes"), rather than for seed. Poor demand meant they could not benefit from their investment in seed production. The Nyabyumba group asked the Regional Potato and Sweet Potato Improvement Network (known as PRAPACE) to help them find alternative markets.

In response, CIAT's Agro-Enterprise team trained staff from Africare, an international NGO that provides services to farmers in Uganda, in how to analyse supply chain and develop business plans. Africare in turn helped the farmers develop a new potato enterprise by analysing the supply chain, identifying a range of market options, and so linking themselves to a more sustainable financial future. This intervention consisted of three phases.

Phase 1: Planning and preparing for the market

The Nyabyumba group worked with the Africare market facilitator to study the changes in demand for potato, the current production status, profitability, the group's organizational strengths, and the types of support they could obtain from their research and development partners. A marketing team was established, which comprised members of the farmers' group and service providers to evaluate market opportunities.

Phase 2: Analysing the supply chain and designing the enterprise

The marketing team conducted a participatory supply chain analysis to assess the actors and services involved in producing, handling, and selling potatoes to various market outlets. The team identified several market opportunities for potatoes: the local market, the Kampala wholesale market (450 km away), small shops in Kampala, or a fast-food restaurant in the capital.

The farmers decided to take on the most profitable market option, even though they knew it involved the biggest challenge. The offer was to sell potatoes to Nandos, a multinational fast-food restaurant which buys 5 to 10 tonnes of potatoes a month. The farmers and market facilitator held further meetings with Nandos staff to undertake a cost–benefit analysis and confirm the viability of direct sales.

The farmers and Africare then developed an action plan. This involved identifying critical points in the production–sales process, and making provisions for the types of actions and investments required to supply the Nandos contract.

Phase 3: Establishing the enterprise

After developing their enterprise plan, the team returned to Kampala to negotiate contractual terms with Nandos. This included aspects such as price, variety, volume, quality, frequency of supply and terms of payment. This part of the process required careful planning and rigour in analysing costs, payments, roles and responsibilities.

The market analysis and enterprise planning process revealed changes the farmers would have to make. These included the following.

Finance Africare was willing to facilitate the process, but its policy of "no handouts" meant it would not finance them. So the farmers had to find the money themselves. They had to open a bank account so they could accept payments by cheque from Nandos. To bridge the first 3–4 months, they had to draw on their own resources and on savings. They also had to borrow about USh 3 million (€1,400) from within the community.

Organization The group formed a management committee, and members received basic training in record keeping and accounting. To ensure quality, the group selected lead farmers to monitor production and to participate in marketing.

Communication Nandos asked the group to buy a mobile phone to reduce communication problems. This was vital in maintaining links with Nandos and transport firms.

Consistency of supply The farmers were used to two harvests per year, and had to make radical changes to ensure a regular supply of 10 tonnes per month. They did this through a combination of adopting new varieties, staggered planting, planting in wetlands, using drip irrigation, building stores, and buying potatoes from other farmers when their stocks were low.

Quality The farmers had to learn how to sort and grade their potatoes quickly. Potatoes transported to Kampala that did not meet the Nandos grade, had to be sold on the wholesale markets, where they fetched a much lower price. Failure to meet the grade was costly: 80% of the initial delivery of potatoes were rejected. This was a major loss in income. So over the next 8 months, the farmers worked hard to reduce the level of rejects. This effort paid off, and rejection rates fell from 80% to less than 10%. By December 2004, the farmers were consistently supplying potatoes that met Nandos' stringent quality requirements.

Experimentation and innovation To achieve this performance, the farmers adopted several innovations, such as micro-irrigation in upland areas, which significantly improved the quality of off-season tubers. To synchronize production, members have taken on strict planting schedules specifying planting times, amounts to be planted, availability of planting materials, harvest date and expected yield at harvest. They changed the planting density to increase the size of the potatoes. Farmers also cut off the plants above the ground a few days before harvesting; this reduces the tuber moisture content and extends storage life. This experimental work was supervised by experts from the National Agricultural Research Organisation (NARO).

Outcomes

From July 2003 to April 2004, the farmers managed to deliver 76.5 tonnes of potatoes to Nandos, earning them USh 24 million (€11,000). By May 2005, they had supplied 190 tonnes of potatoes to Nandos, bringing their total income to USh 60 million (about €30,000).

Deliveries and income are likely to rise, and more farmers will become involved. By May 2005, the group had expanded to 120 members, 80 of whom are women. More women are getting involved in production, and both the secretary and treasurer of the management team are women.

The group has progressed from serving an oversupplied seed market to being an active supplier of high quality, graded ware potatoes. It has improved its position in both chain activities and chain management.

Chain activities

The group was already involved in several chain activities, including supplying seed potatoes, organizing for land management issues, irrigation, production, financing of production, negotiating contracts, and delivering products to various buyers.

The farmers have increased their control over chain activities. They grow high-quality seed and have developed strong links with NARO. They have increased their ability to experiment with support of research and development partners.

Transportation from remote Kabale District is a key issue. The management team have tackled this by arranging for empty trucks returning from Rwanda to Kampala or Mombasa to pick up loads of potatoes in Nyabyumba. This significantly improves their ability to deliver the product on time.

Chain management

The major innovations have been in the area of chain management.

Social capital and organization innovations

- A small farmer group was accepted as a farmer field school and at first followed FAO's field school approach. It morphed into a commercial farming association when the farmers learned new marketing skills.
- The organization has established various committees and elects members to the posts of chair, secretary, treasurer, marketing officer, lead farmers, and so on. It has developed a simple business and a longer term vision – one that members can articulate easily.
- Participatory approaches have significantly improved the group's ability to take collective action.

Finance innovations

- The group was able to save more than USh 1 million (€460) in the 2 years leading up to the business becoming profitable. They used this money to improve their ability to produce and market their product effectively.
- The group opened a bank account, giving them financial credibility.
- The group was able to access credit through the buyer at zero interest.

Technology innovations

- The group has tested new potato varieties for local adaptability and market demand. The farmers have switched from a mix of varieties to one specific variety suitable for making high-quality chips.
- The group has improved its seed supply system to cover its own needs as well as supplying other farmers in the area with high quality, disease-free seed potatoes.
- The farmers are re-investing their profits invest in improving production. For example, they have installed micro-irrigation systems so they can grow potatoes year round, enabling them to supply the buyer with a consistent volume each month.
- They maintain bunds on slopes to control erosion, and apply fertilizers to maintain soil fertility.

Market linkage innovations

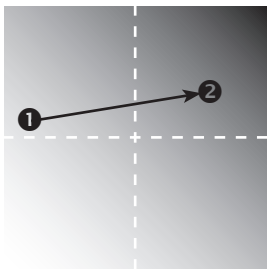
- The group strengthened their links to buyers by buying a mobile phone, by being pro-active in seeking new trading relationships, and by making personal contacts in the market place and with other supply chain actors.
- The group continuously assesses its market options and is seeking ways to diversify its buyers.
- The group also continuously analyses its profit and the quality of its produce.

Lessons

The Nyabyumba farmers' enterprise is now more firmly established. Although they face many challenges, they are seeking to develop strategies for growth. The group's experiences demonstrate that:

- The process of linking farmers to markets was based on a long-term (10 year) process to build social capital. This has included support from various service providers: NGOs such as Africare (which focused on group dynamics and

Chain movements



The farmers have moved from being chain integrators ❶ with an emphasis on seed potato production, to a highly organized supplier of quality, bulked product to a specific processor/retailer on an informal contractual basis ❷. The major shift was to greater horizontal integration; they also increased their vertical integration through improvements in sorting and grading.

leadership), FAO (farmer field school approach), PRAPACE (research insight and business linkage options), NARO (new storage methods and varieties), and CIAT (agro-enterprise support).

- The 10-year timeframe is important: groups with less social capital and leadership would have been unlikely to have succeeded in such a venture.
- The participatory market orientation enabled these smallholders to play a leading role in identifying a market and successfully linking themselves to a higher-value market option. This required strong support from the service providers, but it showed that farmers could learn rapidly not just how to supply a chain but also to innovate and respond to new challenges as they emerged.
- Taking a market orientation enabled the farmers to increase their income and to invest in better agronomic practices.
- The ability to test and adopt new innovations at critical points in the enterprise process, such as at production, post-harvest handling and marketing, are vital for success.
- Enterprises must be based on the collection and analysis of sound technical and economic information.
- Participatory approaches permit actors in the supply chain and service providers to achieve a better understanding of the challenges met by each actor in the chain.
- Farmers can gain confidence and improve their negotiating power by consolidating relationships with their buyers and establishing effective communication channels.
- In this case, women were able to play a key role in developing and sustaining the business.

Ambitions

- The group is undertaking periodic analysis of the market. They have identified a new market to supply a potato crisp factory in Kampala.
- Many other people are now seeking to be involved in this new market area. This will increase competition for the Nyabyumba group.
- The group is considering diversifying into other products.

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7
Strategies for chain empowerment

CHAPTERS 3–6 HAVE DISCUSSED examples of four strategies for empowering farmers in chain development (see figure on the next page). In this chapter we will look more closely at the case studies for each strategy to derive lessons and recommendations that can be used by intermediary organizations and chain facilitators. For each strategy we describe the current situation, the goal and rationale, the timeframe, how to monitor progress, and the set of skills and assets the farmers need.

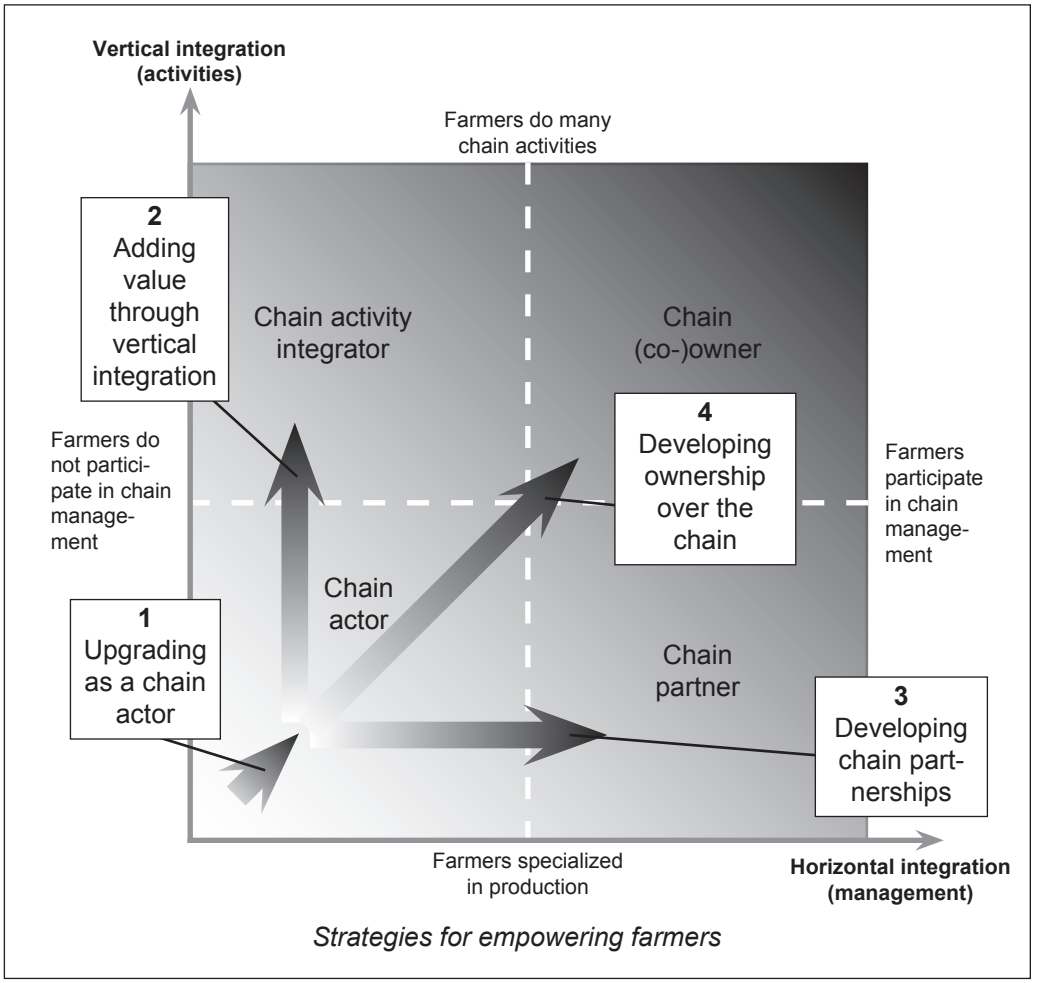
1 **Upgrading as a chain actor** The farmers become crop specialists with a clear market orientation.
2 **Adding value through vertical integration** The farmers move into joint processing and marketing in order to add value to the product.
3 **Developing chain partnerships** The farmers build long-term alliances with buyers that are centred on shared interests and mutual growth.
4 **Developing ownership over the chain** The farmers try to build direct linkages with the consumers.

