# 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.

Chain activity integrators

Chain co-owners

Chain co-owners

Chain partners

Management

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 qual-

ity, 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.
- Define a combination of product and market.
- 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

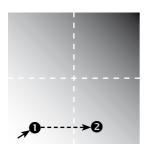
Here are some general lessons from TGF's experience.

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  $\ensuremath{\mathbf{0}}$  .

If they form a cooperative, they may be able to develop into chain partners **2**.

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 biodiesel. 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.



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

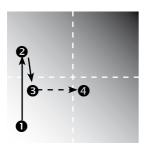
The aim of the original project was to pilot a model of linking women's groups to reliable markets. The women started growing jatropha and processing it. But when the project ended, they began to fall back to their original position as chain actors – as producers of seedlings and oil, rather than of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

But after the end of the project, they stopped making soap, selling their oil instead to Kakute **⑤**.

They will have to become more organized if they are to strengthen their position in the chain **4**.

• 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.

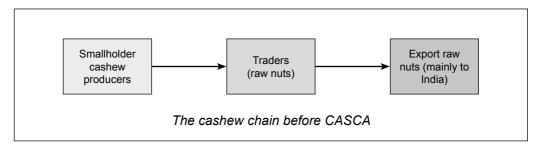
## The CASCA project

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.



 To support local entrepreneurs to establish ten new small-scale cashewprocessing 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.

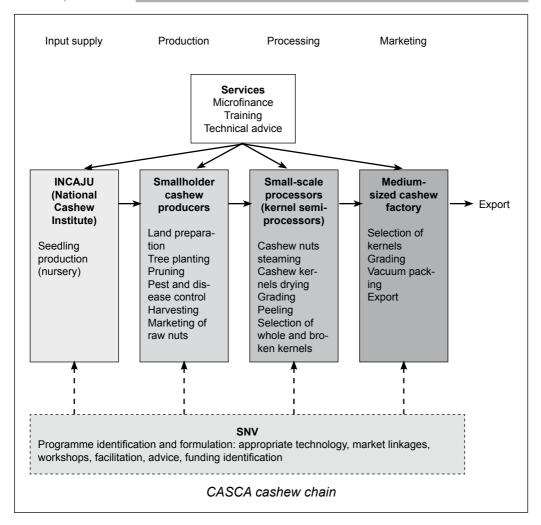
## **Preparatory phase**

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.



#### **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 semiprocessed 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).

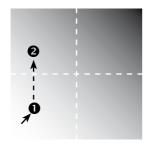
Some of the smallholders work for the small-scale processing units. They benefit from increased income and new employment opportunities. Such livelihood transitions are vital if rural Mozambique is to develop further.

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  $\mathbf{0}$ .

Farmers who are also involved in the small processing units have become chain activity integrators **②**.

#### **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