

**VALUE CHAIN FINANCE
ASSESSMENT OF THE CASHEW
NUTS SECTOR IN THE PROVINCE
OF NAMPULA, MOZAMBIQUE**

Final Report

April 2011

**Prepared for GIZ
African Cashew initiative (ACi)**

**Prepared by
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ACRONYMS AND DEFINITIONS

ACi – African Cashew Initiative
ADPISA - Apoio ao Desenvolvimento de Iniciativas Privadas no Sector Agrário
ADPP - Ajuda de Desenvolvimento de Povo para Povo
AFD – Agence Française de Développement
AfDB – African Development Bank
AMODER – Associação Moçambicana de Desenvolvimento Rural
AMOMIF – Associação Moçambicana dos Operadores de Microfinanças
ASCA - Accumulative Savings and Credit Associations
BOM – Bank of Mozambique
BPD – Mozambican state bank
CCCP - Caixas Comunitárias de Crédito e Poupança
CEPAGRI - Centro de Promoção da Agricultura (private sector promotion unit of MINAG)
CLUSA - Cooperative League of the USA
DCA - Development Credit Authority
FI – Financial Institution
FSP – Financial Service Provider
GAPI - Sociedade de Gestão e Financiamento para a Promoção da Pequena e Média Empresa
GDP – Gross Domestic Product
GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit
HQ - Headquarters
IFC – International Finance Corporation
IMF – International Monetary Fund
INCAJU - Instituto Nacional de Promoção de Cajú
IFAD – International Fund for Agricultural Development
IRAM - Institut de Recherche et d'Application des Méthodes de Développement
KfW - Kreditanstalt für Wiederaufbau
IRAM - Institut de recherches et d'applications des méthodes de développement
MEDA – Mennonite Economic Development Associates
MFI – Microfinance Institution
MINAG – Ministry of Agriculture of Mozambique
MZN – Mozambique metical (Mozambican currency)
NGO – Non-governmental Organization
PCR – Poupança e credito rotativo
RCN – Raw cashew nuts
RCRM - Rede de Caixas Rurais de Nampula
RFSP - Rural Finance Support Program
SDAE – District Services for Economic Activities
SHF – Smallholder Farmer
SME – Small and Medium Enterprise
SNV – Netherlands Development Organization
USAID – United States Agency for International Development
USD – United States Dollars
VCD – Value Chain Development
VCF- Value Chain Finance

Calculation Assumptions

Parameter	Unit	No.
Exchange rate	USD/MZN	29
Average yield of mature Cashew tree	kg/tree	10
Price of RCN	USD/kg	0.86
No. of cashew trees/ha (12m x 12m)	No.	70
Working hours per day	hrs	6.0
Labour costs	USD/day	1.40
Price of 1 seedling	USD	0.70

VALUE CHAIN FINANCE RESEARCH

THE CASHEW NUTS SECTOR IN THE PROVINCE OF NAMPULA, MOZAMBIQUE

Final Report

EXECUTIVE SUMMARY

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in collaboration with TechnoServe, FairMatchSupport and the African Cashew Alliance, is implementing the African Cashew initiative (ACi) with funding from the Bill and Melinda Gates Foundation, the German Ministry for Economic Cooperation and Development and various private sector donors. The Project aims to strengthen the global competitiveness of cashew production and processing in five pilot countries in Sub-Sahara Africa, namely Mozambique, Ghana, Burkina Faso, Ivory Coast and Benin. The project's goal is to assist 150,000 smallholder cashew producers to increase their productivity and thus incomes by a total of US\$15 million per year. The project's support activities additionally aim to create 5,500 new jobs in local, medium and large scale cashew nut processing industries (Große-Rüschkamp, 2010). In Mozambique, ACi's goal is to support 30,000 smallholder cashew producers in four districts of Nampula Province (Moma, Angoche, Mogovolas, and Mogincual) to increase their annual income by US\$ 100 (GIZ Presentation, 2010). The project started in 2009 and runs until 2012. In Mozambique the project implementation began in earnest in May 2010.

Given the constraints noted by the GIZ team during project preparation and initial assessment phases, Mennonite Economic Development Associates was contracted by GIZ to conduct the value chain finance assessment for the Cashew sector in Nampula Province and investigate opportunities for the program to facilitate appropriate and affordable financial services throughout the value chain, and especially for actors targeted to play critical roles in supporting the participation of larger numbers of poor producers in the Cashew value chain. The primary research was implemented using a variety of MEDA- and partner-designed and field proven tools including key informant interviews questionnaires, value chain actor interview guides, financial institution interview research guides, and focus group discussions, which were specifically adapted for the cashew value chain in Mozambique.

The report is divided into four main sections: section 3 profiles the businesses in the cashew value chain, sections 4 and 5 outline the supply and demand for agricultural and specifically cashew financing in Nampula, and section 6 offers recommendations on potential sustainable solutions strategies that could allow ACi to address financial-related bottlenecks in the cashew value chain during the course of their project.

The major stages of the cashew value chain that take place in Mozambique are the input supply level, the production level (dominated by smallholder farmers) and the industrial processing stage, which has been re-built over the past decade through a number of donor-funded initiatives and which now numbers at least eight processing firms in Nampula alone. In addition there are support services to the value chain such as insecticide spraying and agricultural extension for producers.

Despite other donor interventions and development attempts, the input supply and production levels continue to be the weakest in the chain. The input supply level, which consists primarily of cashew seedling suppliers, is dominated by one government agency, which produces and distributes the seedlings at no cost to farmers. The market for seedlings is thus

underdeveloped: the supply is weak, because of the limited production and marketing capacity of the agency, and demand is also weak, since farmers have never had to buy a seedling before, do not have access to sufficient technical support, and can't calculate themselves the potential return on such an investment. There is currently no financing to speak of at this level of the value chain, since there are no private sector actors involved in the business of seedling production or marketing.

At the production level, as is well documented in previous studies of the sector, the dispersed nature of the production amongst thousands of smallholder families does not lend itself well to technical extension or to replanting schemes. Existing trees are aged and low yielding, yet farmers do not have the additional land nor the adequate technical knowledge required to replant new trees. At the same time, cashew as a business, according to the authors' calculations, is not very lucrative and the investment takes more than five years to even breakeven if an individual farmer decides to pursue it on a small scale (for example, one hectare). It is easy to understand why a smallholder would carefully weigh his or her options and potentially choose in favour of a more short-term, higher return investment. As is highlighted by the ACi baseline study, the majority of households in Nampula with cashew trees are still extremely poor, food insecure for part of the year, and have very low literacy levels. These are additional challenges to overcome when designing interventions and communication strategies for this customer in the chain.

Financing for new cashew planting was not observed in this study. The informal nature of the producers, coupled with their rural locations, lack of knowledge of cashew maintenance, and long-term return expectations is enough to keep potential financiers away. There was some evidence of very short-term financing in the value chain (for example advances from buyers to producers, for terms of less than 2 weeks) that helps mainly with liquidity management.

Support services for production level activities have been expanding in recent years thanks to NGO and donor programs. Insecticide spraying is on the rise, which will improve yields, and the business of spraying appears to have relatively low entry costs and potentially high returns, which should incentivize others to enter the market. Value chain financing was also taking place, with sprayers willing to accept payment in kind (with raw cashew nuts) after the harvest season, rather than at the time of the service. This is an opportunity for ACi to capitalize on the interest and momentum around this activity. At the same time, there is work to be done to encourage retailers of spraying equipment to engage more at the customer level and not rely on donors or NGOs to market and sell or subsidize their products on their behalf. Financial institutions could also be encouraged to finance this relatively low-risk start-up business activity. Extension services are less developed and are covered by the government cashew agency (INCAJU) as well as other NGOs. The level of support appeared to be insufficient and it is one area where ACi is planning to devote a good deal of resources. This will be important from a financial standpoint as well, to help protect investments made with high-quality technical support and eventual transfer of know-how to the communities themselves.

Industrial processing in Mozambique has recovered from its collapse in the 1990s and now processes about 30% of the total yield in the country. Firms are mainly locally owned (with one multinational present in Nampula, OLAM), and are usually diversified businesses, which makes net revenue calculations challenging, given the cross-subsidizations between the business lines. While processing firms were not lacking in capital, neither were they investing more to expand their cashew operations. There seemed to be a hesitance to put more money into the cashew sector until some of the challenges at the government policy level (relating to competition from raw cashew nut exporters and export tax regulations) had been resolved.

While cashew nut processing – according to other studies and interviews with sector specialists – also appears to be profitable, it may not be more profitable than other businesses (whether water distribution, construction, or vegetable trading or production). These are the types of trade-offs that are present at the individual firm level and which must be taken into account when determining whether or when investments should be made in the cashew processing business. If additional processing capacity ends up being a goal of ACi, they will need to compare these incentives across industries to determine what interventions or improvements in the technology or the chain itself might lead to increased efficiencies or quality premiums that would encourage additional investment in the sector.

On a positive note, recent global market studies commissioned by ACi and local interviews conducted under this study confirmed that the market for cashew nuts is growing internationally and there is still an opportunity for Mozambican producers to capture a larger or higher-value share of this market. The 2010 cashew season saw the prices for raw cashew nut jump nearly 100% to 30 MZN per kilogram, which could also be beneficial for the ACi project, as more producers may see the value of the cashew business investment. In the course of this study, there did not seem to be a difference in revenue earned for the producer, if he or she sold to a processor or to an export buyer (who would export the raw nut in an unprocessed form). However, this could change over time, or there could be other value chain development or local economic development reasons for which ACi would like to promote the linkages between processors and producers.

The supply for agricultural finance for production level activities in Mozambique is generally weak. This was also the case in Nampula, where few banks or microfinance institutions have made inroads into the sector. Most of the major banks have a presence in the provincial capital (Banco Terra, Banco ProCredit, BCI, etc.) due to the high level of economic activity and its ties with the port of Nacala, but most do not venture very far from the city to attend to customers. If agricultural products are offered, they tend to be for larger customers (with fixed assets as collateral) and are also concentrated on the agricultural processing or trading businesses, rather than production. Microfinance institutions as well as more semi-formal organizations such as GAPI, Caixas das Mulheres, RCRN, Ophavela, and Banco Oportunidade are also in Nampula and several of these have a greater presence in rural areas. The capacity levels, as well as interest in serving production agriculture vary amongst these providers, but there could still be opportunities for partnership with ACi and its clients as is outlined further below and in the report. The organization of the producers, as well as the diversification of their incomes (for quicker returns on investment) will be keys to attracting a third-party financial service provider to the cashew sector.

The study also attempts to quantify the total amount of investment required for the cashew value chain at the levels examined in Nampula. According to the authors' estimates, over the remaining three years of the project, and to include offer the opportunity for new cashew investment for the 30,000 the project hopes to reach, the investment cost for new cashew trees would total approximately USD 10 million. In addition, about USD 2.6 million could be used to invest in additional sprayer businesses, and about USD 1 million could be investment in seedling production activities. This totals approximately USD 13.6 in investment costs. This does not include the operating costs of the cashew production. As well, if the industrial processing continues at its current capacity, and if raw cashew nut remains at its current price of 30 MZN/kg, processors will require approximately USD 82 million in working capital just for raw cashew nut purchasing over the next three years.

The study prioritizes several gaps and weaknesses in the financing of the cashew value chain in Nampula, and offers sustainable solutions strategies for each of the gaps and weaknesses.

- 1) **Tackle financial illiteracy and savings for investment through savings and credit groups:** The low level of literacy amongst cashew producers, as well as lack of experience with formal or even informal savings or credit could prevent smallholders from participating in replanting schemes, if they do not understand the potential returns, have not saved money, or do not know how to manage credit for the investment. The facilitation of all project beneficiaries at the producer level into savings and credit groups (there are several modalities well-known and well-functioning in Mozambique and especially in Nampula), would build financial literacy and a culture of savings in the target communities. The groups are designed to be self-sustaining after twelve months of training and support.
 - 2) **Help to bring the private sector into the input supply market through incentives and financing links:** To address the second constraint, that is the lack of private sector participation in the input supply market (cashew tree seedlings), the recommendation is a shift of these activities from the public to the private sector, using a combination of technical support, investment incentives (matching grants, etc.), and demand-side interventions to stimulate the market. The end goal is that small-scale private nurseries or medium sized farmers are eventually producing and marketing cashew seedlings on a profitable basis to smallholder farmers.
 - 3) **Promote turn-key investments in cashew in plantation style for farmers willing to invest in new cashew planting:** As outlined above the critical investment need at the production level should also be addressed. The report recommends – with the input of many key informants – the installation of block-style plantations for cashew replanting. Only at the critical scale of more than 30 hectares does cashew production actually become a feasible and attractive investment. Individual producers will still have their own individual plots within the block plantation, with responsibilities for maintenance and control over the revenue, but the high-upfront investment costs are greatly reduced through the economies of scale of the plantation. Plantation management and capacity building can also be more easily supported by ACi, and local government more easily engaged for the purposes of land rights as well as potential credit or subsidy for the land preparation costs. Links with buyers, traders, or processors will also be facilitated by the plantation approach.
 - 4) **Continue the expansion of market-driven support services for cashew producers:** The upswing in insecticide treatment activities is a good base from which to expand these types of services in a private sector led approach. The spraying business appears profitable and of value to cashew producers, now what is required is to encourage additional entrepreneurs to take up the business, through marketing, training, and financing links. Encouraging companies that market spraying equipment, chemicals, and/or fuel would also increase the sustainability of the market function, and could even lead to innovative partnerships such as leasing or rent-to own facilities. Showing financiers the profitability and low technical knowledge required for the business should also generate interest in financing the businesses.
-

- 5) **Partner with other actors to support long-term development of agricultural finance capacity constraints in the banking / microfinance sectors:** As is common in many markets, lack of capacity in the banking / MFI sector on how to properly engage with agricultural businesses is one major constraint in encouraging financing from flowing to the sector. Since agriculture continues to be a huge priority for the Mozambican government and its donor agency partners, a coordinated approach, through engagement of educational institutions, the microfinance association, and other industry level players could have benefits not just for the cashew sector but for the agricultural sector as a whole. It would also leverage ACi resources with the resources of other projects or agencies.
- 6) **Help formalize the value chain and its relationships through experimenting with different types of contract arrangements:** Contracts – whether formal, informal, or somewhere in-between – lend legitimacy to business relationships and help to establish credibility and trust between actors. These are critical steps in formalizing and improving value chain transactions, which are key to accessing finance. Already, banks and MFIs are using buyer contracts (in other value chains) as a substitute for formal collateral, which shows that they recognize the inherent lower risk for customers with established selling or buying relationships. The block plantation approach will make contracting with buyers easier for farmers, but even in the interim processors may be especially interested to pre-arrange purchases before prices rise or exporters enter the market. ACi – as a neutral third party – can have a facilitation role to play, while being careful not to take on the negotiating responsibilities of either party.
- 7) **Help farmers build assets by documenting and legalizing capital investments of new cashew plantations:** Farmers are continually capital constrained due to the lack of documented and quantifiable value of the assets they have. In other countries, perennial crops (such as vineyards) have an accounting value based on International Accounting Standards and are often used as collateral or at least as proof of assets for credit analysis purposes. By keeping accurate, transparent records of cashew investments at the outset, ACi can support farmers to legalize their assets which would help them not only to borrow funds potentially but also enable the asset to be transferred (sold) at a market rate should the producer wish to change location or business. It would also help to create a culture of valuing and thereby caring for cashew trees – new and old.

The report concludes with some recommended next steps and closing observations. Following on this study, ACi will want to choose amongst these recommended solutions according to their project's priorities and capacities. In some cases, testing of ideas with the market actors involved (producers, associations, local government, INCAJU, etc.) will also be required. Budget may also be a deciding factor – depending on the budget available to dedicate to financial linkages, ACi will need to choose its value chain finance strategy accordingly.

Where financial sector partnerships are needed, ACi will need to make a final selection of partners from the list of recommended options, as well as determine management support and buy-in from the partner.

There are undoubtedly challenges in the cashew sector in Nampula province in Mozambique. However, there are also opportunities, given the rise in demand and prices, the solid support of the national and local government for the sector, and the existence of potential partners to the

project for financing support. The relevant parties in the sector – public and non-profit, and some private sector actors – seem eager to figure out how to invest in the sector, but lack coordination and a model that would allow them to do so. ACi has the unique opportunity to provide the facilitation needed to encourage cooperation amongst the actors for the benefit of the smallholder farmer and eventually the entire value chain. Investing in cooperation mechanisms (coordinating bodies that involve all stakeholders, education, and information sharing) and creating workplans and assigning tasks among actors could show real results in a short amount of time.

Financial institutions are still not serving ACi's target value chain actors. However, with the proper incentives – such as support to expand to new areas, and facilitating information about cashew production as a business – there is more than one Nampula-based organization that would be willing to test a new product for ACi's cashew producers. With proper risk management and monitoring, and by strengthening producer – processor relationships, cashew has the potential to become a bankable business in Mozambique. Testing partnerships using contracts as collateral, and sensitizing local financial institutions in Nampula to this potential market could make a significant contribution. As the value chain matures, these activities – around coordination, partnership development and marketing – can be slowly transferred to these actors themselves. ACi should take special care to dedicate time and effort in the initial phase to show “proof of concept” – solid examples of an institution or scheme that has successfully (e.g. profitably) served a rural segment with financial services, in order to attract attention and interest from other financial actors in the future.

1.0 INTRODUCTION

1.1 Introduction to the GIZ “African Cashew Initiative”

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in collaboration with TechnoServe, FairMatchSupport and the African Cashew Alliance, is implementing the African Cashew initiative (ACi) with funding from the Bill and Melinda Gates Foundation, the German Ministry for Economic Cooperation and Development and various private sector donors. The Project aims to strengthen the global competitiveness of cashew production and processing in five pilot countries in Sub-Sahara Africa, namely Mozambique, Ghana, Burkina Faso, Ivory Coast and Benin. The project’s goal is to assist 150,000 smallholder cashew producers to increase their productivity and thus incomes by a total of US\$15 million per year. The project’s support activities additionally aim to create 5,500 new jobs in local, medium and large scale cashew nut processing industries (Große-Rüschkamp, 2010). In Mozambique, ACi’s goal is to support 30,000 smallholder cashew producers in four districts of Nampula Province (Moma, Angoche, Mogovolas, and Mogincual) to increase their annual income by US\$ 100 (GIZ Presentation, 2010). The project started in 2009 and runs until 2012. In Mozambique the project implementation began in earnest in May 2010.

The project pursues five objectives in order to achieve the overall goal:

- Increase quality and quantity of cashew nuts production, ensuring thus the competitiveness of African cashew production on global markets,
- Strengthen local medium- and large- scale, cashew processing industries,
- Improve market linkages along the value chain and promote African cashews,
- Support an enabling environment for cashew production and processing,
- Identify and analyse learning areas and implement innovative projects on pilot basis.

Cashew production is one of the major income generating activities for Mozambican households and the economy as a whole – the cashew industry accounts for approximately two and half percent of Mozambique’s exports, generating nearly 33 million USD foreign currency surplus (International Trade Centre, 2008). Cashew sales are also one of the main income sources for rural farmers: according to the ACi Baseline Survey, about 55% of households in Nampula districts surveyed earn up to 40% of their income from cashew.

Unfortunately, sub-optimal agricultural practices and few economies of scale opportunities in both production and marketing, compounded by limited access to capital (investment, loans, and other financial services) prevent cashew farmers from investing in trees or planting good quality seedlings. According to the ACi estimates, poor producers could at least triple their net earnings if they could afford to invest in new seedlings and develop basic pest management practices.

Facts about the Cashew Industry in Mozambique

- Between 750,000 – 1 million smallholders have cashew trees , producing over 80,000 MT of raw cashew nuts (RCN) annually
- Foreign exchange earning from cashew is about USD 50 million annually
- Nampula produces about 65% of the total production
- About 30% of RCN is processed domestically; the remaining 70% is exported as RCN, mainly to India.
- A small percentage is processed in the informal sector within the country (Große-Rüschkamp, 2010, TechnoServe, 2009).

Therefore, one of the objectives of the ACi program is to improve access to finance for agricultural production. Producers need financing – short-term capital, but some also investment capital – for improved technology, inputs such as fertilizers, seeds, agrochemicals, fuel, tools and equipment and the labour used to plant, harvest and transport their crops to the market. The agri-processing level could also potentially benefit from additional finance, in order to finance expansion, increasing the amount of raw cashew nut processors buy from local producers, and to introduce value chain financing to the cashew industry in Mozambique.