1 Upgrading as a chain actor

This section draws especially on the cases in Chapter 3.

What is the current situation?

Currently the farmers are not well connected with markets. They stay on the farm to wait for traders who come and visit them to buy. The traders offer low prices and do not buy all of the output. Of course, the farmers are angry with



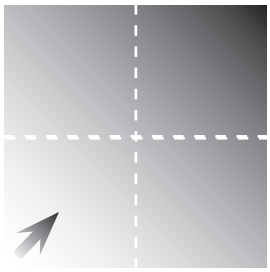
this – their time and effort are not well rewarded. They blame the traders for their problems. The traders give low prices and sell in the city for much more. The world is unfair!

What the farmers do not realize is that they are part of the problem. Their production is not well tailored to what the market needs. They produce mangoes (say) of all different qualities – some are healthy and big, others are small and spotty. But they put them all together in the same crate. The trader does not know what quality to expect, so offers a low price.

What is the goal, and why?

The idea is to make the farmers crop specialists with better farming skills, so that they can produce a better crop of a higher and more consistent quality and quantity, which is better suited to satisfy the buyer. In this way the farmers can make more money and improve their livelihood.

Upgrading as a chain actor

Intervention focus 	Ensure that farmers have the basic assets they need to improve their production Improve farmers' farm management skills: crop and livestock production, planning, record keeping, financial management, etc. Improve farmers' understanding of markets, chains, competition, consumer demands and contracts Identify and develop markets and products Promote and strengthen farmers' organizations
Chain model	Organized farmer groups with stable relationship with buyers
Type of farmer organization	Farmer cooperatives, farmers' schools or study groups
Key competencies of the organization	Good agricultural practices Continuous improvement in farm production Farm record-keeping Strong organizational skills

Becoming crop specialists is a necessary first step, prior to any other form of chain development. Unless the farms are well run it makes no sense to invest in processing or to seek chain partnerships. However, when the farmers have consolidated themselves as specialized farmers, then other options open up.

For example, in the case of the pineapple outgrower scheme in Ghana (page 34), the farmers first develop farming skills as an employee before they become independent farmers. In the future, when they are specialized farmers, they may build up a farmer organization and increase their control over the value chain.

Another example comes from the case of cashew in Mozambique (page 47). The farmers have planted new varieties of trees, and have learned how to improve production. As a result, their yield and quality of their output have risen, and they now get better prices.

How much time does it take?

The time it takes to become a specialized farmer depends on the existing assets and capacities of the farmer, the type of product, and the type of market. To produce for export markets is far more demanding than to produce for local markets – it may take many years to develop the necessary skills. In the pineapple case (page 34) it takes four years before the farmer may produce for the export market

alone. But for in some circumstances, such as in the honey case in Kenya (page 75) huge improvements were achieved in only 3 months. To improve quality in mango production may take 3–4 years – while in dairying big improvements can be achieved within 3 months through simple training in hygiene in milking and storage.

How to monitor progress?

Progress can be measured in two ways. It is possible to collect quantitative data on quality, yields, average price, turnover, etc.

It is also possible to observe the state of the farm (tidiness) and develop a simple questionnaire that farmers can use to measure improvements in farming and management skills. The scores in such a questionnaire can be based on a series of simple questions about farm management.

What skills and assets does the farmer need?

Producing for a market requires some basic assets. There must be basic infrastructure such as roads and communication facilities. The farmer must have access to productive resources – land, water, seeds, capital, etc. Unless these conditions are met, it makes no sense investing in commercial farming. In other words, to improve the livelihoods of farmers, it may be necessary to invest not only in the farmer but also in other parts of the chain.

To become a crop specialist, the farmer should have farm management skills. This includes not only technical production skills – irrigation, integrated crop and pest management, land preparation, etc. It also includes skills to plan activities, steer workers, maintain accounts, manage cash flows, keep records to gain a proper understanding of the costs involved, etc.

The farmer should develop an understanding what it means to produce for a competitive market. Other farmers are producing the same products for the same market, so the farmer must offer something special to attract a buyer. It is common to see farmers in the same area all planting tomatoes at the same time. Everybody does what the others are doing. Of course, this results in a glut and low prices at harvesting time. Hence, instead of just producing tomatoes because it is a tradition, the farmer should rather ask herself what the market needs.

Farmers should also understand that to produce for a market implies risk. The profit an entrepreneur makes is a return for the risks that she has taken. Farming is in itself a risky business – a drought may destroy the crop, or a goat may eat it. But farming for a market poses additional risks because the investments in farm production are higher, and the farmer makes herself dependent upon the buyer. Prices may fluctuate widely throughout the season. The farmer must have the capacity and willingness to take such risks.

One way to reduce these risks is to sign a production contract. The buyer and seller both reduce their risks by agreeing early in the season to supply or purchase a given volume of produce. However, other traders may come by at harvest time and offer higher prices. The farmer should resist such temptations and honour the contract. An example comes from the sunflower case in Tanzania (page 84) where farmers sold on the side to an unreliable trader. The contracting company was furious and withdrew from the contract, leaving the farmers unable to sell the remainder of their produce. They ended up with lower prices for their produce than agreed upon in the contract.

The farmers should be willing to learn and innovate constantly. Conditions in the market change rapidly as new competitors pop up, new technologies are introduced, and consumer preferences change. The farmers must be capable of doing new things, or doing old things in a new way. In this way the farmers can grow and evolve as the market changes. A good example of this comes from the jatropha case (page 41), where the farmers organized as groups, took up a new crop, and started processing it into oil.

All these skills and assets imply that the farmers are organized. Unless farmers are already organized, or are willing to organize, the facilitator does not even come into the picture. Many private companies also prefer working with organized farmers because it reduces their risks and transaction costs. Organization is therefore a basic asset that needs to develop – it is the backbone of the whole process of chain development. This cannot be rushed – organizations that are artificially created from above will soon or later fall apart.

2 Developing chain partnerships

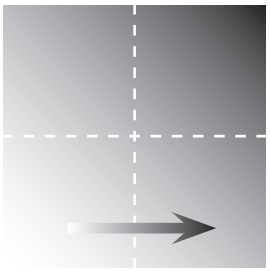
This section draws especially on the cases in Chapter 4.

What is the current situation?

The farmers are already professional chain actors. They offer a fairly attractive product, have organized among themselves, and have developed basic assets, farm management skills, understanding of markets and willingness to innovate. In other words, the farmers are crop specialists and have something good to offer to buyers.

However, the farmers feel out of control in their relations with the outside world. For instance, they may be selling to visiting traders – each year a new one. This leaves them in considerable doubt whether they can sell their produce, and at what price. Or they may be producing under contract for a processing company. This gives them a secure market outlet, but they have to follow the instructions of the company to the letter, and they lack power to bargain over prices or other contract conditions. The farmers feel that they are left to the whims of others – out of control.

Developing chain partnerships

Intervention focus 	Make the farmers an attractive business partner both technically (quality, yields) and managerially (entrepreneurial mentality, understanding of the chain) Organize continuous learning and innovation (farmer schools, exchange of best practice, etc.) Empower the farmers organizationally (including information systems for improved bargaining) Facilitate chain cooperation with the buyer (exchange of information, bargaining, joint action plans based on shared interests, etc.)
Chain model	Specialized, organized farmer groups cooperating with processors, traders or retailers
Type of farmer organization	At grassroots level: farmers' schools or study groups At chain level: representation in a chain platform
Key competencies of the organization	Good agricultural practices Continuous improvement in farm production Farm record-keeping Independent information on market prices and trends Understanding of the supply chain Communication and bargaining with a focus on shared interests

What is the goal, and why?

The farmers would like to build more stable relationships with the market. They would like to move to the point where they have greater influence in the chain – influence on factors such as pricing, technology, quality standards, logistics, timeframes, etc. To this end, the farmers opt for a partnership strategy based on shared interests and mutual growth. By linking with a buyer, they can increase their business security and gradually improve and expand their businesses. They want to make themselves an attractive business partner so that the buyer will be willing to pay better prices, listen to their demands, and invest in them.

How much time does it take?

It takes several years to build chain partnerships. Just identifying a good partner may take a year. Another year is needed to get to know each other, develop trust and shared visions, and agree on a joint business plan. Then comes implementa-

tion of the joint business plan. A real partnership is only in place after 2 or more years of mutually satisfactory implementation. Hence building a partnership will take at least 4 years (assuming that the farmers are already crop specialists). Rushing the process tends to lead to unstable partnerships (as in the sunflower case page 84).

How to monitor progress?

Quantitative data include the volume of the transactions between the business partners, and the amount of investment in the joint business plan.

Progress can be measured in a qualitative way using evaluation forms in which the partners evaluate the other party (e.g., commenting on each other's trustworthiness) and aspects of the business relation (e.g., commenting on quality control procedures, pricing formulas, etc.).

What skills and assets does the farmer need?

We assume that the farmers are already crop specialists, because that is a basic requirement for entering into business partnerships. The cases about the farmer field schools (pages 79 and 94) show that first the farmers worked for many years on technical training and innovation. Later, when they had a good product and were ready to develop market alliances, they started improving their business skills and linkages to business partners. This is the shift from "farmer field schools" to "farmer business schools".

In this transition, the farmers improve their entrepreneurial skills – costing and pricing, production planning, understanding of market demands, marketing planning, negotiation skills, etc. Of particular importance is managing information. Information systems are needed to improve the farmers' management decisions and bargaining position. By keeping records of the use of labour and inputs at farm level, the farmers get a proper understanding of the costs involved, so can make better-informed decisions and calculate prices more precisely. These records can also guarantee the buyer about the product's traceability – where it came from and the inputs that were used. Another important aspect is market information. If the farmers are well informed of updated prices and trends in the market, they are better able to bargain with potential buyers.

The farmers should develop a chain vision – an understanding of how value chains work. They should understand the chain as a network of specialized companies that need each other to make money. They should acknowledge the position of other chain actors, and respect that their interests are also legitimate. They should understand the need for cooperation rather than fighting against each other. They should understand that sellers and buyers will always have opposed interests – a high price and a low price, respectively. Nevertheless, they also have a shared interest – that is, to satisfy the consumer in an effective and

efficient way. When the consumer is satisfied, the businesses of both the seller and the buyer will grow. The chain can only satisfy the consumer when all chain actors cooperate. That is the essence of the chain vision that underlies any attempt at building chain partnerships.

Another necessary asset is an appropriate structure and approach to dialogue with the partnering company and to agree on joint business plans. The farmers must be organized and have democratically elected representatives who can meet the partnering company when needed. Furthermore, to build trust, shared visions and joint business plans, an external mediator may be needed to ensures that the dialogue between the two parties is fair, transparent, concrete, and fruitful. A good example is Faida MaLi's role in the sunflower case (page 84). More information on Faida's approach can be found in the resource section (page 178).

Finally, it is important to develop the farmers' ability to mobilize savings for growth and investment. Because the sunflower farmers had no savings, they opted to go for the quick cash buyers, and in the process affected relationships with longer-term buyers who would have probably been more useful in moving them to the chain partnership level. Apart from mobilizing savings, the intermediary organization needs to build the farmers' capacity in accessing loans and attracting investment. This aims to ensure the farmers have enough capital to upgrade.