1.2 VCF Research Study: Scope, Assumptions, and Objectives

Given the constraints noted by the GIZ team during project preparation and initial assessment phases, Mennonite Economic Development Associates was contracted by GIZ to conduct the value chain finance assessment for the Cashew sector in Nampula Province and investigate opportunities for the program to facilitate appropriate and affordable financial services throughout the value chain, and especially for actors targeted to play critical roles in supporting the participation of larger numbers of poor producers in the Cashew value chain. An extensive amount of research and reports on the cashew value chain in Mozambique already exists; for this reason the Value Chain Finance (VCF) Assessment did not seek to duplicate or comment on the validity of those studies. The scope of the study was strictly limited to the value chain finance aspects of the cashew project in Nampula in order to be able to understand in detail the specific constraints of the sector. It is important to note that the scope of the assessment did not extend to the following agendas:

- Value chain analysis more broadly (outside of VCF aspects, for example relating to production volumes and flows, numbers of actors, enabling environment, and power relations/chain governance)
- Market analysis (size and trends in cashew markets, national or global)
- National or international agriculture or trade policies as they relate to cashew trade and production (except where related to financing)
- The analysis is limited to the stages of the value chain that take place in Mozambique. The VCF research and analysis does not extend to the end consumer of the cashew kernel in international markets.

Despite this narrow scope, naturally the research had to take into account additional information learned on these issues, especially on value chain analysis and development priorities. Since the GIZ project has a flexible Value Chain Development (VCD) approach to the sector, the team explored financing options that would be possible under a number of different VCD interventions. This simply means that the scope for financial interventions was wide, and not constrained by specific project modalities. The research study makes the following assumptions about the value chain, which the reader should keep in mind:

- The cashew value chain is one that GIZ in coordination with its donors has determined will be appropriate for intervention for poverty reduction goals in Nampula province
 - The cashew value chain has sufficient market demand for its products, and has the capacity to produce appropriate products for the market, that justify financial investment in the value chain
 - The production of cashew is appropriate to the Mozambican agriculture system in terms of environmental, soil, climate, production techniques, and other agronomic considerations
-

These are minimum criteria that must be present in any value chain, in order to be finance-worthy, and the Bill and Melinda Gates Foundation as well as the German Ministry for Economic Cooperation and Development have already investigated these criteria prior to their involvement in the sector. Therefore this study will not address these questions and references provided at the end of this document should be referred to for more detail on these topics.

The main objective of Value Chain Finance Assessment was to identify potential approaches for successful introduction of value chain financing schemes in the cashew industry in Nampula Province, with special emphasis on the clients and relationships of the ACi Programme in Mozambique. As further described in section 2.0 below, this involved investigation of both the supply of and demand for financial services in the cashew value chain, identify missing financial links, and propose alternative models for financing enterprises in the chain based on the observed opportunities and capacities of the actors involved.

The MEDA team consisted of Nicole Pasricha (MEDA HQ) and Jonathan Muradzicua (MEDA Mozambique). The research took place during a period of eight weeks in November and December 2010. **Appendix 1** provides detailed Terms of Reference with activities, scope and responsibilities, as well as expected outputs of this assignment.

2.0 RESEARCH METHODOLOGY

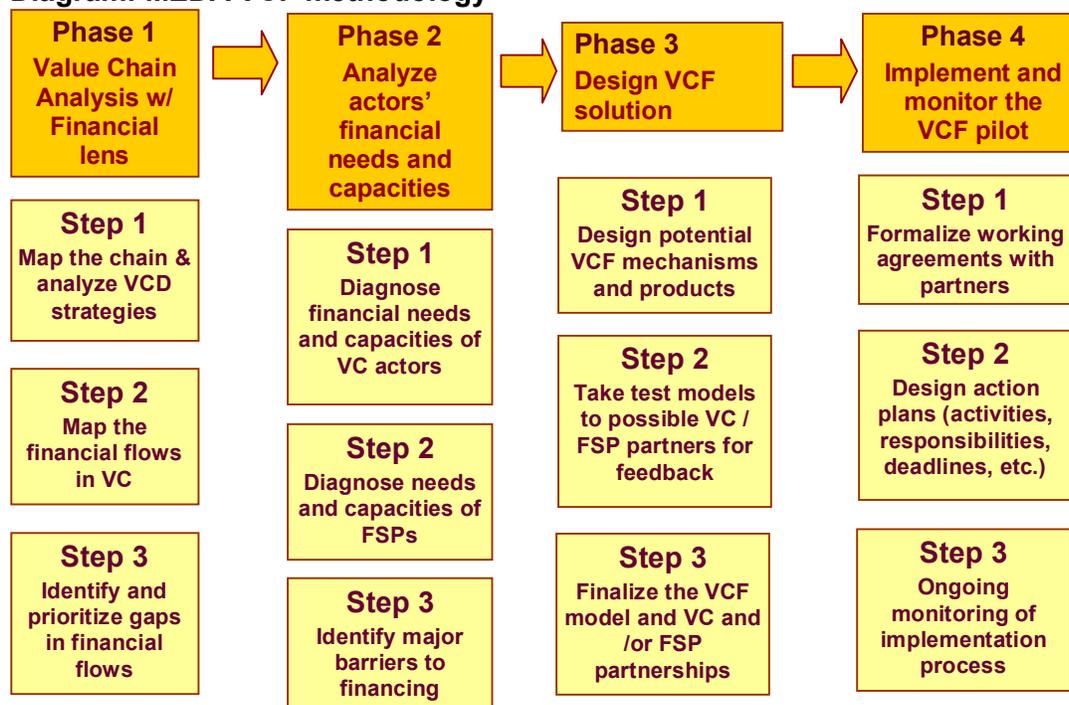
2.1 MEDA's Value Chain Finance Assessment Approach

MEDA uses our tested Value Chain Finance research methodology for studies of this type. The chart below provides an illustration of the steps in the process. The assessment was conducted using both primary and secondary information sources. For the primary research, the MEDA team spent time in Nampula and Maputo in order to:

- Conduct basic background scoping on the Mozambique cashew value chain in order to better understand the financial needs, demands and constraints of the sector actors, with a specific focus on small farmers and processors
- Gain exposure to the existing and potential flow of capital and other financial services within the value chain channels, understand existing formal and informal supply of financial services, identify gaps and propose potential interventions and solutions in addressing capital needs of the cashew value chain participants.

Appendix 2 provides a full schedule for the field research including dates, meetings, contact names and details.

Diagram: MEDA VCF methodology



Source: Adapted from R. Junkin, J. Angulo, 2009

The VCF assessment in this case included Phase 1, Phase 2 and part of Phase 3 (Step 1), ending at the stage of design of potential interventions. Testing, implementation, and monitoring of the VCF interventions will take place during the course of the ACi project.

The primary research was implemented using a variety of MEDA- and partner-designed and field proven tools including key informant interviews questionnaires, value chain actor interview guides, financial institution interview research guides, and focus group discussions, which were specifically adapted for the cashew value chain in Mozambique. The following table gives an overview of consultations held during the field research and applied tools and methodologies. **Appendix 3** lists and provides the full research tools used during the research.

Table 2.1: List of Interviews and Applied Tools

Value chain actor or key informant	Interview Tools Used	Number of Respondents	
		Person	Location(s)
Financial Sector Actors			
Banco Terra	Financial institution VCF Interview guide	1	Maputo
Banco Oportunidade	Financial institution VCF Interview guide	1	Maputo
Banco ProCredit	Financial institution VCF Interview guide	2	Nampula
Red de Caixas Rurais de Nampula	Financial institution VCF interview guide	2	Nampula

Caixas das Mulheres	Financial institution VCF interview guide	1	Nampula
Standard Bank	Financial institution VCF interview guide	1	Nampula
BCI	Financial institution VCF interview guide	2	Nampula, Maputo
GAPI	Financial institution VCF Interview guide	1	Maputo
Key Informants (donors, NGOs, etc.)			
USAID	NGO and Government Agency Questionnaire	1	Maputo
Technoserve	NGO and Government Agency Questionnaire	1	Maputo
KfW	NGO and Government Agency Questionnaire	1	Maputo
AFD	NGO and Government Agency Questionnaire	1	Maputo
CLUSA	NGO and Government Agency Questionnaire	1	Nampula
INCAJU	NGO and Government Agency Questionnaire	4	Nampula, Agoche Maputo
AGRIFUTURO	NGO and Government Agency Questionnaire	4	Nampula, Maputo
ADPP	NGO and Government Agency Questionnaire	1	Nampula
ELIM	NGO and Government Agency Questionnaire	1	Nampula
AMODER Ass. Moz de desenvolvimento rural	NGO and Government Agency Questionnaire	1	Nampula
Independent Consultants	NGO and Government Agency Questionnaire	2	Maputo
AMOMIF	NGO and Government Agency Questionnaire	2	Maputo
Value Chain Actors			
Condornuts Ltda.	Processor Interview Guide	1	Nampula
OLAM Ltda.	Processor and trader Interview Guide	1	Nampula
Miranda Ltda.	Processor Interview Guide	1	Nampula
Private Nursery	Producer Interview Guide	1	Nampula
Farmers Union	Focus group discussion	17	Muecate
Individual Farmers	Producer Interview Guide	3	Nampula, Angoche Namponda,
Mogovolas Producer Group	Focus group discussion	21	Mogovolas
OLAM Factory Manager	Processor Interview Guide	1	Monapo
SDAE	NGO and Government Agency Questionnaire	2	Monapo, Mogovolas
Alexim Ltd.	Processor Interview Guide	1	Maputo

Secondary research included a study of a variety of reports and websites on private sector development, financial sector, microfinance sector, agricultural development, and economic

development projects and interventions in Mozambique including ACi project and partner reports. A full list of documents consulted can be found in **Appendix 4**.

3.0 CASHEW VALUE CHAIN ACTORS: BUSINESS PROFILES AND CASH FLOWS

3.1 Input Supply Level

Cashew seedling production / distribution

At present, this function in the value chain is only performed by a public sector agency, INCAJU, through a number of large-scale nurseries including several in Nampula province. As is well documented elsewhere, including through GIZ's own experience, this arrangement has been less than satisfactory for a number of reasons:

- INCAJU does not have the capacity to produce the number of seedlings required for replanting campaigns
- INCAJU's nurseries are located too far from farmers' fields to transport seedlings on a timely and healthy basis
- INCAJU doesn't have the transport capacity (vehicles, fuel) to move seedlings to the many locations where farmers are located
- INCAJU's technical team is very small in number and can't respond to the need for technical support to farmers on care and maintenance of seedlings during the first critical months after planting

It should be noted that INCAJU receives praise for its work in seedling replication, testing of varieties, and more research-oriented work. INCAJU's funding comes from the Ministry of Agriculture, normally through the export tax on RCN. This funding has been decreasing in recent years. The documentation of use of funds is sometimes difficult, given the bureaucratic nature of most government agencies.

Perhaps more importantly, and as has also been documented in various reports already, the lack of a private market for seedlings has led to a loss of value associated with the input product. Rather than discuss seedling 'sales', donors, NGOs and government discuss seedling 'distribution', and demand for the product is also depressed as there are no private companies marketing the benefits of cashew seedlings and providing support for farmers who might actually wish to purchase these. Neither the seller / distributor (INCAJU) or the buyer / user (producers) knows how much a seedling should cost, and costs of production, while documented at the large-scale nursery level, are unclear at a smaller production level. Despite this, various sources indicated that it would be possible for seedlings to be produced at a smaller scale (both from a technical and cost standpoint), and medium-sized farmers like Mr. Abubacar (a private entrepreneur located near to Nampula city and engaged with cashew for several years, profiled further below in the section on emerging farmers) have been producing seedlings for their own use for many years, as have processing firms that operate plantations. As these seedlings are produced for their own use, the business does not always carefully calculate the costs of production nor does he or she attempt to separate out use of some inputs (like water) between cashew seedlings and cashew trees.

Based on available information, a basic production budget was constructed for seedling reproduction. It assumes a non-nursery, outdoor production venue for 12,000 seedlings. The production cycle for seedlings is approximately 90 days and should take place leading up to the

main replanting season of December to February (see cashew calendar in next section). There is also a full cost of seedlings production included in **Appendix 6**.

Table 3.1. Estimated cost of production – 12,000 Cashew Seedlings

ITEMS	Total cost - MZN	Total cost - USD
Inputs	30,810.00	962.81
Tools / instruments	10,365.00	323.91
Protective Gear	2,820.00	88.13
Infrastructure	2,500.00	78.13
Labor	78,000.00	2,437.50
Transport	4,950.00	154.69
GRAND TOTAL	129,445.00	4,045.16
Production costs per plant	10.79	0.34

Source: INCAJU, interviews with medium-scale producers

The potential businesses to fill this role will be discussed further in the financing needs and interventions sections. At this stage, there are no existing businesses to profile.

3.2 Production Level

Smallholder farmer cashew producers

As numerous publications and persons report, small farmers account for 97-99% of all cashew production in Mozambique. This is one reason that the sector has received so much attention from the Government and donors, in an effort to leverage smallholder participation for poverty reduction purposes.

Currently, as more than one report notes, there are no small ‘cashew producers’ in Mozambique, only ‘cashew collectors.’ This is because the cashew trees are scattered around plots, and ownership, while sometimes known, is difficult to prove or enforce. At the same time, the vast majority of farmers have never invested themselves in cashew: trees were inherited or existing, many inputs are free or subsidized, and most farmers do not spend time or money on tree maintenance.

At the smallholder level, it is important to understand the context of the household and community as the backdrop to any income generating activity such as cashew. GIZ has already invested in a high-quality baseline study of households in the project districts which gives excellent overall data on the situation of the cashew-producing smallholders in Nampula (Weiss, 2010). The general situation of smallholder cashew producers in GIZ priority districts can be summarized as follows, based on the baseline study, other reports, and with some anecdotal reports through this study’s interviews:

- Educational and literacy levels are very low: Heads of household are largely uneducated – 48% of them have completed no more than 2 years of school and less than 50% can read and write Portuguese or another language. In two-thirds of producer households, no more than one person can read and write any Portuguese at all. Over 30% of households with either girls or boys ages 6-12 do not send any children to school.
- Food security is a significant problem: Many households routinely experience a “hungry season” and consider it a normal part of life; about 80% of households did not have

enough food for everyone in the household for at least one month of the previous year and over 75% experienced a hungry season of more than three months.

- Crop selection including cashew and relative income: Smallholders have between 0.5 to 2 ha of landholdings. Most farmers produce about 4 different crops including cashew, through sole or intercropping. The other major crops include maize, cassava, groundnuts and beans, although peas and vegetables are also produced. About 50% of farmers have no more than 50 cashew trees, 75% have no more than 100 trees. About 55% of households earn up to 40% of their income from cashew. Average yields are between 1.5 – 6 kg of RCN per tree per annum, and 70% of households produce no more than 200 kg of RCN per annum. GDP per capita in Nampula is approximately \$274, however of this the majority is non-cash income (TechnoServe, 2009). Most other (non-cashew) crops produced are consumed within the household. Sesame is another important cash crop.
 - Cashew production as a business: In the survey, farmers often didn't know how many trees they had, or counted burned / unproductive trees in the total. Only 10% of smallholders spray cashew trees with insecticide, but up to 45% plant new seedlings. Higher proportions reported weeding (90%) and pruning (80%). When it comes to selling RCN and managing the cash income, this is usually (75% of time) done by the male head of household. Farmers did say they would be willing to invest additional time / resources in cashew (70% answered yes) but the survey team doubted the reliability of this response, since no investment was actually required. Reluctance to make the investment centred on their perceived lack of knowledge of how to correctly manage planting or grafting of cashew seedlings and eventually production. This lack of knowledge was frequently brought up in interviews during the MEDA VCF study as well.
 - Association participation: Most cashew producers (82%) are not members of farmers' associations. In MEDA interviews, those producers who were members of associations thought that benefits from membership were for technical assistance support and potentially for more organized selling of RCN. Producers who were not members did not see benefits to joining at this time.
 - Assets: Livestock, particularly chicken and goats are common, while cows and other large animals are relatively rare.
 - Cashew trees as an asset: Smallholders interviewed had in some cases bought or sold existing cashew trees from a neighbour. Others reported that the cashew trees could be 'pawned' – giving use of a tree to another person until a debt is repaid. These are indications that the producer estimates the cashew tree to have a value that is quantifiable in the very local market. While most inputs are currently given free of charge, farmers did report anecdotally that they were willing to pay for seedlings potentially with cash (10-15 MZN) or with RCN (1 kg). This is also an indication of the value attached to investment in future production of cashew.
 - Land rights and ownership: In some cases, farmers have a traditional right to use land for farming and to live on, however they do not have legal ownership of the land itself. Farmers surveyed indicated that they own the land they use (97%).
-

Table 3.2 Agricultural Calendar and Smallholder Livelihoods for Cashew in Nampula Province

Activity	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Rainy season												
Land preparation	■	■	■	■								
Seedling reproduction		■	■	■								
Transplant seedlings				■	■							
Weeding cashew					■	■	■					
Spraying cashew										■	■	■
Cashew Harvest / sales*		■	■	■								
Other Crop Harvest **							■	■	■	■	■	■
Hunger season				■	■	■	■					

Source: Große-Rüschkamp 2010, Technoserve 2009, interviews.

* Starting in year three of cashew production cycle

** Cassava, grains, beans, potato, etc.

Producers were asked about their use of financial services. The majority had never accessed a loan and did not have a savings account anywhere. In some cases, the producers (in groups or associations) had accessed credit from an NGO or from the local government for purchase of the spraying equipment package. The terms of the credit were usually concessionary: in one case the equipment was priced at about half of retail value, in the other, the term of the loan was flexible and interest rate was low or negligible.

In terms of trade financing or other value chain finance at the producer level, there were a few examples of short term financing taking place. In the case of marketing, some producers – when affiliated with an association – were receiving advance payments from the buyer (a processor) for purchase of RCN (this was observed in the Fair Trade value chain and with Miranda processing firm). The advance was very short term (perhaps 1-2 weeks) and was extended to the forum or association, and it appears to have been used as working capital by the association to do purchasing.

A few producers were also benefiting from the services of the ‘independent’ sprayers (producers who had been given spraying equipment on credit), through a system whereby trees are sprayed during the relevant months (June-August) and then payment is made, usually in RCN, at the time of harvest. The going rate appeared to be approximately 2 kg of RCN per tree sprayed. Depending on the actual yields of the tree, this could be considered a high price in some cases, however most interviewees agreed that this was a worthwhile investment, considering the improvement in yields from spraying.

One group of producers was participating in a savings and credit group, which had been established by a local NGO. (Savings groups have several names in Mozambique and elsewhere including RCN, ASCA, ROSCA, and others, depending on the modalities of operation). There were more members in the savings group than in the producers’ association, which was interesting. The group members (19) were each saving 5 MZN weekly, and had saved a total of nearly 4,000 MZN. They were also making small loans to group members (10% interest) and to non-members (20% interest)

Given the low levels of literacy highlighted by the baseline survey, it is not surprising that producers did not report much use of financial services, as financial literacy and numeracy levels are probably also equally low. This would correspond to the findings of the Mozambique FinScope Survey 2009, which showed financial literacy was much lower in rural areas than in urban ones: more than half of rural respondents of the FinScope Survey did not know what a bank was, and only 4 % had ever accessed formal financial services.

At present, there are no smallholders that were identified who are producing cashew as a business endeavour on a plot of land dedicated to cashew. (There are a few emerging farmer type smallholders who are profiled below). Therefore the cashew cash flow is based on other existing data (from Große-Rüschkamp 2010), information collected from interviews with larger cashew producers and processors growing cashew, and anecdotal information from small farmers. To make the estimate more realistic, it includes costs and incomes from other intercrops which are usually done with cashew, namely beans and groundnuts. **Appendix 7** contains the full breakdown of all expenses and revenue sources.

Sample Cashew P&L and Cashflow for 1 ha smallholder (independent plot, not in plantation/block scheme)

ITEM	Year									
	1	2	3	4	5	6	7	8	9	10
INVESTMENT COSTS	597	-	-	-	-	-	-	-	-	-
OPERATIONAL COSTS	179	377	380	375	378	382	385	387	390	393
Total Costs	776	377	380	375	378	382	385	387	390	393
Total, REVENUE	94	94	195	342	490	639	685	733	783	837
Net Results	(682)	(283)	(184)	(33)	111	257	300	345	393	444
Cashflow	(682)	(966)	(1,150)	(1,183)	(1,072)	(815)	(515)	(170)	223	667

As can be seen from the sample cashflow, cashew production on a small scale, without the benefit of economies of scale, is not an overly attractive investment for a small farmer. The investment does not earn a positive return until year five, and does not generate a positive cashflow until approximately year nine. (And this assumes a selling price of RCN three times higher than in previous years, at 30 MZN per kg). If the household must decide between cashew investment and another, shorter term investment with potentially higher and faster returns, it is easy to see why the other opportunities might seem more attractive than cashew. Naturally, the farm household is diversified and there are other sources of income (both farm and non-farm) besides cashew; nevertheless on a stand-alone investment analysis basis cashew is not extremely profitable in the short- to medium term.

In spite of this, there are other benefits to cashew investment which the GOM, NGOs, and the producers themselves recognize. Cashew trees provide long-term income to a household (more than 30 years, sometimes up to 50 years depending on care and variety), and require little care once mature, a suitable activity for older or younger members of the household.

Cashews also provide diversification of income, and cash at a time when other crops are not in harvest. These benefits, which are difficult to quantify in a simple cash-flow, are those that will need to be promoted if farmers are expected to invest into a business that requires much more patience than usual to see a return. The project should also investigate ways to lower the cost of investment to producers so that the financial return is realized faster; this is explored further in the section on sustainable solutions.

Emerging cashew farmers (more than 10 ha of cashew)

While rare, there are examples of individuals who have begun to grow cashew trees on a more commercial basis of over 1000 trees. These producers appear to have other income sources (e.g. pension, other business) and have decided to invest their excess cash in cashew as an investment for their own and their families' future. It is difficult to estimate how many farmers in this category might exist; TechnoServe guessed that there were perhaps between ten to thirty, but perhaps not all in Nampula. Because these types of businesses are relatively self-sustaining, having used their own savings and earnings, they are not usually very active in donor projects (too large) or in banking portfolios (too small).

Examples of Emerging Cashew Producers

Sr. Joao Mecuceti Sekera, a former- teacher in Namaponda

Sr. Sekera has a plantation of 2750 trees on an area of 80 ha. He relies on labour from his family of nine. He started to develop a cashew plantation after he retired from teaching, using his pension funds as seed capital. He suffered greatly from the 1994 drought and decided to turn to cashew production as a safety net – that if all other food crops fail there will always be cashew to rely on.

He started in 2000 with 1500 seedlings and investment capital of 7,000 MZN for land preparation. He does not own a bank account but plans to open one in Angoche in the future.

Sr. Sekera employs two sprayers and owns two spray machines. This year he has already produced 4 tons and is confident to produce 5 tons of cashew nuts. He managed to purchase a pickup truck and a motorbike from two years harvest of 9,5 tons.

Sr. Abubacar, a leading farmer in Anchillo

We also met with Mr Abubacar who has a 4300 tree plantation in Anchillo. The plantation is about 8 years old with some other new trees coming up. In fact he started the plantation with an aim of developing a private nursery from his own private funding. The drive behind his plantation was a cashew tradition more than anything else.

Sr. Abubacar employs 14 permanent workers and 30 seasonal workers. He produces sesame and groundnuts in addition to cashew. It was not possible to get the investment capital applied as there is not proper accounting records and the owner did not have memory power to remember. His annual bill for wages is 480,000 MZN and 120,000 MZN for other costs. He would be willing to be a support resource and potentially market linkage for farmers in his area, as this will also reduce theft from his plantation.

Sr. Abubacar also produces his own seedlings for use on his plantation. Unfortunately he lost 380,000 MZN due to 200,000 uncollected seedlings he produced for INCAJU in 2008. He feels that with proper training and supervision, other farmers could also produce seedlings, for example his own employees have already learned the techniques from him.

Large-scale Commercial farming of cashew

There are very few cases of large-scale commercial farming operations in Mozambique in any sector, including cashew. Agricultural sub-sectors with some commercial farming include the horticultural sector in Chokwe, the tea sub-sector in Zambezia province, and the sugarcane

sector, in which companies have established vertical integration schemes (Arlindo, 2007). Some processing companies have established small cashew plantations (more than 100 ha of cashew), this is described in the section on processors below. However this is not their primary line of business and they did not express interest in expanding their production capacities. Overall, there are no commercial producers of cashew in Mozambique.

3.3 Traders and Other Intermediaries

There are several types of traders present in the cashew value chain. There are independent traders, who buy and sell RCN on their own, as well as processor- or exporter-affiliated traders who are contracted specifically by one buyer, and are usually advanced cash from the company itself in order to purchase the RCN (cash payment to producers) in large quantities. This could be considered short-term financing for traders, who actually represent the processor or exporter. One representative of the company OLAM in Mogovolas noted that he always had several million dollars “out in the field” at once – as cash advances to traders, who would then call him when the RCN was bulked and ready for pick up. Margins for traders were difficult to determine, as they are not normally forthcoming with this information, but some buyers estimated that the trader would earn between 2-5 MZN per kg of RCN depending on whether cost of transport was also included.

In addition to these two types of traders there are other more minor intermediaries such as the local shops which buy RCN from producers in the local vicinity. These shops are stationary and act as a go-between for traders and rural producers. They earn a low margin on the RCN, likely between 2-3 MZN per kg.

No one reported advance payments by traders to individual producers, or delays in payments for purchase of RCN. RCN is a product in high demand (at least in the 2010 season which we observed and where prices were over 100% higher than the previous year at between 25-32 MZN per kg), and cash on delivery is the standard transaction expectation. This means that traders (or, by extension processors and exporters) must have a lot of cash on hand for RCN purchases. One MFI reported extending loans to traders, but on the whole lack of cash was not noted as a constraint at the trading level, perhaps due to cash advances from buyers, or by buyers doing their own procurement and thus cutting out the need for intermediaries.

3.4 Producers ’ Associations

In some areas, producers had been mobilized into associations. Producers organizations in cashew, as in other sectors and other locations of the country, have had varied levels of success at becoming relevant actors in the value chain. There are reports of successful associations promoted by MIRUKU and the fair trade marketing partner, but these were not visited by the research team. Of the smallholder farmers visited, some were members of associations and others were not. The role of the associations with regards to cashew production at this time was relatively limited, but the grouping of farmers did make it easier for donors, government, and NGOs to give support to the farmers.

While association development is an admirable goal, sometimes with donor-funded programs the formation and strengthening of farmer groups appears to be an objective in itself, without taking into account the concerns and needs of the private sector. Consultation with the private sector in those cases has been very limited or nonexistent, and results in few successful linkages between smallholder farmers and the private sector (ECIAfrica, 2006). This may or may not be the specific case in cashew, and there were a few experiences with associations playing the role of brokers between processors and exporters and farmers, as described below.

But generally speaking, the associations themselves had not figured out a strategy to become relevant to their members as well as to the private sector, in order to offer services to both groups which would make doing business with the association an attractive option. The box below highlights the experience of one donor project in cashew in Nampula that attempted to work through associations.

Cashew Sector Promotion through Associations – The case of Angoche

From our interviews with the Angoche district extensionist it was revealed that the district had benefited in the past from work done by Sofreco – Sociedade Franesa de Estudos e Consultoria (an AFD affiliate). Sofreco funded the development of plantations in blocks and proceeded to form associations, for example the Association Namitoria, which was given a 50 ha plantation in the area of Nacuzupa. Several plantations were developed and given to be collectively run by the associations as opposed to individually owned. Farmers argued that they need to individually own their bloc so that it can be passed on in the family.

The outcome was, that after the Sofreco project finished the plantations were no longer well managed. Organization of the production became a big challenge with most of the confusion coming from ownership status. The blocs no longer exist as such and the associations have gone dormant. Only one association still exists – Association de Namangula-Nacala – but it is not successful due to management problems.

Source: Research team interviews.

The Angoche example illustrates some of the challenges in working with associations in a management capacity. The financial needs of the associations were not obvious, as they did not have a clear business strategy to support their members in building their cashew business. In the MEDA VCF research, as is common about discussions about financing with associations, there was some talk of need for heavy machinery for the group, as well as for technical assistance and potentially irrigation. The issue with collectively owned assets usually becomes proper management, maintenance, and sharing of the assets. In Mozambique, associations are in the advantageous position of being able to access the government's Fundos do Distrito, which could enable some low-cost financing for projects of importance to the groups. A full cost-benefit analysis of a project would be required before proposing a financing solution, in the next section we describe a production level investment that could be supported by associations in some form.

3.5 Primary Processing Level

Microprocessors of cashew nuts

In Nampula, two groups, ADPP (Ajuda de Desenvolvimento de Povo para Povo) and IKURU, a cooperative received technical assistance from SNV (with funding from Triodos/HIVOS) in order to support several producers associations to obtain small-scale cashew processing equipment. AMODER also participated, by providing microfinance loans for the groups to purchase the processing equipment as well as packaging equipment. The program successfully installed ten processing units, eight of which continue to function, at a cost of 225,000 MZN each. The units had an initial capacity of 25 MT / year, which has now been increased to 50 MT/ year. The units are located in Monapo and Muecate. The repayment on the units was 100% according to SNV (Razulo, 2008).

Originally, the microprocessing units sold ungraded processed cashew kernels to medium/large scale processors for grading. However, difficulties regarding scale of the businesses,

relationships and cash flow meant the microprocessors needed to search for an alternative market opportunity. As a result, in 2006 with the support of SNV, the microprocessors in conjunction with AMODER and ADPP formed a limited company, called Ozivacaju. This company serves as a marketing platform for the micro-processors. The microprocessors have 49% of shares in Ovizacaju and AMODER and ADPP together account for 51% ownership (Razulo, 2008). Ovizacaju was able to create a market link with buyers in South Africa, which proved to be a good market. IKURU also provided working capital at the outset, but now the microprocessors have run into difficulty in their operations, without access to working capital to purchase the RCN for processing. To overcome this challenge, they struck a deal with one large processor, Ilha Caju (GANI Comercial), whereby the processor would advance them RCN, which Ovizacaju would process and then return for payment, sort of like a processing service. However, this arrangement has not always worked optimally and at the time of our interviews it seemed that the microprocessors were still awaiting delivery of the RCN. The microprocessors also have access to packaging equipment, but they appear to have leased this equipment out to other users for now, as they are unable to make productive use of it.

In practice, the viability of the microprocessing model is unclear with regards to its application in the ACI supported value chains. More information will be required on the investment and operational costs (labor, etc.) necessary to do the microprocessing, versus the additional price margin earned by groups, to determine whether the return on investment is worthwhile. The market demand for microprocessed kernels should also be verified. Ovizacaju seems to have had a good experience in the South African market, but the ACi project is geared towards European markets, and there is a push in those markets towards increased traceability and food chain controls in the industry. Kernels processed in the microunits will need to be marketed with the same level of quality control assurance. Finally, investment capital and working capital linkages will be needed if microprocessing is promoted in ACi.

Domestic Industrial Cashew Processing Firms

Through support from Technoserve, the domestic processing industry was relaunched beginning in about 2001. By some estimates by 2009 there were approximately 22-25 processing factories, of which approximately 14 are in Nampula province. Some processors have more than one factory in Nampula. The processing stage that takes place in Mozambique is the primary processing only, sometimes referred to as 'shelling' (roasting, cutting, drying and peeling); the international buyer is responsible for the second stage of processing (e.g. roasting and adding flavour and consumer packaging). Based on the interviews with a few of the processing companies, as well as with GIZ and other actors knowledgeable about the industry, it appears that cashew processing is a fairly profitable (but not excessively profitable) activity, with margins between 15-20%. Processors did not go into details of their cashflows with the research team, as this information was considered sensitive and in any case has been documented in detail by Technoserve and others, who helped these businesses to get started. All sources indicated that the smallest processing plant size to justify the investment and breakeven would be 1,000 MT. The most current list of processors in Nampula province is in the table below.

Table 3.3. Cashew Processing Factories in Nampula Province

Name	Location	Year established	Capacity under use	Potential Capacity
Miranda Industrial Lda.	Namige	2002	1400 MT	1500 MT
	Angoche	2004	3000 MT	3500 MT
	Meconta	2004	1000 MT	n.s.
	Napaco	2005	600 MT	1000 MT
Ilha Caju (GANI Comercial)	Ilha de Moçambique	2004	1000 MT	5000 MT*
Condor Caju Lda.	Nametil	2005	4500 MT	5000 MT
Condor Nuts Lda.	Anchilo	2008	2500 MT	7000 MT
IPCCM	Murupula	2003	450 MT*	1000 MT*
Olam	Monapo	2004	3500 MT	5000 MT
Koroxo Lda	Cehure	2006	1700 MT	2500 MT
TOTAL			19,650 MT	27,000 MT

Source: GIZ (2008), Interviews

* Estimate

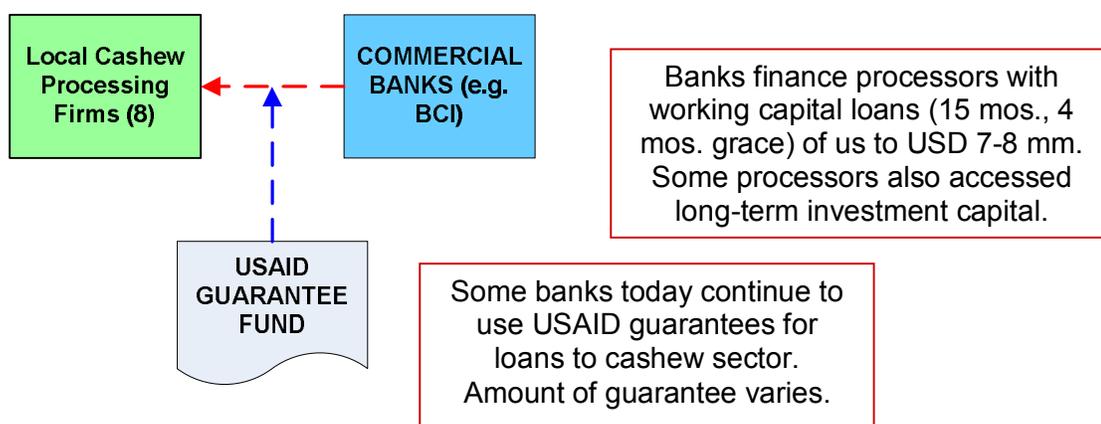
The owners of cashew processing factories usually operate several different businesses, only one of which is cashew processing. Condor Nuts is a division of Condor, a group of Portuguese businessmen involved with hotels and construction; Miranda Industrial Lda. deals with marketing of both cashew nuts and groundnuts as well as other agricultural food crops, macadamia nuts, and water. OLAM is a multinational company with integrated supply chain management of 20 agricultural commodities in more than 60 countries, and accounts for 45% of all primary processing of cashew in Africa and 35% of all trading (McKinsey, 2010). Because these are diversified business operations, the business and investment decisions of the companies are difficult to analyze on the basis of cashew alone – in reality the company is balancing numerous borrowing and investment opportunities and cash is fungible between the various activities. Cash borrowed for cashew may be used elsewhere; similarly earnings from cashew might be invested in other activities and vice-versa. This is important to keep in mind as we explore the motivations and incentives of processing firms with regards to cashew value chain development.

Some of the most relevant operational issues discussed by the firms and key informants are noted below:

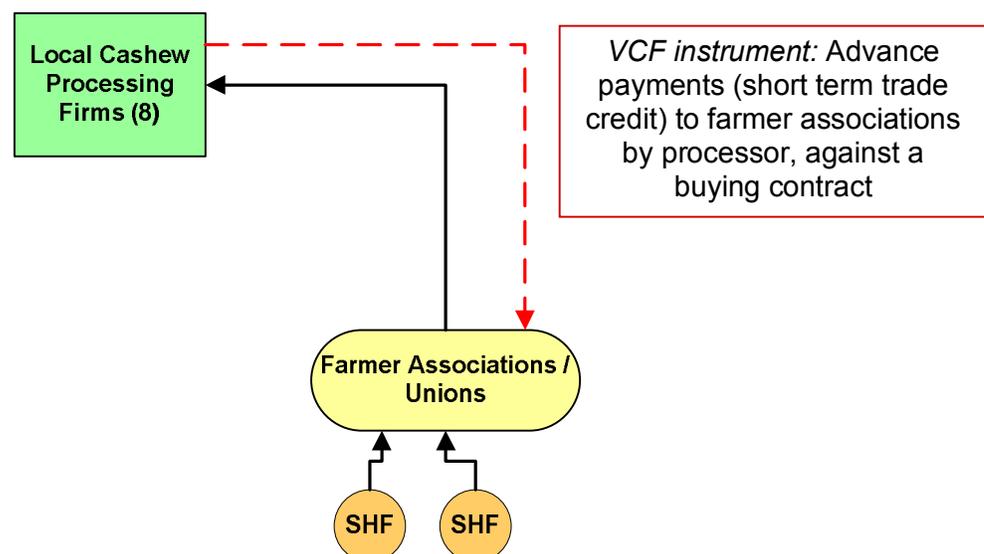
- RCN buying season is short: processors require large amounts of cash during a short period (3 months) to buy and store enough RCN to keep their factories at capacity for the following 12 months. If the price of RCN rises rapidly during the season (e.g. based on world demand and direct exporter activity) sometimes processors do not have enough cash on hand to the amount of RCN that they would like.
- RCN price vs. price of processed kernels: A few processors indicated that they set a price ceiling at the beginning of the year, and that once the price goes above that they would stop buying, based on a break-even calculation. Presumably this means that very

high RCN price does not always mean correspondingly high prices for kernels, especially since there can be a delay of up to 11 months before the RCN are processed and ready for export.

- Some processors maintain small cashew plantations (100 ha or more), but this is not their preferred activity and do not plan to invest more in production. Challenges in integrated plantation management included finding labor, theft of RCN from trees, and land acquisition. At least one processor (Miranda Agrícola) had also piloted a smallholder plantation model but could not continue it due to lack of financing, according to the owner. GIZ felt that there could be other factors besides financing involved in the decision to discontinue this operation.
- Procurement of adequate volumes of RCN is the major challenge for processors. Most use their own buying agents, and also purchase from other independent intermediaries. There were some successful examples of cooperation with farmers' associations for purchasing, including using buying contracts. For example, the above mentioned cooperation of Miranda Agrícola in advancing working capital to an association based on a contract, as well as Condor buying agents establishing formal working relationships with farmers' associations for the purposes of more frequent and regular buying patterns. In general, processors welcomed any support that would help them to establish better / more solid relationships with producers. At the same time they thought that there was not much hope for more formal buying relationships, since producers could easily sell to others including exporters.
- The continued profitability of cashew processing seemed to be questioned by some actors. One processor had left the business already, another was planning to sell his holdings for now and re-enter the business when the business environment became better (Miranda Agrícola). Presumably this referred to government policies around cashew export and the non-enforcement of a regulation that stipulates that cashew processors RCN needs should be fulfilled before raw cashew nut exports are permitted.
- Access to short-term financing: Processors were relatively satisfied with the short-term financing provided from banks, mainly BCI but also others. However, it was noted that these loans were mainly for raw inputs purchase (RCN) and were not properly able to be used for other working capital needs. The loans could be accessed in USD at 6%, with 15 months term including four months grace period. The bank enjoyed a USAID partial loan guarantee of 60%, but also required a long list of other types of collateral including factory buildings, inventory (RCN), insurance on buildings and inventory, and personal guarantees.



- Access to long-term financing: Processors did not have plans to expand their processing capabilities, preferring to remain at their current capacity levels of between 2,000-4,000 MT per factory. As noted above, unless enough RCN can be purchased for satisfy current processing capacity then it wouldn't make sense to invest in further equipment. At the same time, difficulties in having a reliable workforce, and general uncertainties in the cashew sector policies (export, etc.) mean that expansion is not the primary goal at this time. . Processors had, though, accessed long-term loans from BCI for the investment in current equipment, using collateral from other businesses (buildings, equipment) to back the loan. Stand-alone cashew processing businesses without other assets could have difficulty in accessing long-term capital, or the cost of such capital could prove prohibitively expensive.
- Procurement challenges: Processors are unanimously interested in improving their supply chain management techniques. High competition in the marketplace for RCN, coupled with a spot-market relationship between most buyers and sellers, means that processors can never be sure of guaranteed supply from any location. There have been several attempts to improve the status quo, such as:
 - Buying contracts with associations: in Muecete, Miranda Industrial had signed a contract with an association for a certain quantity of RCN. How early in the season this contract was signed was not known. The processor then advanced part of the purchase price a week ahead of collection of the RCN. All parties seemed satisfied with the transaction.
 - Supporting cashew producers during the year: Condor has staff (at least 2, perhaps more) that go out into the field to offer support to cashew producers with the objective of improving supply chain relationships. They also make arrangements for buying and transport of cashew at harvest season.
 - Processors seemed interested in supporting investment in plantations, despite the risks. They were willing to support plantations close to their plant operations – financially or in-kind – even though they understood that there would be no way to guarantee that producers would eventually sell the product to them. There was some general estimate that if they could even capture 25% of the eventual new production which would come on line after 3-5 years, the return on the investment would be worthwhile to them.