3 Adding value through vertical integration

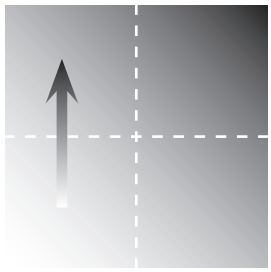
This section draws especially on the cases in Chapter 5.

What is the current situation?

The farmers are already specialized chain actors to some extent – they offer a reasonably attractive product, have organized among themselves, and have developed basic assets, farm management skills, understanding of markets and willingness to innovate.

However, the farmers feel that they get few returns from the market. They sell their produce as raw material at low prices. At the end of the chain the consumer pays a price that is five to twenty times higher than the farmers receive. They see that other players further down the chain make money by grading the product, cleaning it, processing it, packaging it, and making it ready for use by the consumer. The farmers also see that they could get better prices if they could sell directly to wholesale or retail markets instead of selling through traders. But they produce too little volume to do this. Moreover, they have no access to processing technologies, trucks, packaging machines, etc.

Adding value through vertical integration

Intervention focus 	Invest in facilities for processing, marketing and distribution (infrastructure and professional staff) Develop market outlets Design and implement management systems (operational procedures) Develop organizational discipline
Chain model	Farmer cooperatives adding value through joint input procurement, processing, marketing, etc.
Type of farmer organization	Farmer cooperatives adding value through joint marketing, etc.
Key competencies of the organization	Quality grading Market outlet development Logistics management Organizational discipline

What is the goal, and why?

The farmers want to move from merely farming into additional business activities. They want to put their farm produce together, process it to some degree, and then sell it as a group. This will allow them to get a larger share of the revenues in the value chain. It may increase their incomes and generate more jobs in their villages. Another motivation to start processing may be to prevent losses when fresh fruits and vegetables cannot be sold, as in the case of Muleba fruit juice (page 102).

How much time does it take?

In all cases it took 3–4 years for the farmers to integrate new activities. But it is unclear whether they will be able to maintain them, so it is likely that more time is needed. The case of jatropha (page 41) is a good example – without additional project support, the farmers' groups are moving backwards.

How to monitor progress?

Some impacts can be measured in a quantitative way. They include:

- The economic performance of the new business venture: turnover, profit, capital assets, return upon capital

- Increases in income at household level and the number of new jobs created.

In addition, qualitative assessment tools can be developed to monitor organizational capacities such as human resources, information systems, decision-making processes, joint planning capacities, bargaining capacity, etc. Client satisfaction with the product, delivery conditions, packaging, etc. can also be monitored.

What skills and assets does the farmer need?

We assume that the farmers are already crop specialists, because that is a basic requirement for moving from farming into other chain activities. To do so the farmers' organization should build assets such as warehousing, conditioning and packaging, logistics and quality control equipment and systems. The organization has to develop the ability to plan and run these new business ventures. This includes the development of bankable business plans, obtaining investment capital, the identification and implementation of appropriate technologies, the operational management of the new business processes, the assurance of quality, targeting of buyers, management of client satisfaction, and continuous upgrading of the product and the production processes.

In other words, moving from farming into downstream business activities requires an elaborate set of new managerial skills. Operational management becomes highly complex – for example, the organization should ensure that input procurement is synchronized with production, processing, packaging and marketing activities. Specific technical skills may be particularly important, such as quality control and upgrading. Collective equipment and infrastructure must be managed in a professional and responsible manner. Decision-making processes, administrative procedures and information flows also become far more complex. This points to the need of recruiting professionals – farmers themselves are unlikely to be able to perform these functions. Professionals need to be in charge of marketing, administration, and management.

Besides professional management, strong group cohesion and organizational discipline are needed. Involvement in a joint business venture requires the members of the farmer organization to be able to trust and rely upon each other. Individual members must adhere to operational procedures and quality standards. Management decisions have to be transparent and understandable to group members. Unless there is real ownership by the farmers, the business venture will not be successful. This also implies that the members must invest their own resources in the business venture, and thus run risks. Dependency upon outside support is a major cause of failure.

A final area where the farmers' organization needs to develop capacities is public relations. The organization not only deals with suppliers and customers, but with a whole range of actors: financial institutions, service providers, certification agencies, local authorities, labour unions, etc. The organization must be able to manage this diversity of stakeholders and influence relevant elements of the business environment, such as registration, certification, standards, and infrastructure.

4 Developing co-ownership over the chain

This section draws especially on the cases in Chapter 6.

What is the current situation?

The farmers are already specialized chain actors with a fairly attractive product, basic farm management skills, some understanding of markets and a willingness to innovate and take risks. They experience the same problem as in the previous strategy – they feel that they get too little return from the chain and that they have no control over what happens to their produce.

The cases start from a variety of situations. The Malian farmers (page 122) were isolated women processing low-quality shea butter for their own consumption. The Ugandan vanilla producers (page 128) were individual struggling smallholders, as were the Kenyan dairy farmers (page 138). The Tanzanian and Ethiopian coffee producers (pages 89 and 133) were already organized, though the Tanzanian regional cooperative was not operational.

Developing co-ownership over the chain

Intervention focus 	Enter into joint ventures downstream in the chain for the development of new consumer product lines Develop and market branded consumer products
Chain model	Farmer cooperative gaining chain co-ownership in partnership with processors or retailers, or through direct marketing to consumers
Type of farmer organization	Business cooperative
Key competencies of the organization	Total quality management Product/market development Consumer targeting Joint venture cooperation

What is the goal, and why?

The goal of the intervention strategy is similar to vertical integration – i.e., to empower the farmers' organization to deal with technical as well as managerial issues on behalf of its members. However, chain co-ownership goes further than vertical integration. It implies that farmers organize themselves in recognized, visible business organizations, capable of penetrating existing markets, developing new products or markets, or diversifying their activities. It also means they can reach the end-consumers of their products and to initiate dialogue with the consumers to improve the product, based on consumer demand. Such farmers' organizations can negotiate lucrative prices and take a fair share from the chain.

Such a value chain may not be too long or complex, since co-ownership requires good coordination skills and capabilities. For African farmers the most accessible markets are local, national or regional. Reaching the end-consumer may be very difficult in an export chain. However, importers can be considered as the end-consumer since they take over all the rest of the chain in a distant country. Coffee and vanilla producers in Tanzania, Uganda and Ethiopia are involved in export markets to Europe and the USA (pages 89, 128 and 133), while Malian shea butter producers are targeting a regional export market in Senegal (page 122). Meanwhile, dairy product producers in Kenya are essentially targeting a local urban market (page 138).

How much time does it take?

This intervention strategy will take a lot of time, especially if it starts with individual farmers. However, it may be possible to achieve results within 4–5 years if farmers already master their production techniques and aim at local markets where they are easily in contact with the end-consumer. The case of dairy farmers in Kenya (page 138) shows this.

How to monitor progress?

Hard quantitative data can be collected on turnover, profit, capital assets, income increases, etc.

Other ways to know when a farmers' organization is becoming a chain co-owner is when parties start to recognize that it functions in a fair, transparent and trustful manner – for example, guaranteeing an acceptable price to the farmers and ensuring that they are paid in time. Honoured contracts, quality certification and satisfied clients are also good indicators of an empowered chain co-owner. Finally, a cooperative that initiates or negotiates research and development initiatives for the benefit of the entire value chain should be considered as co-owner of the chain.

What skills and assets does the farmer need?

The farmers' organization needs to develop the same skills and assets as in the vertical integration strategy – e.g., professional management skills, organizational discipline and the ability to mobilize funds for investment in new business ventures. However what distinguishes the two strategies is the ability to coordinate the whole chain in order to satisfy the end-consumer. The organization must be able to understand consumer demands and to translate them into product and process upgrading and operational processes. The organization must be on top of what consumers want and what competitors do, and try always to stay one step ahead. This requires constant research and innovation. For example, the dairy farmers in Kenya (page 138) added a new product to their range: besides selling milk they started selling the snacks that consumers like to eat while drinking milk.

The shea butter chain in Mali (page 122) is an example of fragile co-ownership. Though the shea butter union negotiates its price with the Senegalese importer, it still relies on one importer only. The union does not yet reach the end-consumer because the importer processes the butter into a final product that is sold to mainly French consumers. The farmers are currently developing a partnership with a Dutch company to sell shea kernels. This partnership includes negotiating the price, product and process upgrading through improved processing techniques.

In the case of vanilla (page 128), the Ugandan farmers negotiate directly with American importers on price and quality. However, they are not in contact with American vanilla consumers, and they have no information on how to upgrade or brand their product in the US market.

8

Facilitating chain development

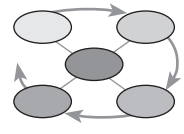
INTERMEDIARY ORGANIZATIONS CAN PLAY a vital role in developing value chains that benefit small-scale farmers. The previous chapter presented strategies that intermediary organizations can follow to improve the capacity of farmers to manage chains or to integrate chain activities. This chapter draws lessons from the cases in Chapter 3–6 about the roles of the intermediary organization in implementing chain interventions. The lessons are grouped into the five components of chain interventions that were discussed in Chapter 2 (page 28).

The intermediary organization needs to ensure that all smallholders can take advantage of a pro-poor marketing approach. In poor areas of developing countries, most communities and service providers face serious challenges in investing in new marketing interventions and sustainably raising incomes. Typically, rural communities produce low-value commodities, which face declining real prices and increasing competition from medium- to large-scale producers. Simply increasing production may not be enough to raise incomes in the long run. There are few examples of smallholders developing new, lucrative markets with undifferentiated products – except for traditional export crops, which have lost most in terms of value. There are, on the other hand, examples where improved productivity and better management have enabled smallholders to sell into existing markets, expand the area where their products are sold, and offset imports. Smallholders rarely make enough money to invest in higher-value or valued added products – though it is value addition that offers real opportunities.

This book shows how intermediary organizations have supported smallholders to confront the marketing situation in various ways:

- Improving their competitiveness in producing local products (such as jatropha in Tanzania, page 41).

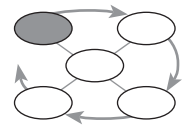
The small diagrams in this chapter refer to the five phases in chain interventions (see the figure on page 28).



- Improving group-based organizations, achieving economies of scale through collective action on inputs, production, marketing and access to services (milk cooperatives in Kenya, page 138).
- Diversifying into higher-value crops or livestock products, linked to identified market demands (vanilla in Uganda, page 128).
- Adding value to products by accessing higher-priced markets, enhancing product quality, or incorporating processing activities that meet consumer needs (organic coffee in Tanzania, page 89, or potatoes in Uganda, page 143).
- Entering new types of contractual agreements, based on forward sales that help to "lock in" buyers over a longer time at advantageous rates (pineapples in Ghana, page 34).

When implementing these interventions, they need to consider the following issues during the various phases of chain development: chain mapping and assessment, building engagement, chain development, monitoring and evaluation, and learning and innovation. The remainder of this chapter covers each of these in turn.

Chain mapping and assessment



Market-orientation and risk assessment

A market orientation implies that an intermediary organization supports smallholders, often in a particular geographical area, to identify and access remunerative opportunities for existing or new products, in existing or new markets (see the box on the next page). Smallholder farmers with limited resources cannot afford a lot of risk. If farmers depend on the sale of a single commodity, or on a single buyer, there is a significant risk that their project will ultimately fail. This was shown by the case on sunflower from Tanzania (page 84). On the other hand, if producers try to improve their production and marketing of multiple commodities at the same time, they may lose focus and not succeed with any.