3.6 Exporters

Independent Cashew Exporters

Technoserve estimates that there are about 10 major cashew exporters based in Maputo and Nacala ports. The data collected on exporters here mainly comes from secondary sources as exporters were not available for interview. Coming from India and other parts of Asia, exporting companies appear to have significant financial backing and are extremely connected with world prices and market movements, making them agile in their buying patterns. While processors were quick to denounce exporter buying practices, producers did not seem to have a preference for who they sold to, as long as the price was comparable to other offers. (This is not to say producers could not benefit from more market information. At present, though, there did not appear to be any significant difference in buying prices between processors and exporters). There were no reports of exporters advancing financing to producers, but they do have buying agents that receive cash for buying on behalf of the company.

Agro Industrias Associadas Lda. (A.I.A.)

AIA is a private company established by nine Mozambican processing firms that market cashew kernels jointly under the brand name “Zambique” with a guaranteed quality standard. The main activities of AIA are:

- Support for bulked imports for factory production, (mainly consumables but also non-durable machinery)
- Manage price negotiations with customers (~70% futures contracts, ~30% spot sales)
- Complete paperwork and logistics for exporting processed nuts
- Remit sales, net of costs, to member processors
- Promote and manage Zambique™ brand (Technoserve, 2009).

Currently, the principle buyer of AIA Zambique cashews is Global Trading Agency BV (Netherlands). The company, besides purchasing nuts, also offers support by facilitating purchasing guarantees and market linkages and gives advice in quality management of raw and processed nuts. GTA (through White Bird International) has minority shares in one processor in Mozambique (Miranda Industrial Lda), which also helps to strengthen their credit-worthiness for local bank financing (GIZ, 2008). At the time of this study information on other buyers was not available, although processors claimed that they had diversified their buying market.

Mozambican processors that do not export via AIA have to establish direct trade relations either with brokers or directly with retail and supermarket chains in the big consumer markets. This is not an easy task since the lack of trust-based and stable output buyer relations is one of the key market barriers for firms trying to enter the export market (Krause, 2010). GIZ however believes that the process of directly entering the export market may be easy enough for individual processors. They know of examples of processors that have established their own marketing channels. OLAM (a multi-national) also naturally operates independently from the AIA group.

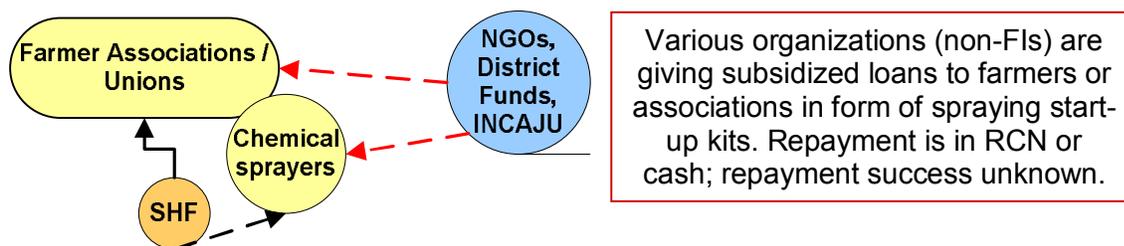
The research team met with processors who are members of AIA who seemed satisfied with the services received to date. We did not enquire as to the financing needs of AIA which appears to simply represent its processor members. AIA benefits from purchase guarantees which seems to facilitate trade finance or local bank financing, and at this time no additional financing needs were identified.

Support Services

Tree insecticide sprayers

As mentioned earlier, several agencies including INCAJU and local NGOs have been encouraging farmers to take up the additional support service business of spraying trees with insecticide. The spraying is purported to increase tree yields by two to three times, and farmers appear to value the service as evidenced by their willingness to pay for it.

To date, the government and NGOs have been the ones sourcing the spraying equipment from the supplier (Agrifocus), and offering it to either associations or individual farmers on credit. The terms of the credit varied, for example in the case of Olipa in Muecate, they offered the spraying package (includes the sprayer, protective gear, and chemicals, which are provided free by the government) for 8,500 MZN, which is lower than the retail cost. The association was given up to 24 months to repay, although the terms seemed unclear (interest rate, etc.). INCAJU was charging more market rates for the equipment (approximately 15,000-20,000 for the package), and also allowing up to 24 months for repayment. Repayment performance of these loans was not documented, although it was reported to be high by INCAJU (self-reporting) to the researchers and also reported to be low (reporting to the GIZ team). The lack of record-keeping makes it difficult to determine the repayment performance. There were no examples – although they may exist – of individual farmers going directly to the supplier and purchasing spraying equipment on their own. This would be signal that the business has been noticed to be profitable, and farmers independently decide they want to participate.



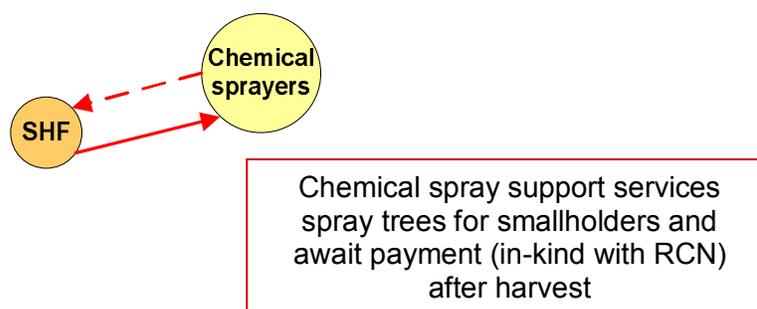
Based on basic cost and fee for service information, a simple profit and loss statement can be constructed for the tree spraying business.

Table 3.4. Profit And Loss: Tree Insecticide Sprayer

ITEMS	Column1	Column2	MZM	USD
Costs				
Sprayer			13,000.00	406.25
Protective Gear			2,820.00	88.13
Chemicals	1 L/100 trees		11,232.00	351.00
Fuel	0.11 L / 100 trees		3,520.00	110.00
Total costs			30,572.00	955.38
Annual Revenue	Total RCN	RCN price	MZM	USD
1000 Trees sprayed = @ 2 kg RCN per tree	2,000.00	30.00	60,000.00	1,875.00
ANNUAL RESULT - 30 MZN	W/o fuel/Chem	30.00	44,180.00	1,380.63
ANNUAL RESULT - 30 MZN	With fuel/Chem	30.00	29,428.00	919.63
1000 Trees sprayed = @ 2 kg RCN per tree	2,000.00	15.00	30,000.00	937.50
ANNUAL RESULT - 15 MZN	W/o fuel/Chem	15.00	14,180.00	443.13
ANNUAL RESULT - 15 MZN	With fuel/Chem	15.00	(572.00)	(17.88)

Source: INCAJU, farmers

Interviewees estimated that one sprayer could spray up to 1,500 trees in a season, so this is a more conservative estimate of 1,000 trees. It does not include transport costs if the trees are very far. Insecticide is provided free of charge from INCAJU (subsidized by government), but in the future it could be offered at real cost. There are thus two results shown: one including the costs of fuel and chemicals and one without (the current actual costs). Even including these other costs it appears that this is a profitable business, with many potential customers, that has modest start-up costs. If the price of RCN drops dramatically, the business might not be profitable in year one, if it had to purchase chemicals and fuel at market rates (would be rather breakeven) but subsequent years would show positive returns. After the initial investment in year one, the business would be even more profitable, or could lower its fees, or could travel further and absorb the transport costs. Tree sprayers were also willing to wait to be paid until after the harvest season, when farmers had RCN or money to pay for the service.



Technical support services / other actors in cashew sector

The main providers of agricultural and value chain support services are the government, the private sector and non-governmental organizations (NGOs). The government, Direção de Agricultura, provides agriculture extension to smallholders, although extension services are not present in all districts. In the case of cashew, INCAJU maintains technicians in each district of

interest to the project: 5 in Angoche, 4 in Moma, 3 in Mogovolas, 2 in Mogincual, as well as 1 in Muecate and 1 in Monapo. According to interviews with the ACi team and other informants, the skills and capacity of the technicians is not always uniform across the province. A lack of funds also sometimes prevents INCAJU technicians from completing their duties (e.g. no money for fuel for motorbikes to visit farmers, etc.)

There are also a number of NGOs and projects that provide agriculture extension and/or other support services for farmers in Northern Mozambique including SNV, CLUSA, AgriFUTURO, and OLIPA-ODES. In some cases these services are specifically for cashew, in others the support is broader in nature. An overview of these support organizations is provided in the table at the end of this section, and a few of the major ones are profiled here.

AgriFUTURO

The Mozambique Competitiveness and Agribusiness Program (AgriFUTURO) works to increase Mozambique's private sector competitiveness by strengthening nine different agricultural value chains including cashew. The project has management and technical teams in both Maputo and Nampula city. AgriFUTURO has experience in working with “emerging farmer” type clients, who are farmers with more than 10-20 ha of land under cultivation. They have had some success with this model, although they point to continuing challenges including access to finance and marketing linkages for the increased production obtained. They were not sure whether emerging farmers would be interested in cashew as an investment opportunity, given the more long term nature of the plant, versus the quick income turnaround of many of the other crops that AgriFUTURO is working with (groundnuts, pineapple, etc.)

AgriFUTURO follows a “Corridor Development” scheme, and Nampula falls into the corridor that is linked to Nacala. As to their work in the cashew sector, AgriFUTURO appears to be ready to engage in some of the same areas as ACI, for example, they want to support the development of private nurseries for cashew seedlings, and support the idea of replanting schemes. They also have technical support capacities (extension) deployed on the ground. There may be opportunity for collaboration in these areas. They have also recognized the banks’ weaknesses in lending to agriculture. For example, until recently, Banco Terra did not have an agribusiness expert on their lending staff team in the Nampula branch, and all agricultural related applications had to be sent to Maputo. Now they have a staff person in place, and AgriFUTURO staff have supported Banco Terra to build the skills of their team in agribusiness loan analysis.

SNV Netherlands Development Organization

SNV Mozambique has an office in Nampula and is active in private sector development activities for both financial services / microfinance and value chain development. SNV has provided advisory services to Ophavela and FDSC (Facility for Civil Society Development) in the capacity building of SACCOs, including organization and management, microfinance and cooperatives legislation, legalization (registration), planning, monitoring/evaluation, MIS, policies/ procedures, good governance, and credit/risk management.

SNV also operates value chain projects in the cashew sector, such as the Support for the Cashew Sector (CASCA) programme, which focused on increasing production levels of raw cashew nuts and on small scale processing. The project was financed by the Netherlands based Triodos/HIVOS fund. SNV supported two partners: ADPP for technical support and agricultural extension, and AMODER for microfinancing, in order that these groups could support the microprocessor program as described above in section 3 on value chain actors.

IKURU, a farmers' cooperative that was formed in 2003, also provides agriculture extension, seeds and marketing support to farmers' associations. IKURU assists producers' associations to negotiate a fair price with private buyers and provides technical support and seeds to farmers. Although most of IKURU's sales have been to national commodity markets, in 2004 the members received organic certification for groundnut and sesame production, and in 2006 the organization received Fair Trade certification (Buss, 2007).

Table. Overview of Agricultural Support Organizations

Organization	Institutional Type	Activities & Services	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
<i>FDSC – Facility for Civil Society Development</i>	Appears to be an NGO financed by Oxfam NOVIB and Netherlands HIVOS	FDSC helps SACCOs with initial capital and expenses incurred from exchange visits. They also donate funds to ASCAs for economic activities, including poultry, small irrigation, warehousing and cattle projects.	Based in Nampula	Unknown	Unknown	This organization was only identified after research period, so no interview was possible.
<i>INCAJU (Instituto Nacional de Promoco de Caju)</i>	- Government agency	- Produces seedlings and donates to producers, subsidizes chemicals and spraying machines - Provides extension services to farmers - Undertakes research and development on cashew varieties, etc.	- Available in all the four districts	- Generally weak logistical and technical capacity according to published reports and interviews. May be due to lack of staff and funding.	-Depends on government budgetary allocations (MinAg), in theory from an export tax on unprocessed cashew nut	- May be able to shift activities away from business functions (seedling production and sale, etc.) and towards research and certification functions (varieties testing, certification of private sector seedlings producers, etc.), given high level of technical knowledge.
<i>MIRUKU</i>	- Local NGO	- Fair trade branding and organic production services	- Muacate - Monapo	- Unknown at this time	- Unknown at this time	To be investigated further.

Organization	Institutional Type	Activities & Services	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
IKURU	A farmers' cooperative formed in 2003	Provides agriculture extension, seeds and marketing support to farmers' associations; also assists producers' associations to negotiate with private buyers. In 2004 the members received organic certification for groundnut and sesame production, and in 2006 the organization received Fair Trade certification.	Works in Muecate, Moginqual	Requires more investigation.	Unknown.	Through SNV, IKURU has access to the international fair trade market (Twin Trading, UK) Linking cashew groups to a centralized marketing board.
Ajuda de Desenvolvimento de Povo para Povo (ADPP)	A Mozambican NGO	ADPP runs a training school that offers courses to farmers on practical farm management skills both for individuals or associated farmers. Through CASCA, ADPP provided technical courses for the processing unit managers on quality control, equipment maintenance, etc. They also trained cashew farmers, mostly women.	Based in Monapo District, Nampula province,	Requires more investigation.	Unknown.	Potentially for training or other capacity building functions.
ADIPSA (Apoio ao Desenvolvimento de Iniciativas Privadas no Sector Agrário)	Danish funded private sector development agency, formally under auspices of MINAG (CEPAGRI is chair of ADPISA steering	Grants, loan guarantees for associations and microfinance institutions. For example co-finances capital investment such as irrigation, processing equipment	-Nampula cidade and Maputo	- Requires more investigation	- ADPISA is currently undergoing planning for its next phase of operations. When the strategy is complete, the funding	- Potential co-funder of cashew plantation investment. TBD whether Nampula province and cashew are sectors of importance in the new strategy.

Organization	Institutional Type	Activities & Services	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
	committee)	or heavy machinery. In some cases also subsidizes inputs.			availability will be better understood.	
AGRIFUTURO	USAID funded project managed by Abt Associates in association with Technoserve	<ul style="list-style-type: none"> - Offers technical assistance to farmers and associations - Distributes seedlings -Marketing linkage support -Working in 9 value chains including cashew - Works in coordination with the USAID guarantee fund 	- Nampula	<ul style="list-style-type: none"> - Experienced staff and management (many years of experience in cashew sector) - If activities overlap with ACI, would likely be willing to coordinate to avoid duplication 	Unknown	<ul style="list-style-type: none"> -Include AgriFUTURO in any working groups interested in building financial sector capacity for agri-lending - Coordinate on private sector nursery pilots -Coordinate work with / support to INCAJU
SNV (Netherlands Development Organization)	Bi-lateral donor and implementing agency	SNV provides advisory services to Ophavela and FDOS in capacity building of SACCOs, including organization and management, microfinance and cooperatives legislation, legalization (registering), planning, monitoring/evaluation, MIS, policies/ procedures, good governance, and credit/risk management.	Nampula city and several districts including Mogavolas	To be investigated further.	Unknown	SNV was not available to meet with the research team on dates of field research.
CEPAGRI	Centro de Promoção da Agricultura (private sector promotion unit of MINAG)	This institution has a track history of value chain development (in sugar sector) and is sensitive to needs of agribusiness.	Presence in Central region of Mozambique, amongst others	Was not available for interview, more investigation required.	Unknown.	According to some reports, CEPAGRI may be developing an Agricultural Credit Programme, which is expected to engage Participating Financial Institutions.

4.0 CASHEW VALUE CHAIN FINANCE SUPPLY SIDE ANALYSIS

4.1 Financial Sector Overview in Mozambique

Macroeconomic trends and overall access to finance

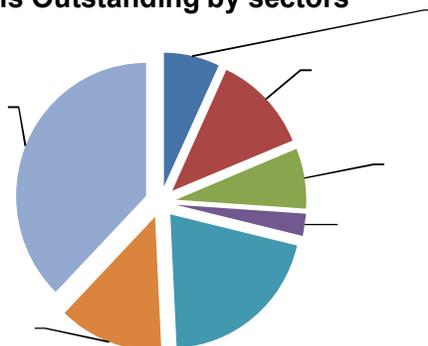
Mozambique's economic performance in 2010 was considered strong, despite a difficult external environment. Economic growth was on target to exceed 7 percent in 2010 and is projected to accelerate to 8 percent over the medium term. While the central bank was effective in maintaining price stability and in lowering inflation from approximately 15% in 2001 to 5% in 2007 (Allen et al, 2010) and 3.2% in 2009, the monetary and fiscal policies adopted in the wake of the global crisis, together with balance of payments pressures, contributed to a depreciating exchange rate and a rise in inflation in 2010 (predicted to be over 9% by the IMF). For the coming year (2011), the Bank of Mozambique (BOM) plans to counter inflationary expectations through a tightening of their macroeconomic policies. This should help return headline inflation to single-digits (IMF, 2010).

Mozambique is ranked as one of the lowest in terms of financial services coverage compared to other African countries. Despite portfolio growth and expanded branch networks among Microfinance Institutions (MFIs) and banks within the last decade, only about 12 percent of the adult population has accessed formal financial services (loans, savings, insurance). In addition, the coverage distribution is skewed towards urban areas – only four percent of the rural population had access to finance whereas the penetration in the urban areas was about 26 percent (de Vletter, 2009). Given that agriculture employs more than half of all labor and constitutes almost a quarter of the country's GDP, the rural need and demand for financial services remains extremely underserved.

Banking Sector

The Mozambique banking sector consists of 15 commercial banks which account for more than 90 percent of all the financial assets. Over half of all the commercial banks are foreign owned affiliates – four, including the two largest are Portuguese banks, and four are South African banks. According to the FinScope Survey of 2009, the top two banks account for 70% of the market, leading to limited competition in the banking sector. The sector is relatively well capitalized, and has become more profitable within the last five years, as poorly performing loans significantly reduced to two percent of the total outstanding loan portfolios. The major hurdle now is the level of operational efficiency which is still well below international standards. Loans outstanding to the private sector total around 72 billion MZN, but agriculture occupies only seven percent of the total lending volume, **Figure 2.1.1**.

Figure 2.1.1: Loans Outstanding by sectors



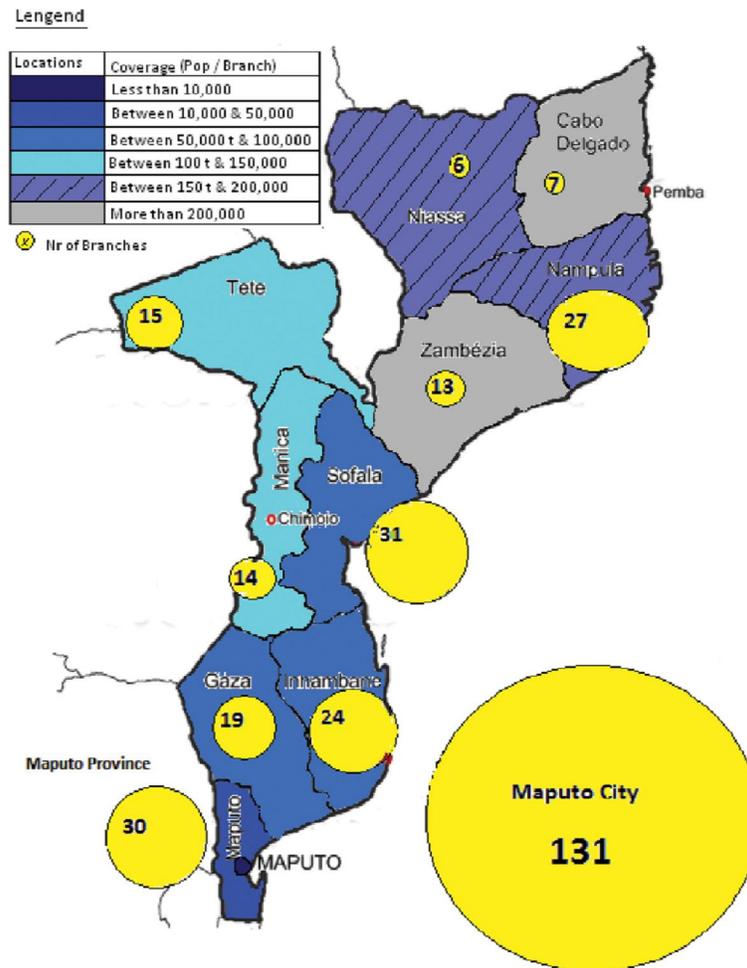
Source: Bank of Mozambique, 2010

As in the case of financial services coverage, the distribution of the bank locations also remains highly skewed with total number of about 350 branches and with most of them located in the cities and around largest urban centers, such as Maputo and provincial capitals (Bank of Mozambique Statistics 2010). According to the FinScope Survey 2009, the provision of banking services sharply declines as one moves northwards away from the economic hub of Maputo-Matola as shown in Figure 2.1.2.