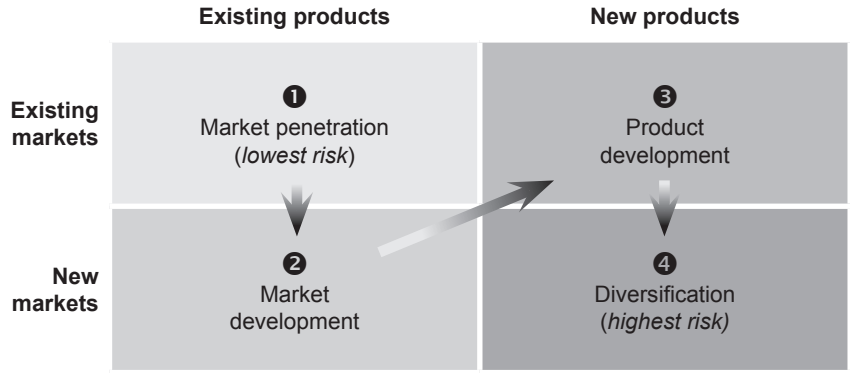
The intermediary organization should involve the farmers in selecting the products they want to invest in, based on what they see as an acceptable exposure to risk. The marketing strategy enables community members to gather information on potential market options. They can thereby build a portfolio of products or market options requiring more or less investment and embodying various levels of risk.

If people in the community want to identify new marketing opportunities, the next task is to review their level of food security and be sure that they are equipped to take on more risk. Then help them select products, supply chains and new business options that take into account a level of risk appropriate for them.

The Ansoff matrix

The Ansoff matrix (below) is a way to categorize risk options by comparing types of products and markets.

Risk increases from 1 (low risk) to 4 (highest risk).



Products in high demand tend to be highly profitable, but also very risky. So if groups look for market opportunities based on demand and profitability, they are likely to be steered towards risky undertakings. Group members need to be aware of the risks and benefits from these options.

The facilitators can use the Ansoff matrix to guide groups towards a sensible level of risk. They may advise newly formed groups to promote existing products in existing markets (the "market penetration" option, ❶ in the diagram above), since this has the lowest risk.

As it gains experience and cohesion, the group might go on to test their existing products in new markets ("market development", ❷) – perhaps by sending a trial shipment to the new market before engaging in larger scale supply.

For groups with more experience in marketing, higher risk strategies (product development and diversification – ❸ and ❹) are likely to be more attractive.

More information: Lundy et al., 2005

However, the intermediary organization needs to consider the impact that a market-oriented approach may have on food security. In the case of vanilla in Uganda (page 128), for instance, farmers may not have planted enough food crops to feed themselves when world prices for this new high-value crop drop in the near future. The vanilla chain currently relies heavily on the intermediary organization, leaving the farmers at great risk when it withdraws from the chain. The case of sunflower in Tanzania (page 84) provides an example where the combination of a new product and a new market was too risky, resulting in a failure to set up a sustainable value chain. Therefore, an intermediary organization needs to strike a balance between market orientation and food security.

Local versus international markets

Most smallholders produce both for home consumption and the local market. It is important to strengthen their ties to local markets before linking them to much more complex international markets. The cases of mangoes in Kenya (page 79) and pineapples in Ghana (page 34) are excellent examples where larger agri-businesses have provided a local market for smallholders. Also, intermediary organizations should always assess the potential to scale up from initial pilot work. Interventions will be biased towards those that can reach larger numbers of beneficiaries at the outset, as it is easier to scale up from a larger starting point, i.e., many farmer groups, than from a smaller pool of beneficiaries. In the case of shea nuts in Mali (page 122), there are currently about 1400 women involved in the production and processing of about 1000 tons of nuts; however, the potential for upscaling exists, because demand for shea nuts from Mali is more than 25,000 tons.

Fostering an enabling business environment

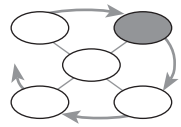
African farmers and the organizations that serve them are often poorly informed about policies, rules and regulations and development programmes. They are typically isolated from decision makers. So rural people and organizations need to organize so they can lobby for a better business environment. The facilitator may undertake a policy benchmarking study on the particular product or crop where it is considering intervening. This information can form the starting point for a dialogue between the national and local authorities, government agencies, donors, the private sector, NGOs and community organizations. The facilitator may develop the farmers' organization's pleading and lobbying capacities, or advise them to join an established pressure group. Strategic themes for lobbying may include encouraging authorities to recognize farmers' organizations as credible business groups that should be supported; promoting agriculture and industry services with a balanced package of grants, subsidies and incentives; promoting rural private-sector development policies; adjusting or enforcing rules, laws and tax systems; or developing national standards and strengthening certification procedures.

Governments should also be actively involved in defending smallholder farmers' socioeconomic interests in global discussions and negotiations. Governments may be the only institution able to influence banks to provide medium and long-term loans to farmers' organizations.

The case studies in Chapters 3–6 showed some successful examples of lobbying. In Same, Tanzania, beekeepers pressed the local government to delineate bee reserves that would protect their property rights, prevent tree felling and prohibit spraying (page 113). In the Coast Region of Kenya, a network of farmer field schools lobbied the national Poverty Eradication Commission for support for a mango processing facility (page 79). Farmers' organizations may lobby for improvements in infrastructure such as roads, market places, telecommunications, electricity, airports and ports. They may press governments to provide basic

social services such as heath and education, since these have a direct impact on the long-term sustainability and dynamism of the rural private sector. They may also push governments to avoid conflict between custom laws and "modern" regulations: legitimacy is more important than legacy. This is particularly true when addressing land tenure or natural resource management issues.

Chain engagement



Developing a vision

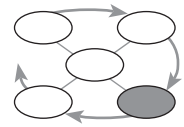
A chain facilitator supports farmers to develop a shared strategic vision on developing their value chain. The facilitator helps the farmers' organizations do a participatory chain analysis. This looks at potential demand and supply, and the income potential for the farmers. It identifies the actors directly and indirectly involved in the chain, their role and importance, as well as their constraints and visions for developing the chain. The results of this analysis should be discussed during a multi-stakeholder chain platform meeting, where dialogue between the different actors is established. This leads to the formation of a group that takes the lead in developing the value chain. This group's collective vision is a starting point for future interventions such as technical advice, innovations, the resolution of specific problems, or coaching of farmer leaders. Most of the cases in Chapters 3–6 show that the facilitator puts in considerable amount of time to select the appropriate actors for joint chain development. It is particularly important to identify actors that are willing to create longer-term sustainable value chains. Traders as well as producers may act opportunistically when market conditions change, so joint vision development helps them to foster longer-term engagements – as in the sugarcane example in Tanzania (page 62).

Trust

Buyers and sellers prefer to deal with those who have proved reliable in the past. Implicit contracts between buyers and sellers are a common form of agreement, and give rise to varying levels of uncertainty and transaction costs. In some cases, mistrust arose primarily because buyers or sellers opportunistically trade with others, rather than sticking to prior agreements. Mistrust also results because product quality is not standardized. In the early stages of developing value chains, intermediary organizations can play an important role to build confidence among the chain actors. Examples are the sunflower case in Tanzania (page 84) and SNV's work to build partnerships between private-sector enterprises and honey producers in Kenya (page 75). Sometimes, though, the chain actors create their own mechanisms to build confidence, as in the Tanzania sugarcane case (page 62).

Intermediary organizations can also play a role in facilitating linkages to service providers. For example, the FFS networks in Western Kenya linked farmer organizations to service providers (page 94).

Chain development



Participatory approach and ownership

The intervention should, where practical, be participatory. It should enable less informed chain actors (such as farmers' groups) to learn how to implement new ideas and methods. The various chain actors should be able to influence decisions made in planning, experimentation, implementation and scaling up of interventions. To strengthen their ownership, service providers should adopt a policy of "no handouts" to avoid dependency syndrome and to accelerate self-reliance. In some cases, subsidies and incentives may be required for low-income farmers to enter a value chain arrangement. But recipients should be clearly informed that this is a short-term support measure that will be phased out. It is important to keep in mind that value chain development takes time, so long-term investments (more than 5 years) are needed to build chain management capacities. An example of long-term support leading to empowerment comes from the shea butter case in Mali (page 122).

Risks and savings

It is clear from all cases that farmers need to be well-organized if they are to be competitive in an ever-more-demanding marketplace. Working in value chains is often best achieved by farmers who are organized in self-selected groups of a similar age, background and wealth status (as in the milk cooperatives in Kenya, page 138). This type of organization facilitates learning and also enables group members to build trust and cohesion for collective action. The smallholders should integrate savings and internal loan schemes in their activities. This will help them work with money, keep records, and learn financial skills that are essential to build their asset base. The pineapple case in Ghana (page 34) is one of the few examples of an intermediary organization supporting the establishment of a savings scheme. Intermediary organizations should consider setting up such schemes in their intervention.

Engineering an organizational development programme

The chain facilitator promotes the development of the farmers' organization, based upon its existing capacities and on maintaining and improving the members'

Steps in developing a cooperative

- **Recognize a common need** or an opportunity.
- **Hold an organizing meeting** to explain the idea and identify the initial leadership. Be sure to ask the question, "what is the right business type"?
- **Conduct a feasibility study.** The more complicated the idea, the more thorough the study will need to be. Do not skip this step, no matter how complicated or simple the idea appears. It is necessary to determine if the business concept has a chance of succeeding.
- **Share the results from the feasibility study** with potential members. Discuss whether the concept has a chance, and decide whether to proceed.
- If you do proceed, it may be necessary to **incorporate the business** by filing the necessary paperwork. If a cooperative or association is formed, a constitution and by-laws will be needed.
- **Prepare a business plan** to provide the road map for your business. This is a vital step.
- **Secure financing:** it is not possible to start a business without some capital.
- **Recruit members.** If the business requires a certain level of production, make sure there are enough members.
- **Hire management and staff.** The board of directors should not run the day-to-day operations of the business.
- **Hold the first membership and board meetings**.
- **Start operations**.

technical skills. For existing farmers' organizations, this may involve upgrading products and processes through a skills development programme. The facilitator may propose training, testing of innovations, improved farm practices, the introduction of new varieties, instituting quality controls, etc. Most of the cases show that intermediary organizations strengthen both the technical as well as managerial capacities of farmer organizations. Strengthening their entrepreneurial capacity is often less well developed.

When farmers are not yet organized, the facilitator may help them form groups. Groups may be informal or formal (as in a cooperative or association). In the past, governments forced farmers into cooperatives that failed to meet the farmers' needs or to function as businesses. Despite this unfortunate history, well-functioning farmer groups, formed for the right reasons, can be an important, effective business type for farmers. A farmer cooperative or association is a business type with three unique characteristics: members own the business, members control it, and members benefit from it. At the start of an intervention, the facilitator should support the farmers' organization by staying focused on the reason for forming the group. It should help the farmers by identifying effective local leadership that follows sound business practices. Developing trust among potential members is vital in order to improve group coherence. This is done through:

- Clear communication of member's roles and expectations.
- Clear understanding of the organizations goals.
- Ensuring that the group's business idea is likely to be feasible.
- Keeping members informed and involved. Member communication is essential. One way to do this is to designate one board member as a confidential person members can go to if they have problems.
- Conduct businesslike meetings, following an agenda.

The facilitator and group should follow a series of steps to develop a cooperative (see the box on the previous page). Some of these steps occur at the same time, while others happen later.

The facilitator should not fill in missing links in the chain itself, because this prevents other private actors from fulfilling this role. In the case of vanilla in Uganda (page 128), for example, the intermediary organization took responsibility for quality grading, transport and marketing of the vanilla. The farmer organizations are entirely dependent on the intermediary's presence, so the sustainability of this chain is undermined. The end of the project funding may mean the end of the vanilla chain.

The box below outlines a toolkit for capacity building being developed by SNV in Mali.

Toolkit for capacity building

In Mali, SNV and two unions are together developing a training and tool kit covering the following questions:

- How to diagnose my value chain environment?
- How to determine the best formal or informal structure for my business?
- How to develop my business strategic vision, from my values and principles?
- How to elaborate my outline business project?
- How to determine the optimal and critical conditions for my business?
- How to pilot market analysis and opportunity, feasibility and marketing studies?
- How to identify and control service providers?
- How to negotiate technical and financial assistance for the implementation of my business plan?
- How to manage the financing of my business plan: loans, grants, subsidies, incentives?
- How to plan my technical and financial autonomy?
- How to measure my economic performances and the social, community and environmental impacts of my business?

More information: Bernard Conilh de Beyssac, bconilh@snvworld.org

Promoting entrepreneurial attitudes

A viable business begins and ends with the market. The members of a farmers' organization must be able to appreciate this: what is important is not what they want to grow, but what the market wants to buy. The facilitator should help the members learn such entrepreneurial attitudes.

Business planning is a comprehensive, responsible, research-based investigation of a business idea. It involves an organized, thoughtful process of identifying and assessing opportunities and problems inherent in a business endeavor. Proper business planning will result in the development of well-conceived strategies for dealing with business challenges. The facilitator leads the farmers' organization through this process, which results in a business plan. A number of cases show intermediary organizations that supported farmer organizations with business planning; they include the cases of jatropha in Tanzania (page 41), cashew in Mozambique (page 47), and shea nuts in Mali (page 122).

Basic questions for business planning

The facilitator initiates business planning by posing some basic questions:

Identifying the market

- Who/what is your target market?
- How big is the market?
- What does this market want?
- Is this market growing, declining, or flat?
- Who will be your competition in this market?

The product

- How can you differentiate your product? What do you need to do?
- How easy or difficult is it to produce what you want to sell?

Price

- How much will your product sell for?
- How much does it cost to produce?
- What is your break-even point?
- How many units do you have to sell every day, month and year to stay in business?

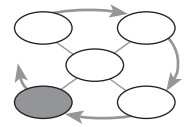
Business management

- How experienced is the person who will manage the business?
- Is this person familiar with the business?

Product distribution

- How are you going to distribute your product to reach your target market?
- How complicated will it be to get your product to your customers?

Chain monitoring and evaluation

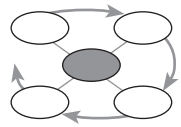


Monitoring, evaluation and impact assessment of value chain interventions are necessary to steer the intervention process, to design future interventions, and to be accountable to donors and farmers (and their organizations). It may be useful to use the indicators presented in Chapter 2 (page 30). Additional indicators may be needed to cover broader development objectives:

- **Local economic growth** Successful interventions should have a knock-on effect on the local economy as organization members earn more, have more to spend, and generate jobs within and outside the community. Possible measures of such changes include tax receipts and indicators of wealth such as ownership of items such as vehicles, televisions and modern housing.
- **Gender** In African cultures, cash crops often are seen as men's affairs – so a focus on producing marketable products may benefit men at the expense of women (and children and the elderly). To measure impacts on women, it is necessary to distinguish between men and women when collect monitoring data. For example, how many of the organization members are women? How many of the leaders? What is the income of women compared to men? etc.
- **Food security** Focusing on cash may mean that farmers have less land or time to grow food to eat. That is not a problem when yields are high and prices are good, but can lead to disaster if the cash crop fails or the market collapses. Indicators of food security may measure food supply, access and outcomes (see Frankenberger 1992).
- **Environment** A focus on markets can impact the environment in many and unexpected ways. For example, farmers may switch to a new crop or cultivation method that may damage the environment (intensive ploughing, leading to erosion, or more spraying of harmful chemicals). Processing may require fuelwood, leading to more rapid deforestation. The changes may, of course, be environmentally benign (as in a switch to organic agriculture). Facilitators should bear the potential impacts in mind and select the appropriate indicators to measure them.

The case studies show that most of the value chain development programmes lack a monitoring and evaluation system. The contribution of the interventions to poverty reduction is not measured, nor is the cost of production, value added due to improved processing, better prices or volumes traded. More attention should be paid to strengthening intermediary organizations to set up participatory monitoring and evaluation systems to measure such items, and to adjust the interventions as needed.

Chain learning and innovation



Learning from others is vital. A learning approach should build on existing skills and resources of local communities, including producers, processors and traders. The goal is to build the management capacity of chain actors and local service providers so that the community can benefit over the long term. A "chain platform" may be a forum where chain actors can exchange experience and expertise to develop mutual beneficial chains. A number of cases have shown examples of such chain platforms where multiple actors jointly carried out a chain development programme; however, there are few examples where these platforms continue without external support.

Intermediaries can provide valuable support in building the capacity of farmers' organizations and other actors in the chain. This support includes training, coaching, group mobilization, organizational development, leadership development, etc. The intermediary can facilitate the farmers to evaluate their own capacity to manage the chain and activities in it. This analysis then forms the basis of a capacity building programme. Faida MaLi's ten-step approach (page 178) is one example of such a programme.

A chain facilitator transfers the necessary know-how both to the farmers' organization and to service providers. It may also transfer tools for quality control and certification. The facilitator has to be knowledgeable about value addition and stays connected to relevant knowledge sources. An important task is to create chain platforms or "farmer business schools", where farmers continuously learn and innovate to better understand market development (pages 31 and 155).

Intermediary organizations that initiate a value-chain development process should have a market orientation; they should facilitate farmer empowerment; and they should ensure larger-scale impact as well as feasibility for resource poor farmers.

Chain facilitators should assess their own stake in the value chain. Not having a stake assures neutrality: the intermediary can organize stakeholder meetings and build trust among the chain actors, and is able to focus on broader development objectives such as transparency and pro-poor advocacy. It is crucial that the chain facilitator remains focused on strengthening the capacities of farmer organizations instead of taking over their role in the value chain.

For those intermediary organizations that need more information regarding tools and approaches for value chain development, Chapter 9 describes a number of tools that facilitators can use to strengthen the capacity of smallholder farmers to manage chains.

9
Resources

THIS CHAPTER INCLUDES BRIEF descriptions of some general approaches that intermediary organizations can use in their value chain interventions.

- SNV's local economic development approach
- The FAIDA market linkage approach
- CIAT's rural agro-enterprise development approach
- CIAT's learning alliance for agro-enterprise development
- Participatory market chain approach
- Participatory value chains analysis
- Value chain development
- Value chain research
- Participatory research methods
- INFO-Cadena: Instruments to foster value chains.

This chapter also also includes a list of references and further reading on value chains and related topics, a list of organizations and websites, and profiles of the contributors to this book.

SNV's local economic development approach

The local economic development (LED) approach was developed by SNV to promote local economic development in municipalities in Mozambique.

Goal

To build economic capacity of an area to improve its economic future and the quality of lives of its citizens.

Objective

To identify a municipality's economic advantages, opportunities and constraints, start high-potential economic activities, and create an enabling environment for development.

The LED approach is designed for countries with limited financial and human capacities and where strong local organizations and institutional frameworks do not yet exist.

Phase 1: Identify and formulate activities

1 Pre-engagement and contracting

- Conduct a preliminary one-day appraisal to identify the potential of the municipality for local economic development.
- Pre-engage with the main partner (usually the municipal council or local authority).
- If successful, sign a memorandum of understanding on continuing the process.

2 Prepare

- Create awareness and identify potential key stakeholders in local economic development (beyond the municipal council itself).
- Establish a core team of representatives of public and private-sector stakeholders as well as the facilitator and (depending on the situation) NGOs.
- Define the mandate of the core team and its members' responsibilities (to elaborate an action plan and develop a monitoring and evaluation system).

3 Identify economic opportunities and constraints (leverage points)

- Select tools for an appraisal to identify opportunities and constraints (leverage points) for local economic development. Tools may include:

  - Participatory sub-sector and chain identification and analysis.
  - Participatory appraisal tools such as triangulation, diagramming and mapping, ranking and scoring.
- Conduct the appraisal.
- Analyse the appraisal's findings on opportunities and constraints (and how to eliminate them):
  - Strengths, weaknesses, opportunities and threats (SWOT) analysis .
  - Political, economic, socio-cultural and technical factors (PEST) analysis.
- Prioritize the opportunities and constraints to be eliminated.

4 Formulate activities and targets

- Consult with stakeholders to prioritize a limited number of leverage points, economic opportunities and constraints.
- Develop proposals for activities. These may include economic activities or actions to create a favourable economic environment.
- Set SMART (specific, measurable, appropriate, realistic, time-bound) performance targets for activities.
- Identify and involve additional stakeholders (local private sector actors, local or international investors, donors, government agencies, NGOs, research and development institutions) who are not yet part of the team. Agree with them their roles, responsibilities and commitments on human, material and financial resources.
- Consolidate the activities into a local economic development plan. This details the activities, the stakeholders involved, their tasks and responsibilities, resources available or to be acquired, and the timeframe for implementation.

Phase 2: Implement activities

1 Launch the local economic development plan

- Launch the plan and initiate the planned activities.
- With the team, accompany and monitor the initial implementation phase.
- Ensure appropriate monitoring and evaluation for each activity, allowing for action-oriented and flexible implementation with a strong emphasis on learning by doing.
- Review the role of the team in subsequent steps.

2 Implement

- Implement activities, monitor and evaluate.
- Refine or revise strategies and action plans on a regular basis, if necessary.

More information: www.snvmz.org or contact Danny Wijnhoud, dwijnhoud@snvworld.org

The FAIDA market linkage approach

FAIDA MaLi's ten-step procedure is a field-tested approach to mobilize, organize and train farmers and agricultural companies.

Main steps	Main activities of facilitator	Critical issues
1 Choose enterprise	• Conduct market research • Review profit prospects for farmers and company • Review environmental issues	• Totally new enterprise is difficult to handle • Market dynamics • Alternative outlets exist
2 Select company	• Review company's expertise and business skills • Gather info from clients • Review end markets	• Good track records • Openness/provide information • Willingness to engage in cost sharing
3 Select farmers	• Review if climate is suitable • Participatorily review farmers' expertise/resource base • Review economic activities	• Farmers eager to participate • Continued food production • Environmental concerns • Gender issues
4 Bring parties together	• Explain the contract • Agree on responsibilities of all partners • Ensure all sign the contract	• Everybody understands the contract and its conditions • Clear activity/time schedule • Develop trust among parties
5 Assist company	• Assist to further develop key business skills • Assist in obtaining finance • Analyse market outlets	• Company willing to provide inputs, finance, extension • Buying/payment procedures • Long-term perspective
6 Assist farmers	• Train in business skills • Support group formation • Ensure extension services • Promote savings/credit	• Group leadership • Appropriate extension • Food production • Side-selling
7 Involve others	• Link with relevant government agencies and NGOs • Share the work • Train other organizations	• Positive attitude to private business • Active involvement • Replicate/adapt approach
8 Support the linkage	• Find solutions for problems that arise • Mediate in conflicts • Link to specific expertise	• Strong commitment of all parties involved • Develop trust • Flexible assistance
9 Monitor and evaluate	• Participatorily review experiences • Implement improvements • Jointly plan follow-up	• Systematic data collection by farmers and company • Learn from mistakes • Longer term perspective
10 Facilitator withdraws	• Stay in touch with further development of linkage • Approach new partners • Start new linkages	• Pull-out strategy is known to all parties from the start • Allow partners do the job • Review experiences

Steps in Faida MaLi's market linkage approach

More information: www.faidamarketlink.or.tz

CIAT's rural agro-enterprise development approach

CIAT's Rural Agro-enterprise Development (RAeD) Project has developed a series of methods, tools and learning approaches to promote entrepreneurial development in rural areas of the developing world. These approaches were developed through collaborative projects over the past 10 years in Latin America, Africa and Southeast Asia.