Mozambique Microfinance Sector

The Mozambique microfinance industry is still relatively small. Although microfinance provision has been growing substantially up until 2007, number of active clients remains at about 90,000 with ten largest microfinance operators within the last three years whereas the gross loan portfolio has slightly increased from 51 to 62 million USD (Finscope Survey 2009 and MixMarket 2009). According to the Bank of Mozambique, there are about 117 licensed microfinance operators, but of these only about half are operational (dos Santos Lucas, 2010). A few large players dominate the industry – the three largest institutions account for about 80 percent of all the assets and retain about 64 percent of all the active borrowers. Eight of the fourteen largest microfinance players report to the MixMarket database, and as of the end of 2009, the microfinance sector has assets of 36.3 million USD, outstanding loan portfolio of 62.2 million with an average loan amount of 336 USD per borrower, about 279,000 savers with a total of 60 million USD deposits.

Figure 2.1.2: Branch Coverage



Source: FinScope Mozambique, 2009.

Mozambique has been experiencing a great deal of growth in the MFI sector in the rural and urban areas. With over 45 million loans the microfinance sector is a booming sector in the country (Allen et al, 2010). To date, microfinance services in Mozambique have been mainly individual-based micro and small business loans, housing loans and some savings. Only two of the major MFIs provide community and group solidarity based loans, though recently a few more MFIs have introduced rural group based savings and credit services. Most deposit mobilization strategies are still mainly based on compulsory savings, and the average deposit size per saver is currently about USD 215. There is little sector diversification as microfinance lending has been almost exclusively dedicated to retailing and commodity trading in urban centers. Even the microcredit operators that do provide services to the rural areas usually target rural trading activities and only a few of them increase their portfolios toward agriculture and fishing. And, despite the emphasis on enhancing rural outreach, about 70% of MFIs operate in Maputo city or Maputo province (dos Santos Lucas, 2010).

It is worth noting that many MFIs also provide other business development services to their clients such as technical assistance, training and planning. A relatively new government policy initiative to impose a less stringent capital requirement for a category of micro banks

(microbanco) designed to offer similar financial services as conventional banks but focusing on rural and micro enterprises is expected to boost lending to rural enterprises and agriculture.

Non-bank Financial Sector and Informal Financial sector

The formal financial sector is also represented by a variety of other registered players such as investment funds, leasing companies, pension funds, and insurance and money transfer agencies. Unfortunately, the market share of these participants is relatively tiny and their services are offered to a very narrow group of clients. The IFC launched a \$12 million SME venture in Mozambique, however, due to high interest rates and erratic currency fluctuations, the development of private equity as a significant force in the economy has been limited. (Allen et al 2010).

Informal financial services serve the most clients in Mozambique – over 14% of the adult population reported using at least one informal service. The main types of informal finance include:

- *Xitiques*: revolving savings groups in which members taking turns accessing the funds saved
- *Xitique geral*: similar groups where savings are compulsory
- Funeral associations
- *Contas da familia*: kind of savings account shared by extended family members to access in case of emergency
- ACSAs (Accumulating Savings and Credit Associations): a type of community-based savings and credit associations which were introduced to the country in the late 1990s and which have spread quickly through donor programmes in rural areas.
- *Money lenders*: Individuals who lend money at daily or weekly interest rates

In particular, the promotion of community-based rural finance associations has proven to be very successful, especially in the programs implemented by CARE, CLUSA and the Caixas Comunitárias de Crédito e Poupança (CCCP) project. As noted in *Microfinance in Mozambique: Achievements, Prospects & Challenges*, the ASCA concept has been well-accepted in a variety of rural environments, notably fishing communities, predominantly agricultural communities and small town traders. Programs promoting ASCAs have documented positive results, with the main weakness that for some groups, especially informal traders, the savings collected are sometimes insufficient to meet the members' credit needs. Not only has the impact been positive but very high rates of repayment have been maintained. Today, ACSAs are present in all provinces and 89 districts, with around 5,300 groups having 100,000 members. Collectively the groups have mobilized around 73 million MZN in savings (about USD 2.3 million) (Carrilho, 2010). This system has been continued by organizations such as Ophavela (itself originally a CARE affiliate) in Nampula which sets up savings and credit groups (poupança e credito rotativo, PCR) that are self-managed after a term of support, usually 12 months. In 2000, IRAM extended its CCCP programme to a remote area of Cabo Delgado Province proving that the programs could be successfully replicated in rural areas (de Vletter, 2006). While the ACSAs themselves become self-sustaining, and often replicate organically in communities without external support, ASCA or PCR groups do not generate income to the promoting institution or in any way contribute to its sustainability. The success of Ophavela and other similar organizations thus lies in the fact that the ASCA methodology is an attractive concept for deep rural financial outreach at relatively low cost, and donors are willing to pay NGOs such as Ophavela management fees to promote them in priority areas (de Vletter,

2006). This model and its potential applicability in the cashew sector is discussed further in the section on sustainable solutions (section 5.0).

Microfinance Network – AMOMIF

AMOMIF was established in 2007 under the auspices of a GIZ project. Its mission is to support the development of the microfinance sector in Mozambique, especially through training and capacity building, advocacy, and reporting and research. It also works to facilitate improved auditing and financial reporting and refinancing, although it does not provide those services directly. The box highlights what AMOMIF sees as its principle roles both domestically and internationally.

4.2 Agriculture Finance Policy Initiatives and Impact on Cashew Value Chain

The Mozambican government endeavors to support rural and agriculture financing. This policy focus dates back to the post-independence period when the government recognized the importance of agriculture and channeled the majority of the loan capital to rural areas through the state bank BPD with subsidized interest rates. However, at that time poor repayment rates from the small farmers resulted in a suspension of the program and since then limited lending was provided to the sector with the exception of large traders. International development community represented by NGOs and donor agencies, have also pursued a range of approaches to stimulate agriculture financing. The first efforts to bring commercial banks back to the rural areas were undertaken through guarantee funds and technical assistance from the donor community, and a set of tax incentives designed by the Bank of Mozambique (BOM) to increase banking presence in underserved areas, but it did not produce the intended outreach.

Although microfinance operations began appearing in the 1990s in Mozambique, they mostly remain concentrated in urban centers as mentioned above and, with the exception of a few, continue to have limited scale in rural settings. Despite heavy support from development donors and the central government, which launched a Government-run Apex Fund that provided wholesale loan capital to microfinance organizations to expand their rural financial operations, financial services coverage in agriculture is still limited. The 2005 microfinance survey found a high degree of regional disparity in microfinance provision - only seven operators reached only 11% of all borrowers and because of the small size of these rural loans, the clients accounted for only 5% of the country's total active portfolio (Fion de Vletter, 2006). As a result, almost all smallholder agricultural finance in Mozambique comes in the form of input credit and short-term crop advances from agribusiness companies and traders.

The survey clearly demonstrated that the physical proximity of the service delivery venues to the rural settings is not necessarily going to resolve a problem of poor access to agriculture finance. Although increasing the network of branches and providing accessible financial services in rural areas will raise the number of banked individuals, there is a need for policy makers and service

AMOMIF Principle Roles

National Level

1. Represent the interests of its members, especially on regulatory and legal issues
2. Serve as a central point of contact for donors working in the sector
3. Support education and literacy amongst end-clients (consumer protection)

International level

1. Support the development of publications and materials in Portuguese
2. Represent the Mozambican MF sector at an international level
3. Disseminate the best practices of Mozambican microfinance
4. Promote partnerships in southern Africa

Source: dos Santos, 2010.

providers to better understand implications of other factors such as a lack of financial literacy, proper needs analysis, agriculture sector dynamics, availability of appropriate inputs and infrastructure and others. This is applicable in the case of value chain financing as well and will be explored later.

In response to the 2005 survey findings, the Government of Mozambique created a Rural Finance Support Program (RFSP) in the same year, (co-funded by the AfDB and IFAD). The RFSP has had significant impact on rural finance, particularly at the microfinance level by promoting rural outreach through grants and loans for existing MFIs and start-ups as well as the promotion of rural finance associations (de Vletter, 2009). It has held several rounds of funding calls for proposals, and finances infrastructure (buildings, software and hardware), training, and loan capital for MFIs that wish to expand their rural finance operations. The official budget of the RFSP is USD 32 million, but it has recently been extended again which could mean additional funding.

4.3 Financial Service Providers and Agriculture Financial Products Offered

While access to finance is naturally a challenge in rural Mozambique and for agriculture in particular, once one digs below the surface there are actually a number of financial service providers (FSPs), both formal and informal, that continue to serve the rural sector. The table below provides a high-level overview of relevant actors in the sector, and the FSP profiles in **Appendix 5** contains full Financial Service Provider profiles about a few organizations that are more likely to be potential partners for the GIZ project. These organizations are marked with an asterisk in the table following.

Table. Overview of Financial Service Providers and Other Relevant Players in Financial Sector

Financial Sector Partner	Institutional Type	Products & Services (esp. for Agriculture)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
Retail Level Partners						
GAPI SARL	GAPI is a development finance institution that operates at both the retail and second-tier level. It has funding from a number of sources from German and other aid agencies.	Gives loans directly to traders, businesses, and associations supporting commercialization of cashew. Supports creation of local MFIs. Has credit lines for Timber, sawmill and carpentry through Nordic funds. Through BAD funding extends credit to artisanal fishing and BDS. IFAD funds are channeled to development of rural markets. Loans vary from US\$2,000 to US\$300,000, interest rates vary from 16-21% plus commission. Usually require 120% guarantee unless there is a third-party guarantee in place.	Operates in Nampula City but activity and outreach is very limited by design (some 150 clients total in Nampula).	Does not have sufficient outreach capacity – staff etc. There seems to be a low priority placed on reaching out to more clients.	The organization has a good donor funding base: Nordic Fund, DANIDA, BAD and IFAD.	None identified at this time. They could eventually be a source of financing for associations, to be investigated.
Banco Terra	Commercial bank with various public and private investors including the Netherlands and Rabobank	<ul style="list-style-type: none"> - The banks priority sectors are SMEs and agriculture / agribusiness - Most of agri portfolio is in food / processing, but some in production - have financed a macademia plantation - Worked with emerging farmers program - Associations have proven difficult to finance. - prefer when farmers have contract with buyer – they make an agreement 	Branch in Nampula city.	<ul style="list-style-type: none"> - Have financed processors in past (Condor) - Management is open and willing to collaborate. Challenge will be loan sizes (not small enough) and location (too far from Nampula city?) - They are still building internal agrilending capacity. Agrifuturo is helping 	- Not known, but the investors presumably have sufficient capital for expansion as this is a new bank (est. in 2008)	- No obvious opportunities. If processors require additional financing, Banco Terra may be an option. They are now benefitting from the next USAID guarantee fund (see details in section 3.4)

Financial Sector Partner	Institutional Type	Products & Services (esp. for Agriculture)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
		<ul style="list-style-type: none"> with buyer for direct repayment of loan to bank - interest rate: 16% base rate - minimum loan size is 100,000 MZN, and that low only for farmers in a group (such as outgrowers) 		<ul style="list-style-type: none"> by coaching Bco Terra staff on proper due diligence of agribusiness clients 		
Standard Bank*	- Foreign Owned Commercial Bank	<ul style="list-style-type: none"> - Offers traditional bank products: savings, current accounts and term deposits including a special product called CRED-AGRO - Minimum loan is US\$40,000 and has no limit. Interest rate is prime rate plus 3 to 5 %, 9 months grace period - Credit is guaranteed by AGRA, MCA and CEPAGRI - Mainly targets food crops - Disburses loans through three vehicles: farmer associations, agro-dealers and agro –businesses - Enters into contracts with suppliers and service providers - Possessing a buyer contract and owning land, are prerequisites for loans (no collateral is required) 	- Branches in all provincial capitals	<ul style="list-style-type: none"> - One of the big commercial banks in Mozambique with core agribusiness unit headed by two agronomists and is backstopped by its RSA division of agribusiness 	- Committed US\$25 million for this agricultural credit line with AGRA	<ul style="list-style-type: none"> - does not offer funding to set up plantations, only for processing and commercialization - Prepared to consider loans for production agriculture

Financial Sector Partner	Institutional Type	Products & Services (esp. for Agriculture)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
Banco ProCredit	- Commercial microfinance bank owned by German holding company operating 21 MFI banks in developing countries	- Loan products focus on commercialization, providing short term loans (6 to 12 months) that range from \$1000 to \$3000 USD - Interest rate is between 6.5 to 12%. Agric loans are about 3% less. Maximum loan can be US\$750,000 - The bank offers savings and current account services. Pays up to 4% interest on savings - Associations may also open savings accounts	- Nampula - Nacala	- Professionally managed institution, but interest in expanding agricultural portfolio needs to be explored further at head office level	- Expanding very rapidly and extending loans more to the SMEs (moving away from micro lending), which would tie up capital	- The bank could be interested in financing cashew traders and possibly sprayers for equipment loans, as these would fit into existing product lines. - Challenge will be location: bank staff do not venture very far from Nampula city to do loan assessments
BCI	- Commercial Bank	- Offers cashew processing loan for 15 months at 5% interest -Has four-month grace period	- Mugovolas - Nampula - Nacala	- No capacity to analyze the cashew production sector	Have funds from - -IFAD -Own funds -USAID guarantee fund. See below section 3.4 for more info on this.	- Strong possibility exists to further develop products in the processing sector. Is the most experienced bank in the sector.
Ophavela*	Mozambican national NGO	-Training in PCR Starts savings groups of 15 to 30 people, train them on how to manage the savings. The savings groups hold up to 200,000 MZN -Micro insurance- this is a separate product to which members contribute about 20.00 MZN a week and benefit an insurance coverage of about 1500 MZN for any death in the family to cover expenses .	Angoche Moma Munjicuari Mugovolas	One supervisor and 3 technicians in 11 districts. One technician can lead 7 activists. Well-respected and capable founder and management team, with experience in partnering with projects / donors.	While the activities are relatively low cost, at present the organization is dependent on donated funds to organize the groups, as the groups themselves cannot pay for this service. They are exploring fee-for-	Cashew producers would benefit from the financial literacy and savings habits that savings groups can provide. The savings could be used to finance part of the start-up costs for cashew trees, and eventually could be a source of credit for intercropping or other small activities.

Financial Sector Partner	Institutional Type	Products & Services (esp. for Agriculture)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
					service options (like the microinsurance) and associating their activists.	
Rede de Caixas Rurais de Nampula (RCRN)*	Project of Micro lending Funded by Swiss Cooperation and UNHCR	Caixa model (village banking type model) Credito Solidario (groups of 5, avg loan size 4,000 MZN). Different terms for agriculture and commerce. Credito Individual (requires collateral) Deposits (informal, as not licensed) Association loans (use associations to reach members with credit / savings)	Meconta, Muecete, Ribaua, Mecuburi, Monapo, Erati, and Nampula. Could be willing to expand to areas of interest with ACi project support.	Managed by Canadian expat and capable local manager. 50 staff 302 seasonal collaborators Plan to register as microbank in 2012.	Financed by Swiss Cooperation, UNHCR, Danida. Currently financed at no-cost capital of 1.2 mm USD from donors.	The RCRN is one of the few MFIs already reaching GIZs target clients – rural farmers. Their products for traders and sprayers could be linked immediately; cashew farmer intercrop loans could also be possible, as could farmer loans through associations for cashew production.
Caixas das Mulheres de Nampula	Established in 1994 with subsequent support by Cooperation Canada-Mozambique (COCAMO).	- Gives credit to mainly women - loans between 3,500 to 50,000mts at 5% interest monthly, - captures savings but does not pay interest, gives loans to members instead. - In the process of being legalized as Credit cooperative	- Branches in Nampula and Nacala - Looking to establish small caixas in rural localities.	- Outreach capacity is still limited, however they are interested in reaching more rural women in agricultural production	- Unknown at this time.	- Looking for partners to extend credit to rural women in agricultural production

Financial Sector Partner	Institutional Type	Products & Services (esp. for Agriculture)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
Banco Oportunidade	- Micro bank part of an international U.S.-owned network of MFIs	- Deposits services: Term deposits gives individual credit of 5000,00 to 150,000mts 5.5% interest per month-group lendings of loan between 5 to 150,000mts at 6% per month over 4 to 6 months. - loans: 70% of the loans are individual loans, 30% are group loans - Have done a pilot in Manica for an agriculture product for soy and beans.	- Branch in Nampula Cidade. - Plan to expand to at least 2 districts in 2011, using mobile van bank. This will serve approx. 10 communities – but it is not certain which ones yet (probably ones closer to Nampula city)	- BO has experimented with agrilending in Manica with other (short-term crops), but interest in cashew sector needs to be explored further with head office. Loans are mainly short term so might not be suitable for cashew producers.	- Unknown at this time.	- Lack of proven capacity in Nampula, where the branch just opened in 2010. To be explored further, but no immediate linkages were observed.
Wholesale / Network Level Partners						
USAID – Development Credit Authority	- Development investment agency	- Guarantee fund offered through Banco Oportunidade (US\$2.5m) BTUS(\$4.5m) and Barclays (US\$ 6.5m)	- Offered through Barclays, Banco Terra and Banco Oportunidade	- The most experienced development investment fund in Mozambique	- US\$13,5m in guarantees which can leverage at least twice that amount in loan capital	- Guarantee fund is open to production activities, if bank / MFI partners have appropriate loan products
FDSC – Facility for Civil Society Development	Appears to be an NGO financed by Oxfam NOVIB and Netherlands HIVOS	FDSC helps SACCOS with initial capital and expenses incurred from exchange visits. They also donate funds to ASCAs for economic activities, including poultry, small irrigation, warehousing and cattle projects.	Based in Nampula	Unknown	Unknown	This organization was only identified after research period, so no interview was possible.

Financial Sector Partner	Institutional Type	Products & Services (esp. for Agriculture)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
Agence Française de Développement	- French Development Agency Investment Fund	- Offers Individual, Portfolio, and capital/ equity guarantees with 50% cover for 2 to 12 years - Offers SMEs 150,000 to 300,000 Euros - Charges flat rate commission of 1.35% to 2.5% for two years	- Offered through Commercial Banks and MFI's BCI already signed up	- IFAD helps bank by making loan appraisal in 5 to 10 days	- US\$4m	- Possible funding for processors
District Development Funds / Fundos do Distritos ("Sete milhões")	Government funds allocated to the district level.	A development fund set up in every district to fund public and private projects that result in poverty reduction at district level. The fund gives out loans of about 7 million MZN every year at very low interest and usually with a grace period of one year.	Covers all districts and is administered by the local government (administrator).	The fund is generally marred by underperformance, mismanagement, corruption and outright fraud. Needs capacity building in order to deliver. The interest is to bring development to the district as per govt strategy to use the district as the pole of development.	Annual funding of 7 million MZN per district guaranteed by the state budget.	This fund is the ideal source of funding for the producers if there can be special attention to the cashew sector- given its designation as a govt priority area for development – given its conspicuous contribution to the balance of payment.
Rural Finance Support Program / FARE (Fundo de Apoio à Reabilitacao da Economia)	Public sector programme funded by IFAD and AfDB.	Tasked with developing financial access, especially rural areas. Provides wholesale funding to MFIs on concessionary terms, also cofinances technical assistance and investment in rural infrastructure for FSPs. 41 institutions currently benefit from financial support.	Works all over Mozambique; projects in Nampula include Riboue, Moma, Nomiolo, Nacala and Angoche for partners like Modelo Microcredito, Parapatu, Millenium BIM, Norcredito and Amoder.	Rural finance is a priority area, MFIs who want to expand are usually able to access low-cost funding and grants for this.	Programme is valued at USD 34.2 million	Possible funding for MFIs or even bank partners that wish to engage in agricultural microfinance.