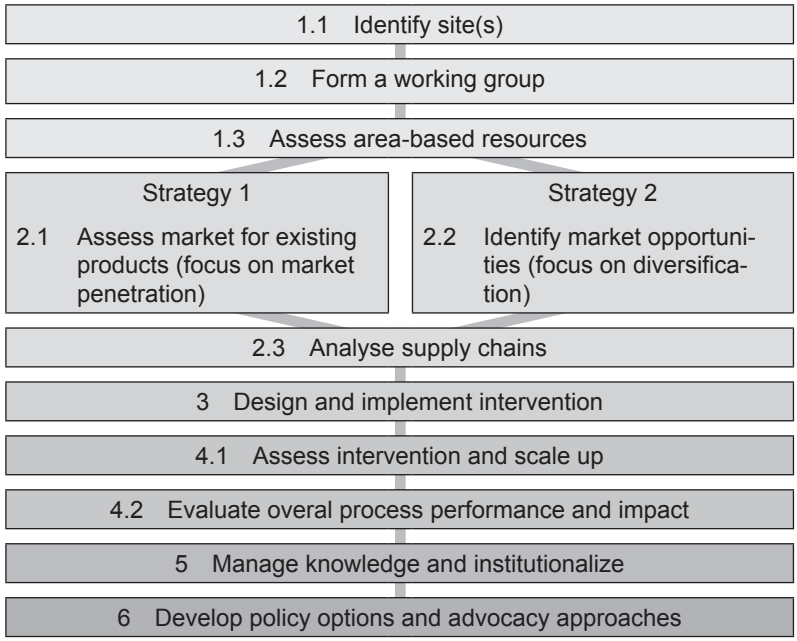
Key elements in the strategy include ways to:

- Develop partnerships, evaluate project site resources and prepare joint plans.
- Evaluate markets and identify market opportunities.
- Develop business plans and establish or strengthen rural enterprises and local business support services.
- Assesses process performance and introduce mechanisms for scaling up.
- Share knowledge and effect institutional change towards income-based approaches.
- Advocate for improved marketing and trade policies.

RAeD offers a methodical approach for service providers to use in identifying and responding to market demands. It enables service providers to assist communities increase the competitiveness of their existing products and to diversify into other, higher-value products. The approach promotes a chain perspective that strengthens business linkages between producer groups, service providers and higher-order supply chain actors, rather than focusing on the farm alone. It emphasizes continual innovation to tackle the dynamic nature of markets, and collective action to shift from pilot projects to scale.

New market-based activities must be competitive, sustainable and equitable. The RAeD methods incorporate basic marketing, business and community support principles into a stepwise process that facilitates market engagement. The approach is non-commodity specific and supports collective action, horizontal (among farmers) and vertical (between actors in the value chain) diversification and value addition as key options. The RAeD project views production-based food security approaches as unlikely to alleviate poverty in a market-driven environment. It believes that it is perilous to ignore the marketing element, even when seeking the basic aim of sustainable food security.

For this approach to be effective, service providers and farmers need to acquire new skills and different ways of doing business. This change requires time, finances and careful planning. Decisions are needed on the best entry point – for example, to start with producer organizations, production chains, or business support services – and the expected duration of the support programme.



The rural agro-enterprise development process

Main features

The main features of this approach are:

- **Area-based** The process focuses on improving the livelihoods of beneficiaries within a particular geographical area.
- **Participatory** The process is participatory. Partnerships begin by forming a stakeholder or working group, whose members share a common goal in improving enterprise activities for a selected target group.
- **Market-led and targeting growth markets** It aims to enable entrepreneurs in the area to identify and access remunerative market opportunities.
- **Thinking "outside the farm"** It encourages partners and stakeholders to think "outside the farm".
- **Seeking business linkages** Many development processes focus on one segment of the supply chain – usually resource-poor smallholders. The RAeD approach takes a chain approach, and may select interventions at one of several points in the supply chain.
- **Organization and savings** There is increasing evidence that farmers need to be better organized if they are to be competitive. Smallholders should integrate savings and internal loan schemes into their activities and adopt a policy of "no handouts" to avoid dependency syndrome and accelerate self reliance.
- **Seeking continuous innovation** Market engagement is a continuous process rather than a one-off exercise. Markets are dynamic, and agro-enterprises will be constantly confronted with new challenges. Service providers and communities need to be empowered with the knowledge and assets to do this.

Manuals

The RAeD project has produced the following manuals on rural agro-enterprise development. They are available at the website below.

- A strategy for rural agro-enterprise development.
- Developing partnerships, territorial analysis and planning together.
- Identifying and assessing market opportunities for small-scale rural producers.
- Strategies to improve the competitiveness of supply chains for smallholder producers.
- Collective marketing for small-scale producers.

More information: www.ciat.cgiar.org/agroempresas/ingles/index.htm or contact Shaun Ferris, s.ferris@cgiar.org

CIAT's learning alliance for agro-enterprise development

A "learning alliance" is a model of mutual, participatory learning between research, development institutions and rural communities. The alliance aims to accelerate institutional change, improve knowledge management and deepen the level of impact with rural communities.

Whilst there are many successful research and development activities across Africa, it is often hard to learn of successful approaches. The learning alliance approach aims to overcome these barriers. It was developed by CIAT's Rural Agro-enterprise Project (RAeD, page 179) and development partners from Catholic Relief Services (CRS). In East Africa, it involved CRS teams in Eritrea, Ethiopia, Sudan, Kenya, Uganda, Tanzania, Rwanda, Burundi and Madagascar in 2003–4.

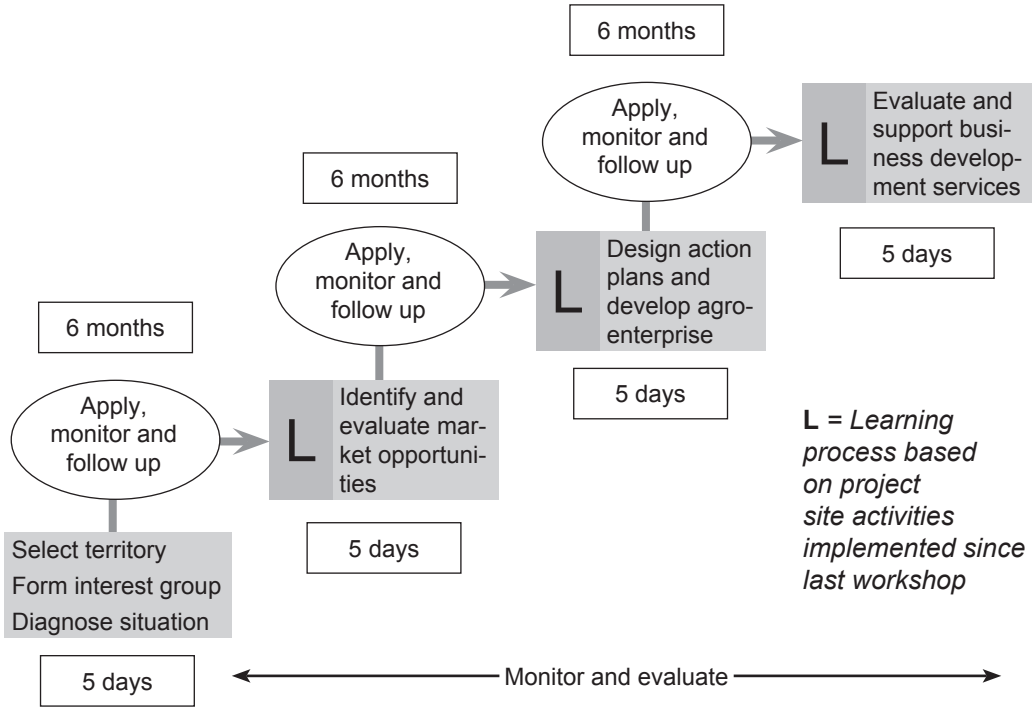
The process involves series of "learning spaces", typically over a 12–18 month timeframe. It comprises the following:

- Identifying a common goal.
- Learning with direction from best-practice guides.
- Putting into practice what has been learned.
- Reflection and feedback on what has worked well and what has not.
- A further cycle of learning, practice, reflection and feedback, etc.

This approach differs substantially from the common practice of attempting to train development practitioners in new methods through short, one-off training courses.

Principles of a learning alliance

- **Clear objectives** Objectives need to be developed from the outset of the process; these are based on the needs, capacities and interests of the participating organizations and client groups.
- **A robust process** CIAT uses the learning alliance to introduce "good practices" that will enable service provider to shift towards a market-led perspective in their agricultural interventions. The process has eight steps (see next page).
- **Shared responsibilities and costs** A learning alliance seeks to benefit all participants; therefore responsibilities and costs should be shared. This is an important precedent to make at the beginning, as funds for out-scaling or training are often tied to project budgets.
- **Flexible learning mechanisms** Learning alliances involve a variety of participants from different backgrounds. Their perspectives and interests to participate in different parts of the learning process need to be ascertained.



The learning alliance approach

Best-practice guides need to be flexible but effective in guiding the group towards common goals.

- **Long-term relationship** The learning alliance takes about 2 years. This time is required to effect meaningful institutional change and observe positive trends at the community level. Trust, generated through effective results, between researchers, development practitioners and donors is the glue to these relationships.
- **Performance and accountability** Performance evaluation of the facilitators and implementers is essential. Poor performance must be addressed, and partners need to ensure that agreed tasks are being achieved.

More information: contact Shaun Ferris, s.ferris@cgiar.org

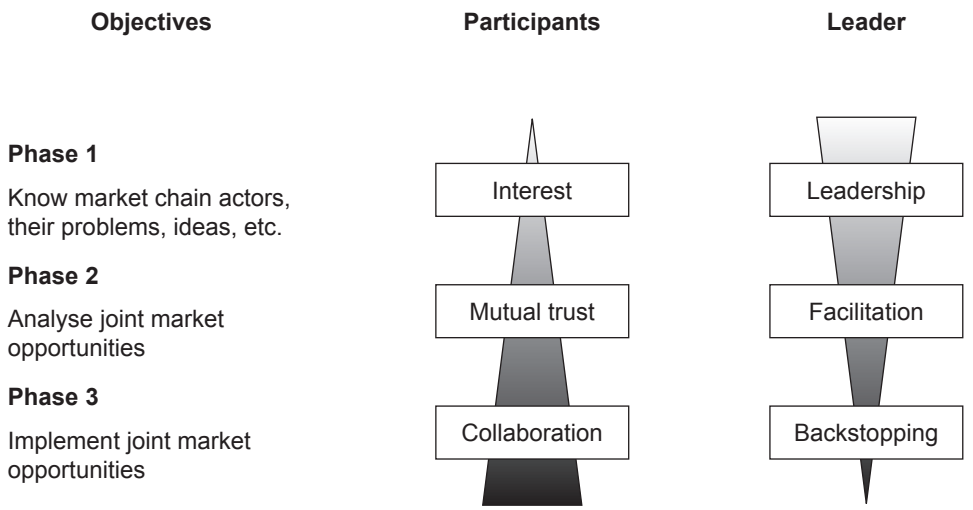
Participatory market chain approach

The participatory market chain approach (PMCA) is a way to foster broad participation in existing or new value chains. It concentrates on solving two limiting factors: the lack of market-oriented participatory method expertise of research and development institutions, and the lack of methods that effectively integrate the different marketing chain actors.

The approach has three phases:

- Create interest
- Develop trust
- Implement collaboration.

The PMCA instrument describes actions and activities within these steps and shows the role of development agencies.



PMCA structure and processes

Source: Bernet et al. 2005

Participatory value chains analysis

Participatory value chains analysis (PVCA) is a modelling and analytical tool to analyse value chains as a part of participatory assessment process. It can also be used as an action-research tool for sustainable participatory processes for strategic learning and ongoing accountability within and between enterprise sectors.

PVCA involves:

- Mapping the chains involved in particular production sectors: the different types of activity, geographical location, and actors in different roles at different levels.
- Quantitative and qualitative research to study the relative distribution of "values" and the reasons for inequalities, inefficiencies and blockages in the chain.
- Based on this analysis, identification of potential leverage points for upgrading the chain as a whole, or redistributing value in favour of those at the bottom.

Key dimensions

- Mapping the chains, networks and systems of interlinked production and exchange activities in particular sectors or subsectors.
- Mapping the geographical spread of linkages and networks operating over international, national and local areas.
- Identifying the key stakeholders at different levels of the chain, different geographical locations and in relation to differing external opportunities and constraints.
- Measuring the relative value accruing to different levels of the chain, different geographical locations and different stakeholders.
- Identifying the governance structures which affect the ways in which values are distributed between activities and geographical areas.
- Mapping the interventions directly targeting different levels of the chain, network or system.
- Clarifying the direct, indirect or unintended impacts at these different levels.
- Exploring the different alternative levels of intervention or strategy.

Principles

Stakeholder participation

- Visual and diagram mapping techniques accessible to all stakeholders.
- Dialogue between stakeholders and hence potentially mutual understanding and respect for their different opportunities and constraints.

Equity and empowerment

- Incorporation of poverty and gender analysis throughout the process.
- Ensuring participation of the most vulnerable and supporting their information and action needs.
- Formation of sustainable systems for ongoing accountability of enterprise and chain governance.

Key stages

1 Scoping the analysis: clarification of questions and investigation strategy.
2 Preliminary value chain mapping.
3 Participatory value chain analysis.
4 Setting up sustainable structures for sectoral and inter-sectoral accountability.

Source: Mayoux 2003

Value chain development

"Value chain development" consists of three stages:

- Evaluating
- Planning
- Managing.

Stage	Activities	Success factors
1 Evaluating	• Evaluate the idea and the market • Review strategy • Assess resources, risks and rewards	• Careful market review • Value chain catalyst • Leadership vision • Value chain knowledge • Strategic analysis • Clear company goals • Measurable objectives
2 Planning	• Select partners • Build relationships • Agree on goals and measures	• Careful partner selection • Commitment from all • Cohesion/interdependence • A dedicated "champion" and chain manager • Collaborative planning sessions • Expert assistance in facilitation • Compelling value chain goals
3 Managing	• Launch pilot project • Integrate systems • Build and adapt	• Honest pilot evaluation • Increasing cohesion • Opportunities to learn • Process for ongoing dialogue • Commitment from the top

Stages and success factors of value chain development

More information: Agriculture and Food Council of Alberta 2002 and 2004

Value chain research

This is a methodology for researchers and intermediary organizations to study value chains as a prelude to intervening in them. It covers the following:

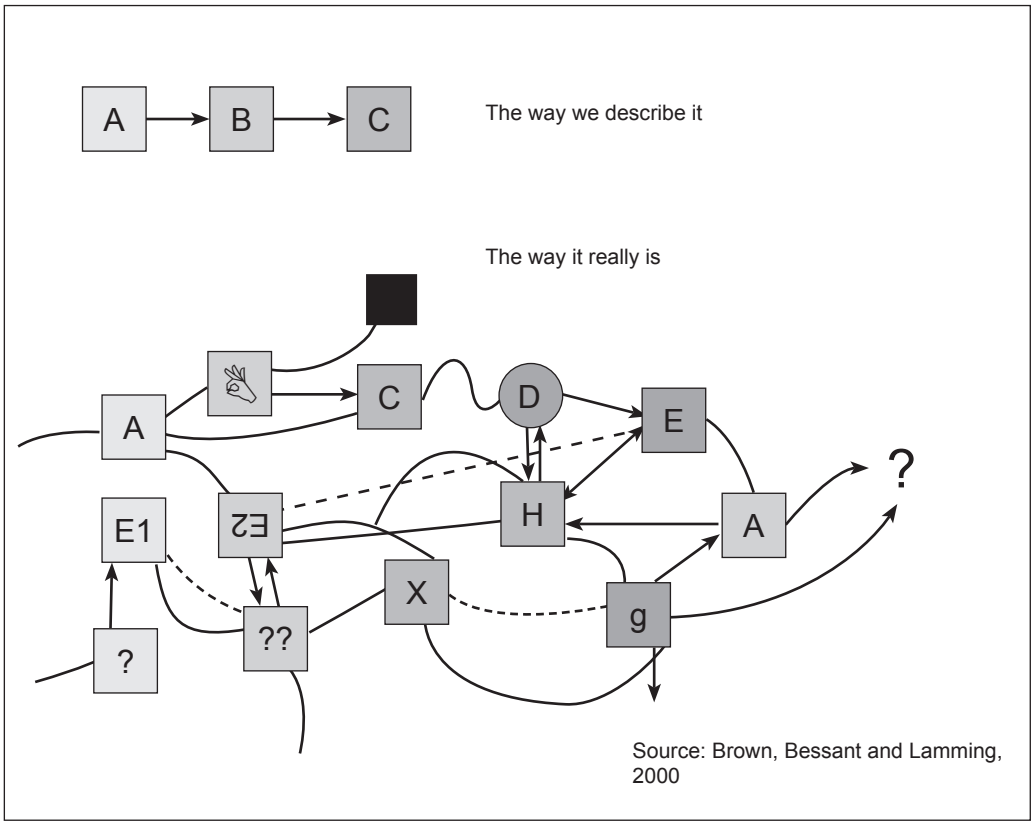
- The point of entry for value chain analysis
- Mapping value chains
- Product segments and critical success factors in final markets
- How producers access final markets
- Benchmarking production efficiency
- Governance of value chains
- Upgrading in value chains
- Distributional issues.

Value chains are complex, and individual firms or farmers may feed into a variety of chains. Which chain to study depends on the primary area of interest and point of entry for research. For example, if the primary area of interest is farmers, then the point of entry will be farms; the analysis moves forward to processors, buyers and their customers, and backwards to input suppliers.

Primary area of interest	Point of entry	What to map	Examples
Agricultural producers	Farms	Forwards to processors, buyers and their customers, backwards to input suppliers	Fresh vegetables to salad packers and category buyers in final markets
Informal economy producers and traders	Home-based workers, street traders	Forwards to processors, assemblers of third party organizers/distributors, backwards to retailers	Outsourcing in clothing and shoes, recycling cardboard cartons to mills, street-based tourist handicrafts
Gender, age and ethnicity	Female labour	Use of female labour throughout value chain	In clothing, women in cotton farms, factories, export agents, design houses, advertising agencies, retail stores
The global distribution of income	The final consumer (and recycling) in a sector	Backwards down whole chain to retailers, buyers and producers	In furniture, begin with groups of customers of department and specialist stores in rich countries

Some examples of different points of entry into value chain research

Value chains are much messier than often assumed. The researcher will sometimes have to make arbitrary decisions on what to map in charting a path through complex value chains.



Value chain mapping: Theory and reality

Source: Kaplinsky and Morris 2000

Participatory research methods

Participatory research is very useful in analysing value chains. It involves local people in collecting and analysing data, with professional researchers acting as facilitators. This has several advantages:

- Local people know most about their own livelihood systems, and have the most to gain or lose in any development effort, so they should be active participants in the selection, design, planning and implementation of interventions that affect them.
- Local people often find it easier to get sensitive information than outside researchers, and can judge the accuracy of information better.
- People who have been involved in the research are more likely to own its findings and recommendations.

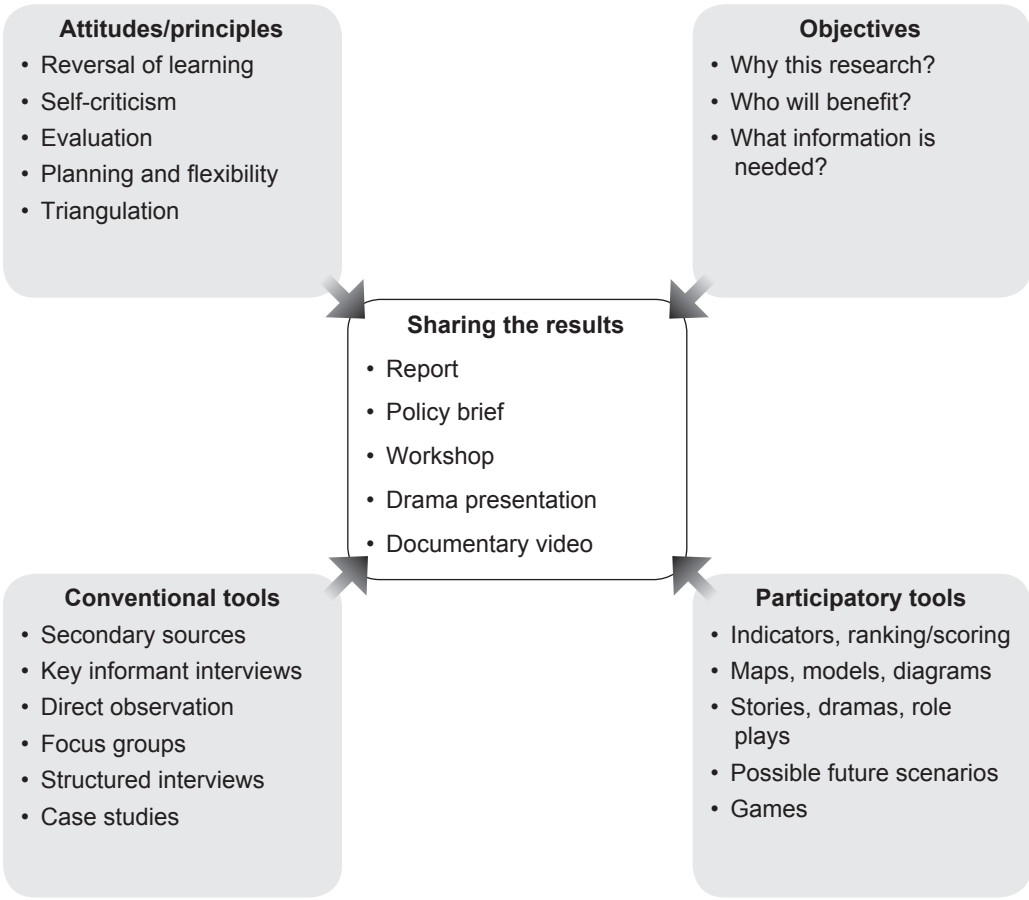
Some guiding ideas

- Be driven by the questions you want answered and not the method.
- The most effective way of answering your questions is often to use a combination of methods and sources.
- Chain analysis is mainly about relationships, so hear both sides of the story.
- Feed your analysis back to the stakeholders. This helps to bring about change.
- Mapping is an empowering exercise: it helps to show up bottlenecks, inequities and leverage points for action.

Attitudes and principles

Participatory research relies on certain underlying attitudes and principles:

- In a reversal of the usual roles, researchers become learners and research subjects become researchers. Researchers must listen to and learn from those being studied.
- Constant self-criticism and evaluation of the process are important for success.
- The research approach must adapted to the local situation and culture: it must be planned in advance, but flexible enough to change if particular techniques are not working well.
- Triangulation, or multiple strategies to study the same phenomenon from different perspectives and using different methods offer additional insights and can reconcile differing results.



Participatory research process

Setting objectives

A participatory study begins with the setting of objectives. It is necessary to state why the research is needed, who will benefit from it, and what types of information will be gathered. Both researchers and the local people must be involved in and understand these objectives.

Methods for data collection

The study can draw on tools from both conventional and participatory methods.

- **Conventional research methods** include the use of secondary sources, key informant interviews, focus group discussions, structured interviews, and case studies.
- **Participatory methods** include analytical methods such as indicators and ranking or scoring techniques; visual methods such as mapping, making models

and drawing diagrams; stories, dramas and role-plays; scenario building and games.

Sharing the results of the participatory process

The results of the research can be shared in conventional form – as a research report or policy brief, as well as in more creative ways to bring the results to those who need the information:

- Workshops to explain the results and enable discussion and questions.
- Dramatic presentations to highlight key points.
- Video to combine verbal and visual messages.

Source: adapted from McCormick and Schmitz 2002, pp 69 and 191–96.

More information:

- *www.ids.ac.uk/ids/particip/research/pra.html*
- *Mikkelsen 1995*
- *PAMFORK, pamfork@nbnet.co.ke*

INFO-Cadena: Instruments to foster value chains

INFO-Cadena is short for "Instruments to foster *cadenas*" (*cadena* is Spanish for "chain"). It is designed to enable technical assistance projects, NGOs and public programmes to support local economic development in rural areas by linking small rural producers to formal markets.

Bases for action

Role of government and sectoral organizations

- Each economic actor must be efficient so it can collaborate in a value chain.
- The actors in a chain organize the cooperation and coordination themselves. The leader of the chain normally takes responsibility.
- To achieve sustainable development (e.g., to benefit disadvantaged groups), the state and development organizations must take the lead and offer additional services and financial support.