Financial Sector Partner	Institutional Type	Products & Services (esp. for Agriculture)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
AMOMIF <i>(Associação Moçambicana dos Operadores de Microfinanças)</i>	Network association of MFIs in Mozambique	<ul style="list-style-type: none"> - Training / capacity building - Advocacy, represent members - Research and experience sharing in industry in Mozambique and internationally 	- Maputo	- Interested to document agricultural financing experience in Mozambique. Feels as though experiences to date are not well known and therefore others repeat the same mistakes.	- Unknown	- None identified at this time.
ADIPSA <i>(Apoio ao Desenvolvimento de Iniciativas Privadas no Sector Agrário)</i>	Danish funded private sector development agency, formally under auspices of MINAG (CEPAGRI is chair of ADPISA steering committee)	Grants, loan guarantees for associations and microfinance institutions. For example co-finances capital investment such as irrigation, processing equipment or heavy machinery. In some cases also subsidizes inputs.	-Nampula cidade and Maputo	- Requires more investigation	- ADPISA is currently undergoing planning for its next phase of operations. When the strategy is complete, the funding availability will be better understood.	- Potential co-funder of cashew plantation investment. TBD whether Nampula province and cashew are sectors of importance in the new strategy.

4.3 Review of Other Types of Agricultural Finance Initiatives

Outgrower / contract farming schemes

Several other crops / value chains in Mozambique have experimented with various types of contract farming / outgrower schemes which are a common instrument in value chain financing (see box definition).

Given the lack of outreach of the financial system in rural areas in Mozambique, contract farming has been the more successful instrument in providing credit to farmers, especially for cash crops. Private companies are the major providers of agricultural credit in Mozambique, providing inputs and guaranteeing the commercialization of the output. The World Bank estimates that more than 400,000 farmers benefit yearly from the cotton, tobacco, sugar, and oilseed agro-industry credit, which represents over 16 percent of the total farms in the country (ECIAfrica, 2006).

Usually the producers in these contract farming or outgrower schemes are smallholders. The average size cultivated by these producers is below 1 ha, and they receive, on average, a very small amount of cash or in-kind credit: for example US\$ 10.00 per producer as input credit for cotton and US\$ 40.00 per producer as input credit for tobacco. While no micro-finance institution or bank could economically provide such small loans, it makes financial sense for a processing or marketing company which aims to make the profit from the eventual crop, not from the financial transaction (ECIAfrica, 2006).

The largest outgrower schemes in Mozambique working with smallholder farmers are in the cotton and tobacco sub-sectors. More than 300,000 smallholder families are dependent on cotton outgrowing, and tobacco is also predominantly a smallholder crop, with over 100,000 families participating in the value chain. The contract farming systems for tobacco and cotton developed under very specific conditions, namely government allocated monopsony concessions which give exclusive rights to only one or a few companies to market these commodities (ECIAfrica, 2006). Monopsonies, if not properly managed and enforced, can allow firms to capture rents more easily; however they also lend themselves well to contract farming because there is less chance of side-selling by the producers. Those familiar with the cashew value chain (to be described in the next section) will know that these types of regulatory controls do not exist in that sub-sector and that there are unlimited number of potential buyers of cashew nut in the Mozambican market.

Outgrower schemes have also been attempted in the horticulture sector in Mozambique. One example is in Pimentas de Mozambique (PDM), based in Chimoio, Manica province, which

The Basics of Contract Farming

Contract farming or out-grower schemes are more formal relationships in which buyers of agricultural products finance producers ahead of the crop cycle, either in-kind (with inputs or technical support) or in cash. The financing is generally tied to a purchasing agreement which specifies the product type and quantity that will be bought by the agricultural buyer. Contract farming schemes are predominant in cash crops like tea and tobacco, where a processed final product is destined for an international or specialty market.

In contract farming, the financing – in cash or in-kind - often flows directly from buyer to producer. In some cases, however, there may be additional financing from a financial institution that bases a lending decision about the producer on the strength of the contractual relationship and history of successful transactions between the producer and the buyer.

(USAID, 2005).

began outgrower production of paprika in 2003. These have been smaller experiments, for example in year two the scheme worked with around 800 smallholders, identified with the support of ACIDI-VOCA. Of these, only 15 percent eventually repaid their credits (ECIAfrica, 2006). The main problem was the diversion of inputs by the smallholder, which resulted in lower yields and thus inability to repay the credits. Similar issues were experienced in subsequent years and the company describes their approach as trial and error.

Currently, the only known microfinance initiative targeting productive activities is the SNV CASCA programme which provides credit through AMODER to small satellite cashew processors supplying processed cashew to the larger producers such as Miranda Cajú for export. (de Vletter, 2006).

Loan Guarantee Funds for Agriculture

USAID – BCI Cashew Guarantee Fund (2003-2010)

This guarantee fund began in 2003 when USAID repurposed some funds remaining from a different program. This guarantee fund – which was targeted specifically at cashew processing working capital loans – started with \$700,000 but grew to \$10 million over 7 years. The guarantee scheme was run through BCI bank and was successful in channeling finance to the fledgling processor businesses. There were some cases in which the guarantees were called (e.g. the client could not repay), but the fund manager attributes this more to poor management practices at the firm level than sector problems or poor analysis of the loan.

It was not clear whether the guarantee fund would continue into the future or not – normally a guarantee fund should eventually end once the viability of lending to a sector has been proven to the commercial bank. It is not clear why the bank continues to rely heavily on the guarantee fund (and still required additional collateral) once the businesses have proven, over the past seven years, their capacity to repay the loans.

The USAID cashew guarantee scheme did not address financing needs at any other level of the value chain, e.g. production or support services markets such as seedlings, fumigation, chemical importation or land preparation.

USAID – DCA Guarantee Fund for Agriculture (2010-2015 (?))

USAID, through the Development Credit Authority (DCA), has launched a new guarantee fund for agriculture in Mozambique. The DCA has already negotiated agreements with two banks: Banco Oportunidade de Moçambique and Banco Terra. The guarantees are valid on loans made to agriculture business including any part of the value chain. The fund has \$13 million in total, meaning it could leverage up to \$26 million in loans (assuming a 50% guarantee cap). The approximate guarantee sizes were described as follows:

- Banco Oportunidade: \$2.5 mm in total guarantees; for loans up to 100,000 MZN each
- Banco Terra: \$4.5 mm in total guarantees; for loans up to 100,000 MZN each
- Barclay's Bank (still under negotiation): \$6.5 mm in guarantees for loans up to 1 million MZN

As the guarantee fund is just getting started, there is not yet any information on the performance of the fund. None of these financial institutions are currently present in the cashew sector so it does not seem likely that these guarantees will be directed to lending in the cashew sector.

Standard Bank – AGRA Guarantee Program

Standard Bank has partnered with the Alliance for a Green Revolution in Africa and the Millennium Challenge Account to create a loan guarantee fund to benefit smallholder farmers and small agribusinesses in four countries in Africa, including Mozambique, Ghana, Tanzania, and Uganda. AGRA and its partners are providing \$100 million over three years and Standard Bank will also make \$100 million available for the loans (Standard Bank press release, 2009). The performance of the fund to date is unknown, Standard Bank is scaling its capacity in agricultural lending (see full profile in Appendix), but AGRA declined to comment on the performance of the guarantee fund, citing confidentiality of information.

Agence Française de Développement – ARIZ Guarantees for Bank Financing

AFD manages ARIZ, a dedicated risk-sharing tool that aims to facilitate access to bank credit. Launched in 2008, ARIZ works in 20 countries, mainly in Africa, partnering with over 40 banks. Since 2000, ARIZ has committed over €59 million in guarantees to over 100 companies.

In Mozambique, ARIZ offers several different guarantee programs:

- Single deal guarantees: for banks wishing to access a guarantee for a single financing deal. The loan may be for up to €4 million – ARIZ guarantees up to 50%. The loan can be in USD or MZN, and term of 2-12 years. Under this model, ARIZ also guarantees loans from banks to MFIs, in which case the guarantee can be up to 75% of the loan amount. A flat commission is charged of 1.35% annual, paid twice yearly.
- Portfolio guarantees: for a portfolio up to €2 million, ARIZ guarantees 50%. Usually these are to encourage lending to a smaller business size sector, for example loan sizes between €10,000-30,000. Usually the agreement with the bank lasts for two years, but the guarantees extend for the loan term. The fees are either flat as above (1.35%) or a one-time charge of 2.5% for the total amount of the guarantee amount.

AFD has signed agreements with two banks recently to access to ARIZ guarantees. BCI is confirmed and another bank is still in finalization. One weakness is that the loans can only be for capital investments, not for working capital, therefore some SMEs may not be interested in the product.

4.4 Mozambique Financial Sector Strengths and Weaknesses

Strengths	Weaknesses
<ol style="list-style-type: none">1. Guarantee funds do exist to share risks with bank on agricultural lending2. Nampula has a diverse range of financial service providers (banks, MFIs, PCR, SACCOs)3. MFI and bank sector is growing and looking for new areas of expansion4. Financial sector appears to be relatively liquid5. Several donor projects are supporting the sector as a whole, there appears to be coordination amongst the actors.	<ol style="list-style-type: none">1. Interest rates at SME level are high in MZN (16-21% annual)2. Banks require high collateral, even with guarantee funds3. Banks lack capacity to evaluate agriloans4. MFIs aren't often able to do long term financing5. High inflation keeps monetary policy tight (lowers credit supply)6. Banks and MFIs are not present in rural areas of Nampula

Opportunities	Threats
<ol style="list-style-type: none"> 1. Agriculture sector is dynamic and growing, banks could finance downstream businesses 2. Cashew farmers represent 97% of the rural population – could cross-market other financial services as well. 3. Cashew enjoys technical support from NGOs – decreasing credit risk 	<ol style="list-style-type: none"> 1. Knee-jerk reactions to monetary and fiscal crises could threaten health of financial sector (example of FX accounts / loans recently). 2. Slowness to tackle true underlying issues of land rights prevents banks from using agriculture assets as collateral 3. Some security issues around holding and transporting cash in rural areas

5.0 CASHEW VALUE CHAIN FINANCE DEMAND SIDE ANALYSIS

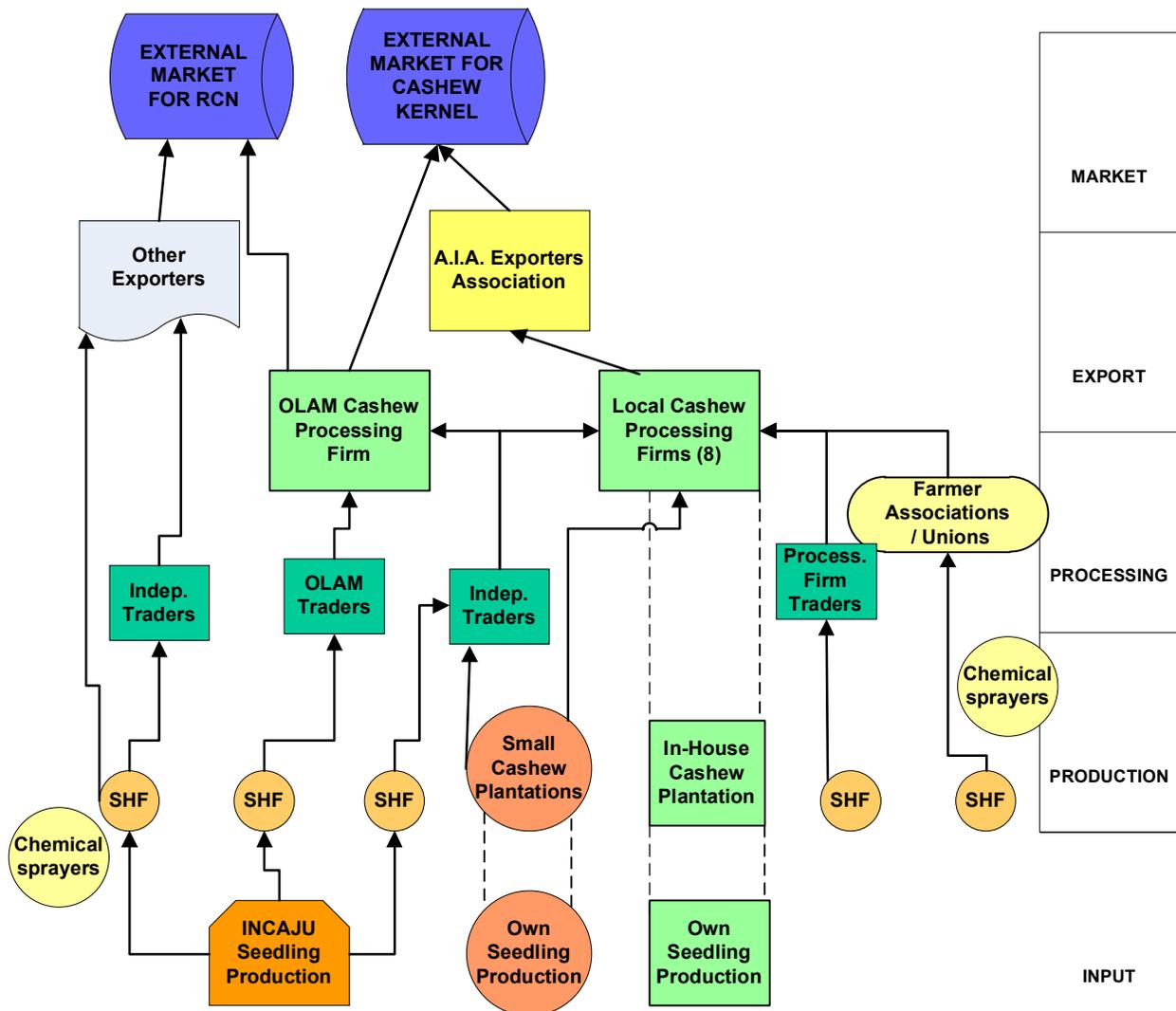
To better understand the need for finance, first we must understand the business profile, cycle, cash flow, and especially expected returns for the individual businesses in the value chain. The team met directly with value chain businesses, support service providers, financial institutions, and others working with the sector to gain the most up to date information possible on the demand for and supply of financial services in the value chain. This information from various sources was used to create profiles and cash flows for the businesses, as well as a value chain map which shows financial flows.

Several assumptions must be made for the calculations. These can be altered if additional information becomes available or if factor inputs or output information changes (e.g. costs, prices). Please refer to the full spreadsheets which accompany this report for complete data.

5.1 Mapping Financial Flows in the Cashew Value Chain

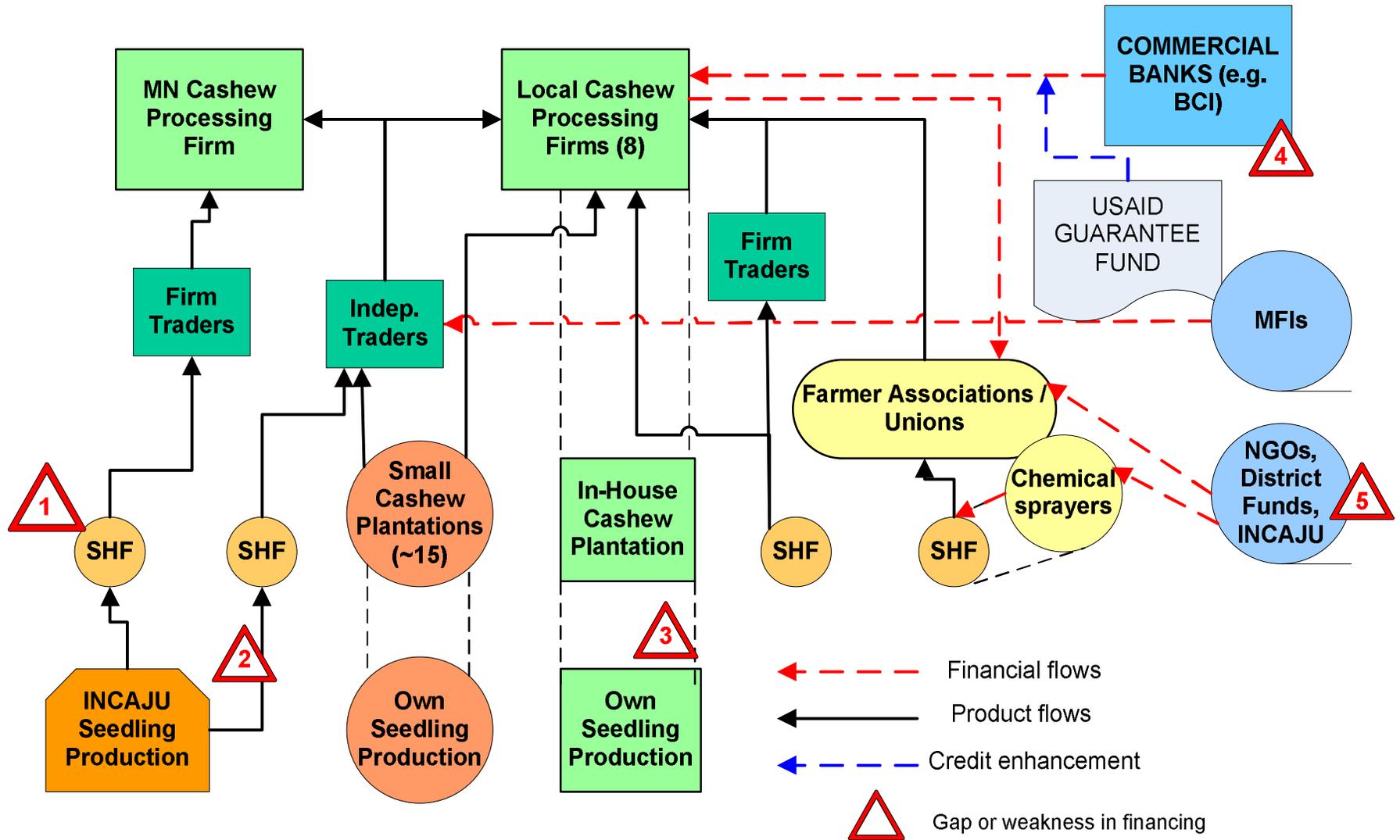
Based on the interviews above, the team attempted to create both an updated map of the value chain with its product flows, as well as adding the financial flows, to better identify the weak points in the chain where finance is not easily accessible.

Cashew Value Chain Map – Nampula, Mozambique



Following this, the next step was to add the financial flows as illustrated in the above small diagrams, to make one holistic picture of VCF in the cashew chain. Once the financial flows are added, it becomes easier to see the weak points in the financing of the chain, as summarized below the diagram.

Cashew Value Chain Map with Financial Flows – Nampula, Mozambique



- **#1 – Gap:** There is a complete lack of financial flows to the small cashew farmer. No actors (financial sector or value chain) appear to finance the small farmer on any significant level, even though this was identified as the area which requires the most investment (see below under quantification of financial requirements)
- **#2 – Weakness:** Inputs are provided with 100% subsidy, which weakens the private sector incentive to deliver them, and distorts client willingness to pay for them
- **#3 – Gap:** There is no financing of private nurseries, in fact there are no private nurseries. This is related to #2 above. Obviously no financier would like to finance a business that will be selling a product that the consumer can get for free elsewhere.
- **#4 – Weakness:** While credit guarantees for the sector exist, they are concentrated only at the processor level. And, even though the guarantee facility has been in place for more than 5-7 years, banks still rely on it to make loans to the sector, when by now they should have been weaned off of the need for third-party guarantees and been able to make lending decisions based on the merits of the business and its repayment record with the bank.
- **#5 – Weakness:** Non-financial organizations, such as district governments, INCAJU, and NGOs are giving credit to farmers associations and producers in some cases, most often for insecticide spraying kits. From a financial systems perspective, best practice recommends that only dedicated financial institutions undertake credit activities, since other groups (including government and non-profits) usually can't manage this activity and suffer from poor client discipline and repayment rates.

5.2 Prioritizing Key Financial Needs, Gaps, and Opportunities in the Cashew Value Chain

The following table summarizes the observations from the value chain interviews as well as the value chain map. It is the first attempt at prioritizing the financing gaps in the VC. How are the financing gaps prioritized? There is no specific list of criteria used, however the lens of analysis is based on the needs of the value chain and the requirements for it to upgrade, expand, or otherwise development according to the priorities already identified in earlier analyses done by GIZ and other actors. This question was also posed to key informants, as well as the GIZ staff team in Mozambique, for their input into prioritization of gaps.