Economic opportunities of small rural producers

The following criteria are important in selecting a product (a chain) for intervention by development organizations:

- The business must be viable.
- There must be potential to organize producers and to ensure they do not become dependent on external support.
- The chain should promise social or ecological benefits.
- Do not continue to promote chains where private investment is already profitable and needs no external stimulus.

Which products are most likely to meet these criteria?

- Products that are linked to the use of natural resources.
- Products where small-scale producers have comparative advantages – e.g., products that require labour, are produced on a small scale, or require traditional processing.
- Products that have growth potential of the market, both domestic and export. This is often in high-value products such as fish, meat and fresh produce.

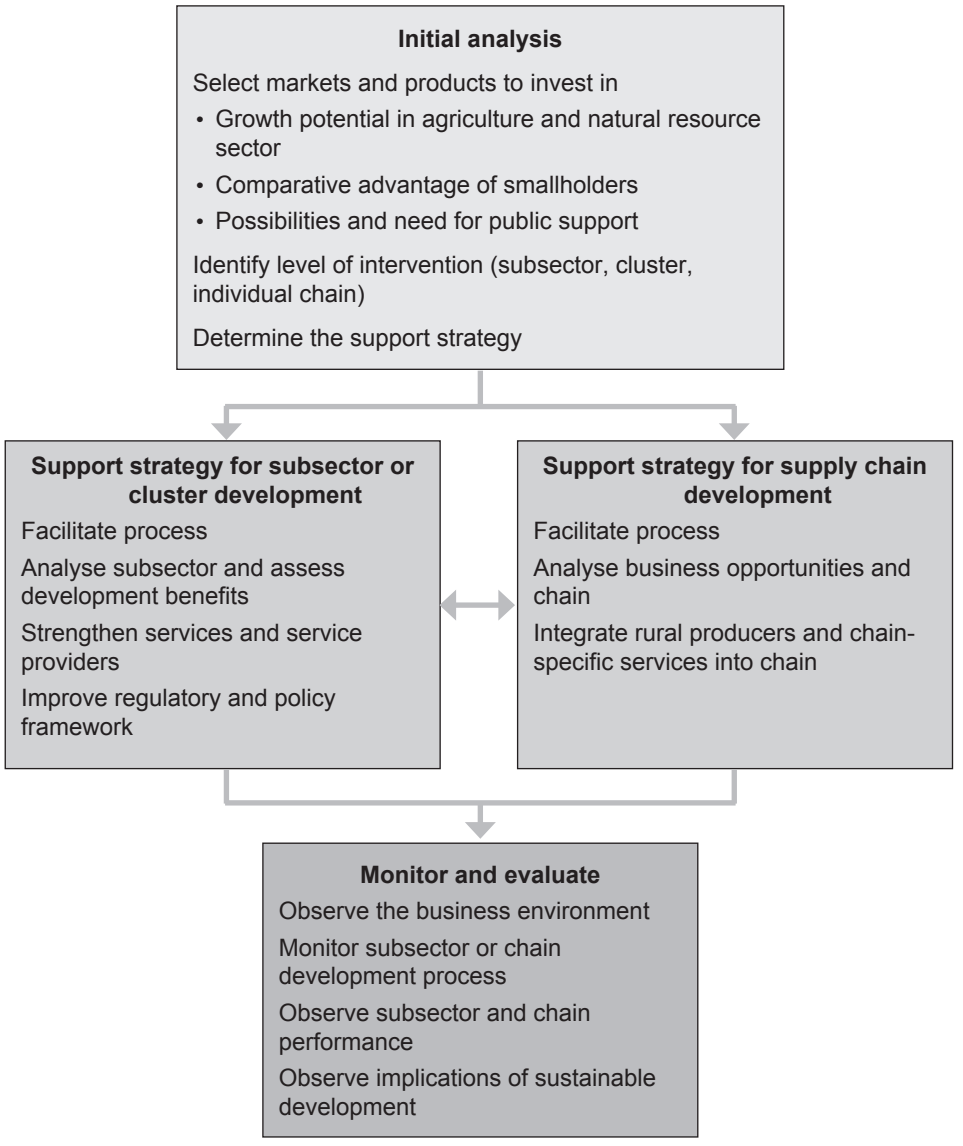
Principles of chain promotion

- Market orientation
- Organization of small producers
- Development as a learning process.

Chain promotion strategies

Building a support strategy for chain development follows a sequence of steps (see the diagram below).

Adapted from Springer-Heinze 2004. This guide provides an extensive list of instruments on issues and tasks in each step.



Steps in promoting a chain in INFO-Cadena

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Brings together many of the publications on agricultural marketing published by FAO since around 1990. The publications include training materials for extension workers and for university students, books on marketing policy, guides on the planning and design of markets and books on market information and farm input marketing.

Resource organizations and websites

ACIAR. Linking farmer with markets: ACIAR's supply chains matter newsletter
www.linkingfarmerswithmarkets.net

ACP-EU trade website
www.acp-eu-trade.org
A non-partisan source of information, documents and links on ACP-EU trade matters.

AgraNet
www.agra-net.com
Information on agriculture and food policy, markets and trade.

Agri Chain Competence Center
www.kc-acc.org

CBI, Centre for the Promotion of Imports from Developing Countries
www.cbi.nl
Dutch government agency promoting the competitiveness of companies from the developing world in the European market.

Doingbusiness, Benchmarking business regulations. World Bank and International Finance Corporation
www.doingbusiness.org
Database provides objective measures of business regulations and their enforcement.

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Export promotion of organic products from Africa, links producers of organic products to markets.

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FAO, Linking farmers to markets
www.fao.org/ag/ags/subjects/en/agmarket/linkages/
FAO website on market linkages.

FAO, Agricultural Support Systems Division
www.fao.org/ag/ags/

Food Security and Food Policy Information Portal for Africa, Pan-African agribusiness
www.aec.msu.edu/agecon/fs2/test/links.cfm?Lang=en&Country=110&Topic=10&Section=2

Imperial College London, Improving market information: Market information and organization in Sub-Saharan Africa.
www.imperial.ac.uk/agriculturalsciences/research/centres/cdpr/imi/

IDS, Institute of Development Studies, Global value chain initiative
www.globalvaluechains.org

IFC, International Finance Corporation: Small and medium enterprise development.
www.ifc.org/sme

IFAMA, International Food and Agribusiness Management Association
www.ifama.org

International Trade Center, UNCTAD/ WTO
www.intracen.org

KIT, Royal Tropical Institute: Business to business: Connecting people, values and markets
www.kit.nl/frameset.asp?/about_kit/html/expertise.asp&frnr=1&

KLICT, Chain networks, clusters & ICT
www.klict.org/default.asp?Lang=EN

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NCBA, National Cooperative Business Association
www.ncba.coop/abcoop.cfm

NetMBA Business Knowledge Center, The value chain
www.netmba.com/strategy/value-chain

NRI, Natural Resources Institute: Natural Resources and Ethical Trade programme
www.nri.org/NRET/

PACA, Participatory appraisal of competitive advantage
www.paca-online.de

PAMFORK, Participatory Methodologies Forum of Kenya
pamfork@nbnet.co.ke
Network on participatory processes to strengthen citizens' voices, influence policy making, enhance governance and transform institutions.

SDC. Focal point for rural development: Value chains
www.sdc-valuechains.ch

SEEP Network, Business development services.
www.seepnetwork.org/section/programs_workinggroups/bds/

SAIPlatform, Sustainable Agriculture Initiative Platform
www.saiplatform.org
Created by the food industry to support the development of and to communicate worldwide about sustainable agriculture involving the different stakeholders of the food chain.

SNV, Netherlands Development Organisation, Reference guides for market access for the poor:
Food security, sustainable agriculture and trade: www.snvworld.org/cds/rgFS
Business development services: www.snvworld.org/cds/rgBDS
Economic analysis: www.snvworld.org/cds/rgea
Microfinance: www.snvworld.org/cds/rgmfin
Trade in agricultural products: www.snvworld.org/cds/rgTAP

UWCC, University of Wisconsin Center for Cooperatives
www.wisc.edu/uwcc/

WBCSD, World Business Council for Sustainable Development
www.wbcsd.org
Coalition of 180 international companies promoting sustainable development.

World Bank, Agro-food Systems, Agribusiness, and Agricultural Markets
www.worldbank.org/afr/aftsd/agribus.htm

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Arnoud has set-up his own non-profit organization in the area of experiential learning and empowerment. Over the last 5 years he has done consultancies and missions for various organizations, particularly for FAO. Currently he is based in the Netherlands and operates as a match-making, information resources and networking broker, with emphasis on facilitating partnerships among farmer field school stakeholders.

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Sander holds a BSc in international agricultural trade from Deventer Agricultural College in the Netherlands, and an MSc in marketing and product management from Cranfield University (Silsoe College), UK. He set up his paprika business in Zambia (1994), Malawi (1995) and Mozambique (2001), where he is working with over 25,000 smallholders. He is involved in the production of paprika, bird's eye chillies, annatto, marigolds, baobab and sausage tree. He is interested in the later two crops because of the new focus on sustainable forest harvesting. Sander has been invited by several institutions to lecture on private sector involvement in development. He has significant experience in smallholder production and extension services. He is also interested in the introduction of new technologies to increase smallholder production.

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Shaun is currently the manager of CIAT's Rural Agro-enterprise Project, which works with partners in over 30 countries worldwide. His interests include market analysis, rural enterprise development, marketing information services, and commodity trade analysis. He previously was regional coordinator of Foodnet, a marketing and agro-enterprise project in eastern Africa. As part of this work, he developed local, national and regional market information and market intelligence products. Shaun has worked in marketing and postharvest innovation since 1989 for research and development agencies including the CGIAR, World Bank, EU, USAID and numerous partner agencies.

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Maria holds an MSc in plant breeding. She has been involved in facilitating sustainable market linkages between small-scale farmers and agricultural companies for 9 years. She is experienced in bean breeding, community development, business training and entrepreneurship development. She has provided consultancies to development organizations in Tanzania on training of trainers, the Faida market link approach and business awareness training for farmers. She focuses on training farmers on entrepreneurship skills, and setting up and managing farmers' organizations.

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Stephen holds a BSc in agricultural economics and agribusiness from Sokoine University of Agriculture, Morogoro, Tanzania. He has worked with the Rural Markets Development Project in Morogoro and Kongwa District, on business development services with Incomet 2001 in the Iringa region, and as an agribusiness officer with Faida MaLi. He has experience in coordinating project activities, building farmers' capacity and conducting business training for farmers. He offers consultancy services in market research, supply chain analysis and sub-sector studies, and developing value chains for farmers. He is currently pursuing a master's in business administration from Clements University, Australia.

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Paul is a British consultant in development communication. He holds a PhD in journalism and mass communications from the University of Wisconsin-Madison. He specializes in easy-to-understand extension materials, developed through intensive writeshops like the one used to produce this book. He also provides consultancy services in various aspects of development communication. He has worked extensively in Southeast Asia, South Asia and Africa.

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Lucian holds a PhD in technology and agrarian development from Wageningen University, where he focused on supply chain management in Chilean export agribusinesses. He has worked as an independent management consultant for agribusiness companies, farmer cooperatives and international agencies including FAO and FairTrade. He is currently a market access and chain development advisor with KIT, focusing on small scale farmers in the South and working in collaboration with the Dutch private sector.

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Martin studied community development at the Institute of Community Development at Tengeru, Tanzania. He has worked with the Agroforestry VI Project in mobilizing communities. He is currently working with MVIWAMO, a farmers' groups network in Monduli District, which focuses on strengthening farmers' groups and coordinating farmers' training and extension services.

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Edwin holds an MA in public administration specializing on human resource management and organizational development. He has wide experience with private and public organizations. He has been involved in the sensitization and mobilization of private sector stakeholders in industry, commerce and the agricultural sector in urban and rural communities in Tanzania. He also offers business training advisory services to medium- and small-scale enterprises in business development and management.

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