Table. Prioritizing Value Chain Financing Needs – Cashew Sector

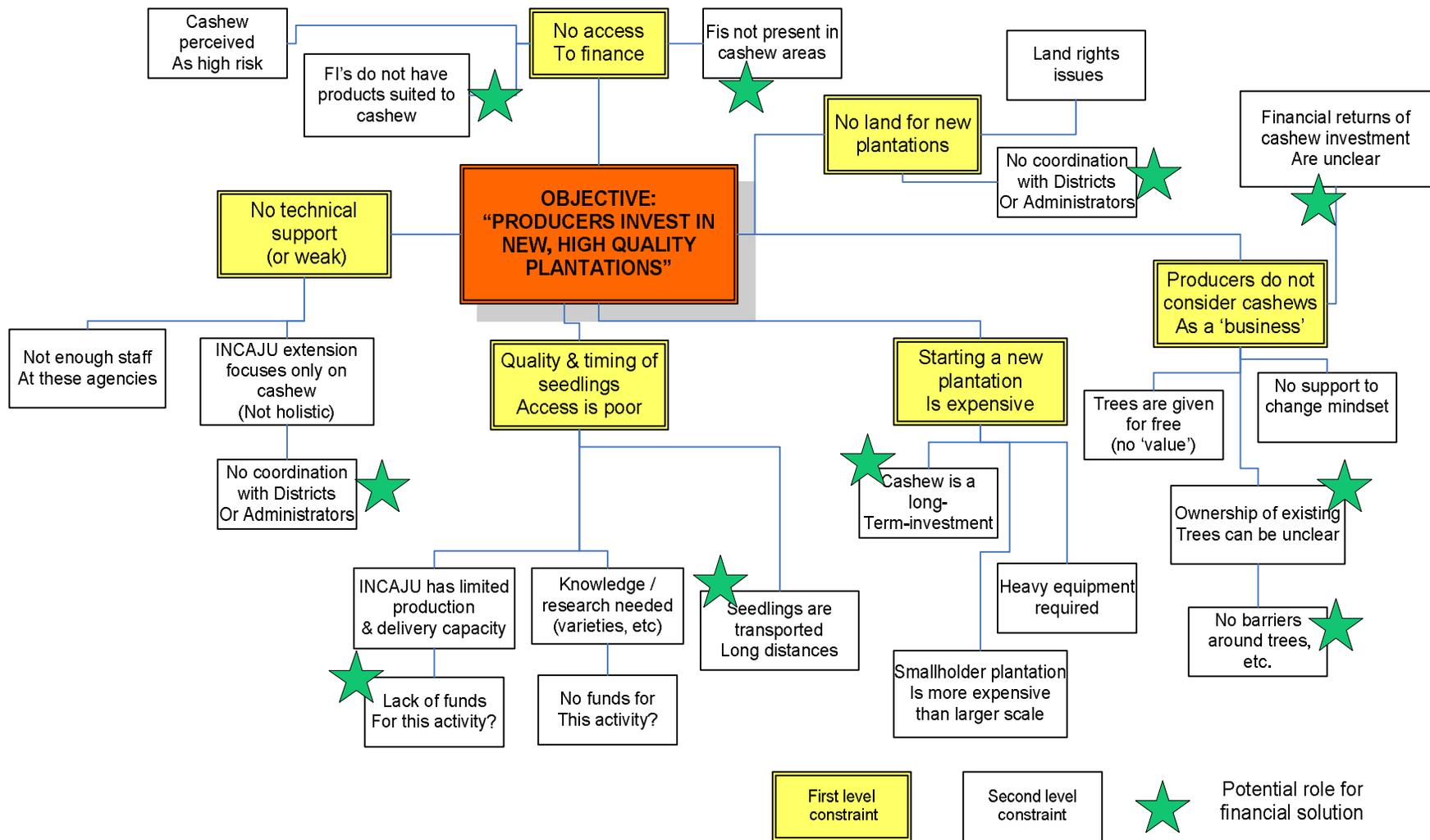
Value Chain Actor	Financial Needs / Challenges at Firm level	VCF and FSP linkages observed	Opportunities	Barriers to Accessing Finance	Priority Level (High, Med, Low)
Cashew Seedling Producer (Nursery)	<ul style="list-style-type: none"> - Need working capital for land preparation, inputs for seedling production, logistics costs to deliver seedlings, and labor 	<ul style="list-style-type: none"> - None at this time, as this actor does not yet exist. 	<ul style="list-style-type: none"> - The business can benefit in the interim from subsidies from NGOs and Govt. - INCAJU can subcontract seedling production to private nurseries in the long run. Seedlings can be supplied to farmers and small holder plantation. 	<ul style="list-style-type: none"> - Lack of FI interest to invest in this area due to high initial investment compared with the rate of return. - The demand is not yet proven to be sustainable. 	High. Without a functioning market for seedlings, the entire value chain becomes unviable.
Smallholder Cashew Producers	<ul style="list-style-type: none"> - Need long term investment finance to plant new trees and support other crops that guarantee food security and income until cashew matures. - Lack of experience with savings, credit, or formal financial institutions - Lack of collateral / assets - Lack of knowledge amongst farmers on cashew production as a business 	<ul style="list-style-type: none"> - Rather than credit, most support is in form of subsidies: government (through INCAJU) provides free seedlings and free chemicals - INCAJU has distributed subsidized spraying equipment on credit to farmers (repayment rate unknown). - Some credit provided by NGOs (Olipa) for subsidized spraying machines to associations - Some processors offer short-term trade credit (1-2 weeks) to 	<ul style="list-style-type: none"> - Farmers (through local administration) have access to land at low cost - New cashew trees could create an asset base – biological assets that could eventually be sold or traded or borrowed against. - Cash crop with solid unmet demand both locally (processors) and internationally (exporters) and rising prices 	<ul style="list-style-type: none"> - No funding from the formal financial system because of the long term investment period, lack of assets for collateral, and absence of FSPs in the locations where farmers are located. - FSPs do not offer appropriate products. Finance policy biased against production agriculture. - Producers not set up as a business. 	Very High. If farmers' incomes are to be impacted, investment at production level will be necessary. Any upstream further VC development also depends on production level investment.

		producers associations in advance of purchasing RCN			
Emerging cashew producers (+1000 trees)	<ul style="list-style-type: none"> - Need long-term investment finance to plant new cashew trees, mainly have used own funds - Not especially interested in debt 	<ul style="list-style-type: none"> - None observed. These actors seem to operate relatively self-sufficiently. 	<ul style="list-style-type: none"> - Although these are sometimes 'hobby farmers' (i.e. not their principal activity), smallholders could potentially still learn from their experience. - More ambitious emerging farmers could be tapped to produce seedlings for sale 	<ul style="list-style-type: none"> - Long term nature of investment 	Low to Medium. These farmers could provide support services to SHFs or potentially produce seedlings, but seem reluctant to engage with small farmers.
Support Service: Chemical Sprayers	<ul style="list-style-type: none"> - Needs capital investment for the spraying equipment and protective gear as well as transport / operational costs (bike or fuel) 	<ul style="list-style-type: none"> - Sprayers can spray trees and are paid in kind at harvest time—cashews 2kg per tree sprayed. Sprayers receive subsidized spraying machines and chemicals are free from INCAJU. 	<ul style="list-style-type: none"> - The attractive RCN price makes investment in tree spraying more bearable to producers and hence increases the demand for sprayer services. - The start-up cost is not high, each community can have several farmers offering spraying services on a commercial basis. - Several MFIs have loan products that could be appropriate for start-up costs of sprayer 	<ul style="list-style-type: none"> - Lack of enforceable contracts with producers means they could decide not to pay. - Need credit for spray equipment purchase, and much to date has been subsidized by various actors. 	Medium. Low cost investment with high potential benefits.

Traders	<ul style="list-style-type: none"> - Need working capital to buy RCN. - Need working capital to pay for transport and logistics at farm gate. - Finance provided on very strict and uncustomized terms by the banks. - Could require investment capital for vehicle etc. 	<ul style="list-style-type: none"> - Commercial processors such as OLAM advance cash to associated traders - Processors usually supply transport if the quantities are more than three tons of RCN at one pick up point. - One MFI (RCRN) finances traders with ST loans (3 mos, term with balloon payment) 	<ul style="list-style-type: none"> - Traders could operate more independently of processors if they had alternative sources of finance - Normally, RCN could be warehoused, but because demand is so high at harvest season, warehousing does not make economic sense - All farmers report being paid in cash, illustrating no cash flow problem at buying level 	<ul style="list-style-type: none"> - Traders are often informal businesses. Microfinance lenders would be better suited to finance these. - BCI does have a new branch in Mogovolas that could be a potential source of financing for local traders in the future 	<p>Low at this time. Traders did not specifically mention capital as a constraint to their businesses.</p>
Producers' Associations	<ul style="list-style-type: none"> - Depending on the role they play, could require working capital for cashew purchase and consolidation - Capital investments were not a requirement at this time - Weak management could be a constraint to accessing finance - Lack real collateral 	<ul style="list-style-type: none"> - Some local processors (Miranda) advance cash to farmer associations against a supply contract 	<ul style="list-style-type: none"> - Associations are able to access the government district funds, if they have a viable investment plan - Associations could potentially be the starting point for savings and credit group formation 	<ul style="list-style-type: none"> - Formal financial institutions do not normally have products geared to associations. Specialized development finance institutions may be the exception (GAPI) 	<p>Medium. While associations themselves do not require capital, they may be the most feasible conduit for financing to individual producers.</p>
Local Cashew Processing Firms	<ul style="list-style-type: none"> - High working capital requirements for purchase of RCN during harvest season (several million USD per processor) - Investment finance for factory 	<ul style="list-style-type: none"> - Working capital loans from BCI to processors, usually 15 mos. term w/ 4 mos. grace period, USD and reasonable interest rates - Investment finance from BCI - Insurance on 	<ul style="list-style-type: none"> - If more banks were interested in the sector, that could mean lower collateral requirements and more competition to lend to processors; this could mean processors would borrow more and thus purchase 	<ul style="list-style-type: none"> - Most banks still lack interest and ability to properly evaluate the sector (exception of BCI) - Processors lack extra capital and are skeptical of entering into more 	<p>Low. Processors already have access to working capital finance, and most are not seeking investment capital at this time, preferring to keep the business at a steady level.</p>

	<p>expansion was not noted as a pressing need</p> <ul style="list-style-type: none"> - Prefer USD financing - Most had adequate collateral including USAID guarantees, factory buildings and equipment, RCN inventory, other business or personal assets, although requirements of banks were quite high 	<p>inventory and equipment</p> <ul style="list-style-type: none"> - Some processors had buying contracts with farmers associations, and advanced very ST working capital to the association to secure the purchase - Some processors have experimented with supporting groups of producers with seedlings, TA, with expectations of purchase of some of RCN (no contract) 	<p>more RCN</p> <ul style="list-style-type: none"> - Have an opportunity for processors to formalize relationships with commercial clusters of producers around the factories-financing inputs and affirming a supplier contract with pre-determined price range. 	<p>long-term relationships with farmers</p> <ul style="list-style-type: none"> - Processors are not interested in expanding their own cashew production capacity 	
Exporters	<ul style="list-style-type: none"> - These are mostly multinational companies or foreign individuals that do not depend on the local finance market. 	<ul style="list-style-type: none"> - OLAM's supply chain is integrated, with buying agents financed by the firm - None observed with RCN exporters 	<ul style="list-style-type: none"> - None observed 	<ul style="list-style-type: none"> - None observed 	Low.

Based on the prioritizations in the table, we brainstormed with the GIZ team to construct a “Constraints Tree” Diagram which attempts to take most highly prioritized gap / weakness, identify as many challenges to that goal as possible, and then drill down to get to the “root cause” of the constraints. Once the root causes of the gap or weakness are identified, that is where we determine which ones could potentially have a financial solution. The constraints tree below actually addresses the two top prioritized gaps in the table: increasing production of cashew by smallholders, and filling the gap for private sector seedling production and marketing. The green stars show the primary level constraints where we think that there could be a potential solution involving financing.



5.3 Quantifying Financial Requirements

Input supply level

GIZ estimates that there are currently about 10 million trees in Nampula, and that the survival rate of seedlings is approximately 75% (assuming good technical support, otherwise the rate may be lower). They calculate that to reduce the present age structure of the cashew tree population in Nampula it will be necessary to plant approximately 625,000 seedlings each year, for a survival rate of approximately 500,000 trees (GIZ, no year). Coming back to the project outreach targets, we can use that to estimate financial requirements of seedling production.

Parameter	Annual	Over 3 Years
Producers	10,000	30,000
Hectares of new cashew (1 ha pp)	10,000	30,000
Trees per hectare (incl. losses)	93	93
Total no. of seedlings needed	930,000	2,790,000
Cost of production per seedling (MZN)	10.79	10.79
Total cost of production (MZN)	10,031,988	30,095,963
Total cost of production (USD)	313,500	940,499

Production level

Smallholder producers

As we examine the need for financing at the producer level, it is important to keep the profile of the family in mind. Microcredit was designed as a tool for low-income people who nonetheless had some productive assets and an income-generating activity that could repay a loan plus interest, while still earning a positive return. Generally speaking, people that do not have enough to eat (which means they are not earning sufficient income from their activities to purchase or grow enough food) are on the low end of the poverty spectrum, and may not be suitable clients for microcredit. The household is usually at such a vulnerable level that they would not be able to productively manage the credit – they might need the money for food or other emergencies – and could find themselves unable to repay, leaving them in a worse situation than before. Lenders are also left disadvantaged: with a portfolio of nonperforming loans and high costs of follow-up and collection.

Some microfinance providers have come up with innovative ‘microcredit plus’ programs that combine intensive training, literacy, and /or health support with very small amounts of financing and/or savings. Organizations such as BRAC (Bangladesh), Sèvis Finansye Fonkoze (Haiti), and ProMujer (several countries in Latin America) invest significant time and resources in helping clients that are not ready for microloans to move up the poverty spectrum and be ready to take on their own loan and business activities. Appendix 10 provides an illustration of the Fonkoze program. Nampula cashew farmers may not be in the very same position as those customers, but they will undoubtedly need significant non-financial support and coaching to make the best use of any potential investment in their household livelihoods.

Investment requirements of smallholders were illustrated in the cashflow from the earlier section. Assuming a block style plantation of 50 hectares (which lowered the costs of investment significantly), the cost per hectare was approximately USD 336. Over a three year period with a target of 30,000 producers, this would equal an investment of approximately USD 10 million.

Parameter	Annual	Over 3 Years
No. of Producers	10,000	30,000
Hectares of new cashew (1 ha pp)	10,000	30,000
Investment cost per ha (in 50 ha block)	336	336
Total cost of investment (USD)	3,360,000	10,080,000

Trading, Association, and Processing Levels

At this stage, estimates as to financial requirements are not reliable. If current operations have enough capital, the additional volume of RCN moving through the chain as a result of this upstream investment will not reach the processing level of the chain until at least three years from the date of investment. Therefore it is not necessary to calculate the short-term increased capital needs of these other actors in the value chain at this stage, although it will be necessary in the future.

Support Services Level

Tree sprayers do have investment needs, at the start up stage. There are already a number of spraying businesses in operation, if we remove an estimated number of those from the calculations we can determine the approximate investment requirements.

Parameter	Annual	Over 3 Years
No. of Trees under production	1,500,000	4,290,000
No. of trees per sprayer	1,500	1,500
No of sprayers required	1,000	2,860
No of sprayers already in existence	300	300
No of new sprayers needed	700	2,560
Cost of 1 sprayer investment (MZN)	15,820	15,820
Total cost of investment (MZN)	11,074,000	40,499,200
Total cost of investment (USD)	346,063	1,265,600

RCN Processing Firms Level

The main credit facilities demanded by processors in Nampula at this stage in their development are for working capital loans, mainly to facilitate the buying of RCN in the compressed harvest and buying period. The amounts required vary according to installed capacity as well as price of RCN as explained above (processors may invest less if the price of RCN is higher, or they might borrow more if they think that the return will justify the additional investment). Interviews with processors indicated that they each currently borrow between \$1 million up to \$7 million dollars per cashew harvest season, for working capital purposes. We can also calculate some estimates based on the processing capacity in Nampula.

Parameter	Annual	Over 3 Years
Total processing capacity in Nampula (MT)	26,500	79,500
Cost per MT of RCN (2010) (MZN)	30,000	30,000
Total working capital required (MZN)	795,000,000	2,385,000,000
Total working capital required (USD)	24,843,750	74,531,250

These estimates do not include OLAM, which presumably sources capital from its parent company and was not available for interview in Nampula.

6.0 SUSTAINABLE SOLUTIONS STRATEGIES (POTENTIAL INTERVENTIONS)

6.1 Value Chain Financing Instruments, Examples, and Suitability for Cashew Value Chain in Nampula

This section reviews the characteristics of several more relevant value chain financing instruments and contrasts them with the situation in the cashew value chain in order to evaluate their suitability for the sector. The instrument typology and descriptions are based on Miller and Jones (2010).

6.1.1 VCF Product Financing Instruments

Product financing instruments are those that are based on a future transaction that will eventually involve the agricultural product. These products are therefore closely tied to a specific commodity, range from informal to more formal, and tend to be short-term in nature. They exist to some degree in virtually all value chains, as they are the actors' attempts to self-finance the chain in the absence of easily obtainable, and low cost financing from external, formal sources.

INSTRUMENT	BEST FOR	BRIEF DESCRIPTION	CASHEW SECTOR	RELEVANCE LEVEL
1. Trader Credit	Short-term working capital	Traders advance cash to producers to be repaid, usually in-kind, at harvest time. This allows traders to secure product procurement, and provides farmers with needed cash (for farm or livelihood usage) as well as a guaranteed sale of outputs.	Traders in the cashew VC only appear at the time of harvest/ purchase, and no advance credit was observed. There are no fixed relationships between traders and producers, so traders would be reluctant to give cash out without any guarantee of buying priority.	Low. Producers are more in need of investment capital than working capital, and traders are not well-capitalized to finance other actors.
2. Input Supplier Credit	Short-term in-kind credits	An input supplier advances agricultural inputs to farmers (or others in the VC) but does not require payment until harvest or other agreed time. The cost of credit (interest) is generally embedded into the price of the input.	At present, producers do not actually purchase many inputs. Thanks to NGO/Gov't efforts there is starting to be some payment – and supplier credit - for support services, e.g. insecticide spraying services, via RCN payment at harvest time.	To be investigated further. There are no private suppliers of inputs (cashew seedlings, etc.) at present, therefore it is uncertain whether their businesses could support a credit function. If the RCN payment for spraying continues to function well, that input credit could be expanded.

3. Contract Farming / Lead Firm Financing	Term tied to crop cycle (usually between 4-12 months) and offered in cash/in kind	A buyer in the value chain provides either direct finance to value chain enterprises including farmers, or guaranteed sales agreements enabling access to finance from third party institutions. This type of financing is often in the form of contract farming with a buy-back clause, provides farmers with finance, technical assistance and market access, and ensures quality and timely products to the lead firm.	The earlier section describes the context of contract farming for other crops in Mozambique. Cashew production is a long-term investment which does not lend itself well to this model. There are no commercial firms willing to invest in smallholder production of cashew at this time in Mozambique – processing firms are neither willing nor able to manage such a scheme. In addition, the cashew market is completely open with many buyers and no incentive for farmers to respect contracts if another buyer offers a slightly better price. However, there is some news of a recent Vietnamese investor coming to Nampula with a cashew plantation – this will need to be investigated further by GIZ as no other details were available yet.	Low. The lead firm required is absent in Mozambique, the crop term is too long, and the market is too spot-based to ensure that the lead firm would eventually recover its investment.
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Example of Lead firm financing – Soybeans in Paraguay



Soybeans are Paraguay’s primary agricultural crop, and silos (owned by national or multinational businesses) that store and market soybeans often provide credit in-kind to farmers through contract farming. This means that the silo provides a credit advance usually in the form of inputs to the farmers so the farmers can meet their working capital needs. Through this formal contract, the silo provides inputs to the farmer and agrees to purchase the future soybean crop either at a price set when the contract is signed or at market price at a specified time.

Silo owners are unable to meet all the farmers’ demand for credit and so a local MFI – Financiera El Comercio – was brought in to help finance the remaining farmer needs. Collateral for the MFI loan is the farmer’s soybean contract with the silo for which acts as a guarantee from the silo. The loan contract stipulates that the silo is authorized to deduct the loan amount from its payment to the farmer and remit it directly to El Comercio.

Source: Wittlinger, 2005.

6.1.2 VCF Receivables Financing Instruments

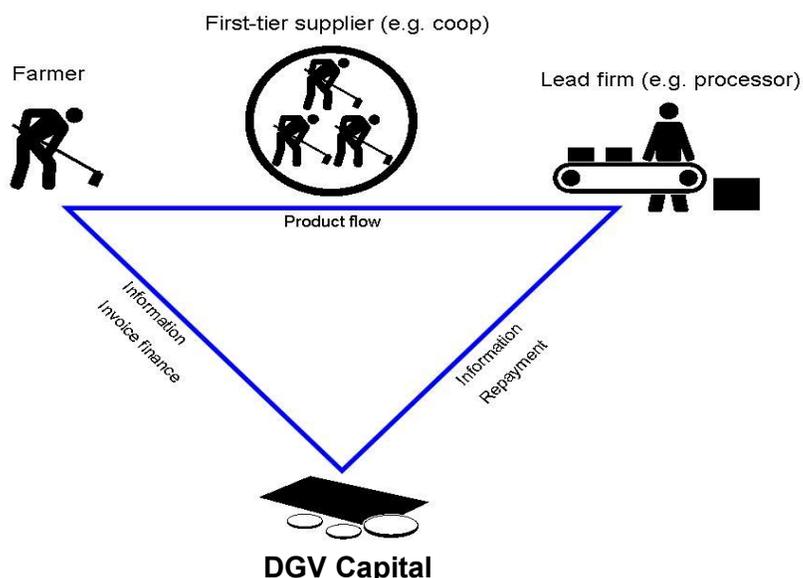
Receivables financing instruments are based on verifiable receivables (such as invoices for product delivered) which serve as the 'collateral' for the short-term loan. Upfront due diligence is required by the financial institution to investigate the financial position of the buyer (firm from which receivables are pending) as well as the authorization for the receivable to be sold, in the case of a factoring instrument.

INSTRUMENT	BEST FOR	BRIEF DESCRIPTION	CASHEW SECTOR	RELEVANCE LEVEL
4. Trade Receivables Finance, Factoring	Speeding working capital turnover, credit risk protection, accounts receivable bookkeeping and bill collection services	A bank or other financier advances financing to a business (supplier, processor, marketer and exporter) against accounts receivable. Receivables financing takes into account the strength the purchase and repayment history of the firm owing against the receivable. In the case of factoring, a discount is applied and the receivable transferred to the financier.	Transactions at the RCN purchasing level in the cashew chain appear to take place 100% in cash. There are no receivables used since the producer would simply sell to a different intermediary who is willing to pay cash. At the processor level, a delay of up to 3-4 months was mentioned between processed kernel shipment and final payment, mainly due to the lengthy shipping time of the product to the buyer. Factoring could be a means to rotate working capital more quickly for processors affected by this.	Medium. If processor working capital becomes a priority of the project, and if there are funds to support a local financial institution to introduce this product for cashews, it would likely be well-received because of the low cost / low risk to the bank. One issue to a local bank could be the international nature of the final buyer.

Example of Trade receivables financing – Producers' Cooperatives in Kenya

In Kenya, a few new Factoring companies focused on the agriculture sector have sprung up in recent years. One such company, called DGV Capital is offering innovative financial products focused on invoice discounting for processors and producers' organizations in the tea, milk and horticulture sectors.

Cooperatives have buying contracts with the processing companies, but oftentimes are faced with payment terms such as 30-90 days after product delivery, due to the time the processors take to process and market the final products. This in turn delays the payment of the cooperative to their producer members, which can create problems for small farm families who need the cash income as quickly as possible. To improve the cashflow for the cooperatives, DGV offers an invoice discounting service. For approved buyers in certain sub-sectors, the cooperative may submit its invoice to DGV. DGV verifies the invoice, and issues immediate payment to the cooperative for portion of the total (such as 70 or 80 percent). When the invoice falls due, the processing firm is responsible for payment directly to DGV, who then pays the cooperative the remainder of the invoice amount, minus a discount for the transaction fee.



The system has been functioning well, one of the major challenges is due diligence procedures on the processing firms who are too busy or uninterested in having DGV obtain the required business information (financial statements, buying transaction history) in order to be able to accept invoices for discounting.

Source: Quirós, 2010.

6.1.3 VCF Physical Asset Collateralization Instruments

Asset collateralization serves to convert assets, whether inventory or movable, into usable collateral for financing purposes. In the case of warehousing, it is most appropriate for commodities with a longer shelf life, and informal warehousing schemes have been set up in countries and locations where formal asset managers are not present. Leasing is present in most markets in some form, even in Mozambique some institutions offer leasing or microleasing products.

INSTRUMENT	BEST FOR	BRIEF DESCRIPTION	CASHEW SECTOR	RELEVANCE LEVEL
5. Warehouse Receipts	Short-term credit based on stored product	Farmers or other actors deposit agricultural products in a certified warehouse. In exchange, they receive a deposit receipt from that can be used as collateral to access a loan from third party financial institutions. Such systems enable quality and bulking of commodities, and enable producers to hold their products to sell for a higher price at a later date.	RCN is a product that can be stored for several months without decline in quality. However, the demand for RCN is very currently very high at harvest season, and the price is thus pushed higher, making the value of storage unclear, since it is not certain that the price will remain high throughout the year. This is due in part to the various cashew crop cycles in other parts of the world. Processors	Low at this time. Some short-term storage (for bulking, grading or packing purposes) could be useful at the local level, long-term storage is not a priority until production levels can be increased and price fluctuation risks managed properly.

			reported being unsure of whether to invest in RCN today, when they do not know the price of kernel they will sell in 9 months. Hedging products are not available for cashew making risk management difficult (see below).	
6. Financial Leasing (Lease-purchase)	Asset investment (machinery , vehicles, etc.) without the usual heavy collateral requirements.	An asset purchase made on credit that includes an agreement of sale, payments of installments with interest, and terms for ownership transfer to the buyer once the contract is fully paid. The financier maintains ownership of financed goods until full payment is made, making it easier to recover the asset in case of borrower default.	The major investments required in the sector right now were identified as 1) cashew plantations and 2) cashew seedling production nurseries. The plantation investments will require use of heavy machinery, but this can be rented on short-term basis and likely won't require purchase of assets up front. A quasi-leasing structure for the cashew investment could be possible, if there were an outside financier willing to take the risk of a long-term asset investment. See box description below of a similar product in another context. Or, a micro-leasing product could be developed for the insecticide spraying equipment investment.	Medium. This product would be most relevant for the support service provider business start-up package (value of approx 20,000 MZN) since the assets could be recuperated as serve as a substitute for collateral.

Example of Asset Collateralization – Agri-leasing company in Ukraine

In Ukraine, MEDA manages a CIDA-funded value chain project focused on improving the competitiveness of the horticulture sector, specifically table grapes and greenhouse products such as tomatoes. A major challenge in the sector was the lack of formal financial institutions interested in financing the agricultural sector, as well as a complete absence of semi-formal institutions such as MFIs. To overcome this constraint, MEDA invested in the establishment of a new Ukrainian LLC – “Agro-Capital Management” or ACM (AKM in Russian).

The company is not a financial institution but instead a distributor of specific agricultural technology packages which the MEDA project has determined will best fit the needs of small and medium farmers and businesses in the value chain. The package includes all of the assets that will be required for the start-up investment, which ACM procures directly from approved suppliers, and then on-sells to farmers with deferred payment plans according to the expected return on the investment. The selling price is higher than the retail price, to account for the cost of interest and administration by ACM.

ACM Agricultural Technology Asset Packages (ATAPs)



For example, in the case of table grapes-- which as an orchard perennial crop bears some similarities to the cashew plant—small farmers (planting less than 1 ha of table grapes in most cases) are offered repayment plans of up to three years (36 months). The product acts as a

quasi-lease, whereby the assets purchased (such as vine seedlings, posts, wire, and drip irrigation) are collateralized by ACM until the sale contract is completely paid. Farmers are also offered discounts on the contract price of up to 20% - covered by donor funding - if they make all payments on time. This has proved to be an important incentive to get farmers interested in a long-term investment and to encourage repayment in an environment where legal recourse could be costly and ineffective, and ACM has over 300 smallholder farmer grape clients after 12 months of operations. Technical support and monitoring by the MEDA project has also helped to reduce risks to ACM, which will need to internalize these functions before the project ends in 2013.

6.1.4 VCF Risk Mitigation Instruments

Insurance is a means of redistributing risk amongst a larger group of individuals or firms, and hedging products help buyers and producers to manage price risks in the agriculture sector where prices are affected by international and local events such as weather events or bumper crops or even political instability. These types of instruments are not observed in Mozambique currently but could be used in the future.

INSTRUMENT	BEST FOR	BRIEF DESCRIPTION	CASHEW SECTOR	RELEVANCE LEVEL
7. Insurance	Reducing risk exposure to natural disasters and other calamities.	Insurance products reduce risks by pooling small regular payments of many clients (premiums) against a smaller pool of clients affected by disasters (claims). Payment schedules are set according to statistical probabilities of loss occurrence. In the case of agricultural production, crop index-insurance schemes, which offer payouts based on a pre-determined threshold (of rainfall for example) are being experimented with in other countries and are designed to be lower cost and easier to manage.	Inventory and property insurance are being used by processing firms (and are required by banks using these assets as collateral in any case). Insurance products of any kind (index or traditional) are in a nascent stage in Mozambique. More than ¾ of rural adults have never heard of insurance, and only 5% of the adult population has any type of insurance product (de Vletter, 2009). Banco Oportunidade has very recently (Jan 2011) launched a credit life and funeral insurance product; this essentially protects the borrower's family (and the bank) in case of death. No examples of crop insurance were observed in the research.	Unknown at this time. Would require research into historical weather data availability and records, historical cashew yields, and potential insurers and re-insurers interested in market, as well as demand side research on producer interest to pay for and use insurance. Probably outside the scope of the ACi project.
8. Forward Contracts, Futures	Futures provide price hedging, allowing companies	A forward contract is a sales agreement between two parties to buy/sell an asset at a set price on a specific date in the future. Forward	Processors reported having buying contracts with kernel buyers, but it was not noted whether price was included in those contracts.	Low since products are not generally available. Other GIZ-sponsored research

	or financial institutions to manage the price risks associated with future commodities purchases and/or sales.	contracts allow price hedging of risk and can also be used as collateral for obtaining credit. Futures are forward contracts that are standardized to be traded in commodity exchanges.	Raw cashew nuts are not currently a tradable commodity, therefore futures and hedging is not offered.	(McKinsey) indicates an uptrend in the price for the next several years.
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6.1.5 VCF Financial Enhancement Instruments

In cases where loans or investment are perceived as unattractive or unfeasible by one party alone, these instruments can help to redistribute risk and also lower the cost of obtaining financing for target groups such as agricultural producers.

INSTRUMENT	BEST FOR	BRIEF DESCRIPTION	CASHEW SECTOR	RELEVANCE LEVEL
9. Loan Guarantees	Incentivizing lenders to enter a new sector in which credit risk is perceived as high	Loan guarantees are offered by a third-party guarantor (private or public) to help reduce lending risks to the financial institution. The guarantee normally acts as first loss against default of the loan, up to a certain maximum percentage of debt amount.	As described above, donor guarantee funds have been successful in encouraging commercial bank lending to the processor level of the VC. However, as yet guarantees have not been used to help share risks of investing in the production level or the input level of the sector.	High. Scaling up finance to the production level is a priority, and guarantees could help to support that, if proper risk-mitigation tools are also in place, such as technical assistance and monitoring of investments.
10. Joint Venture Finance	Large, long-term projects with multiple investor stakeholders	Joint venture finance is a form of shared owner equity finance between private and/or public partners or shareholders. It can create opportunities for shared ownership, returns and risks, often with complementary partner technical, natural, financial and market access resources.	There were the examples of the Netherlands buyer investing in the local processing companies, probably to help to secure their supply chain. There were recently announcements about a new Vietnamese investment in the sector as well.	Unknown. More research would be required to determine feasibility of this approach, especially which private businesses (likely foreign) would be interested in such a venture at the production or processing level of the value chain.

6.2 Sustainable Solutions Strategies, Potential Partners, and Models

In choosing solutions appropriate to the cashew sector in Nampula, the analysis considered both the constraints observed in the value chain, the potential financial instruments available, and the unique characteristics of a perennial crop such as cashew (see box).

The table below highlights some of the prioritized constraint from the analysis, and suggests the first few steps towards implementation. Each solution is expanded upon in the text that follows.

Box. Advantages and disadvantages of farming systems / value chains with perennial crops

Advantages

- Individual land ownership can be established and encourages investment in permanent improvements
- High productivity per hectare (with proper extension support)
- Labour often easier than arable farming
- Advantages of monoculture without reduction in soil fertility
- Often can use land not suitable for arable farming
- Fluctuations in yield smaller than arable farming
- Products can often be more easily transported and stored
- May have considerable scope for intensification
- Cultivation can begin with only a few plants

Disadvantages

- High initial investment and yields do not reach capacity until after a few years
- Often important that processing should take place shortly after harvest
- Need processing plant, therefore high fixed costs
- Often need early skilled labour for good plant development (e.g. year 1)
- Unlike arable farming, committed to one type of production for a long time

Source: Baumann (2000).

Goal: Increase incomes of cashew producers by facilitating investment in additional, new cashew production while ensuring input, support, and output markets are capable of supporting them in their investment.

Purpose Statement: Design financial partnerships with public, private, and non-profit actors, to ensure appropriate, affordable and inclusive financial services are available cashew producers and other value chain actors while minimizing risk.

Prioritized Constraint	Solution & Business Case Potential Partners	Stage 1 Pre-Intervention research	Stage 2 Entry Point	Stage 3 Mid-Point	Stage 4 Exit Stage
<p>1. Smallholder Cashew Producers are mainly poor and uneducated and may have had little to no experience with savings and credit</p>	<p>Facilitate the participation of cashew producers in Savings and Credit Groups or Associations to begin saving <i>(Poor producers cannot effectively use credit or business training unless they have gained basic financial literacy and savings habits)</i> Ophavela ACSAs RCRN</p>	<ul style="list-style-type: none"> - Explore preferred modalities (e.g. ASCAs, PCR, women-only, mixed groups) - Visit existing groups to learn best practices, challenges - Determine whether to contract out PCR activity or train ACi facilitators 	<ul style="list-style-type: none"> - Contract TOT for facilitators and project team on PCR facilitation, monitoring, and phase out - Recruitment of PCR facilitators from within local communities - Prioritize locations and communities for PCR creation 	<ul style="list-style-type: none"> - Creation of PCR groups in priority project areas, expanding out as project expands outreach - Offer training and support to groups according to established 12 month timeline - Prioritize savings for cashew investment or borrowing 	<ul style="list-style-type: none"> - As groups reach 12 month mark, cease external support, freeing facilitator to move to new group formation - Monitor graduated groups for project M&E purposes - Explore ways to leverage strong PCRs for other functions (associations, marketing linkages, etc.)
<p>2. Private Cashew Seedling Producers (Nursery) do not exist and need a combination of finance and expertise to get up and running</p>	<p>Support INCAJU and private businesses / associations to shift cashew nursery activities to the local level and to commercial actors <i>(Cashew plantation inputs must be produced and</i></p>	<ul style="list-style-type: none"> - Test the economic model for soundness - Investigate possible businesses willing to attempt cashew nursery - Determine financing needs - Design demand 	<ul style="list-style-type: none"> - Finalize pilot businesses - Explore financial partners including guarantee funds - Begin implementing demand stimulation activities (incentives, etc.) 	<ul style="list-style-type: none"> - Support to nursery businesses (technical, marketing, etc.) - Continue and evaluate demand side changes - Begin planning for upscaling of nursery model 	<ul style="list-style-type: none"> - Nursery business model is tested and proven - Appropriate financial package available for nursery start up or working capital finance needs - Demand for product has been successfully

	<p><i>marketed on a commercially viable basis to ensure investment into the activity and sustainable supply in the future)</i></p> <p>INCAJU Emerging farmers AgriFUTURO Processing firms Financial institutions (RCRN, Banco Terra)</p>	<p>stimulation strategy</p> <ul style="list-style-type: none"> - Coordinate with AgriFUTURO, which is promoting a similar line of businesses 			<p>created, incentives are phased out</p>
<p>3. Smallholder Cashew Producers Need turn-key investment package to plant new trees and support other crops that guarantee food security and income until cashew matures.</p>	<p>Create a low-cost replanting package that allows smallholders to invest in a small cashew plantation asset (<i>Plantation style cashew production appears to be the lowest cost and highest probability of success for smallholders to become semi-commercial producers</i>)</p> <p>Producers' organizations (formal or informal) District governments Ikuru AgriFUTURO</p>	<ul style="list-style-type: none"> - Test the proposed economic model with potential partners (public, private, producer) to determine viability - In parallel, design non-financial services package that will accompany investment - Market research on what will motivate producers to invest in cashew 	<ul style="list-style-type: none"> - Design timeline/ milestones and locations for investment pilot - Finalize and organize partners and delegate roles of each - Begin implementation and marketing if required 	<ul style="list-style-type: none"> - Close monitoring of model for any adjustments required - Internal (community managed) systems in place for risk management and replication of model - Evaluate returns on investment - Prepare for scale up 	<ul style="list-style-type: none"> - Project partners (public sector, FIs, and producer groups) have taken ownership of the model and are able to replicate it without the facilitation of the project
<p>4. Support Service: Chemical Sprayers Needs capital</p>	<p>Support the continued development of</p>	<ul style="list-style-type: none"> - Examine current credit schemes for strengths and 	<ul style="list-style-type: none"> - Select FI partner, role of each partner is finalized and 	<ul style="list-style-type: none"> - Monitoring of loan portfolio for any challenges 	<ul style="list-style-type: none"> - Repayment of loans are satisfactory - At least 1 MFI

investment for the spraying equipment and protective gear as well as transport / operational costs (bike or fuel)	private small scale support services (sprayers). <i>(Spraying is good business for both provider and user, which are both smallholders – two opportunities for increased incomes).</i> RCRN – IRAM ProCredit Caxias das Mulheres	weaknesses - Short list FI partners and discuss interest - Test product design with clients and FI	agreed to (MOU, contract) - Support FI in product development and roll out - Dissuade non-commercial actors from performing this function	- Hopefully see interest from other FIs to join the activity	decides to continue or scale up without further support
5. Financial institutions (banks and MFIs) lack institutional capacity to assess and manage agriculture credit products.	Engage with the development community to coordinate support and leverage ACi resources for greater impact on financial sector capacity building. <i>(Financial institutions cannot serve the agriculture sector without human resources skilled in agriculture lending and risk management).</i> Donor Financial Sector Working Group AMOMIF Other projects working in financial sector or agricultural sector development	- Determine which actors are active in financial sector capacity building / promotion. - Identify other potential partners such as universities, associations, or other training institutes - Determine ACi resources (human or financial) for this activity	- Working group organized and financial institutions engaged to determine priorities for agriculture credit knowledge transfer - Workplan developed including roles of partners, timelines, and milestones	- Educational curriculum developed for Mozambican context and for both managers and front line staff - Suitable trainers identified - Management and staff - First phase of trainings initiated	- Evaluation of materials and trainer skills - Review of impact within institutions (strategy and implementation) - Devise longer-term strategy for the sector for ongoing capacity building (e.g. housed in a local institution)
6. The absence of formalized	Support key market actors to improve	- Seek out one or two key	- Together with the partners, design the	- Execute the contract (ACi as facilitator)	- Allow the value chain actors to take

<p>contractual relationships in the value chain harms relationships and potential for long-term planning, as well as investment.</p>	<p>and formalize relationships with others in the value chain. <i>(Contracts help to build more formal relationships, can support the value chain to reach better markets, and can serve as collateral or proof of business activity for financial institutions).</i> Processing firms Potentially, producer associations MFIs</p>	<p>businesses who are interested in experimenting with a contract arrangement</p> <ul style="list-style-type: none"> - Seek out and educate one group of producers interested in experimenting with a contract arrangement. 	<p>contract tool including terms and conditions</p> <ul style="list-style-type: none"> - Where relevant include embedded services required - Capacity building for partners on how to use contracts effectively, different terms, etc. 	<ul style="list-style-type: none"> - Monitor the participants for any potential challenges or contract breaches - After contract conclusion evaluate the results for improvements or changes - Replicate the arrangement to other groups, processors, or regions - Educate financial institutions as to the value and use of contracts in lending analyses 	<p>over their own contract negotiations</p>
<p>7. Currently, cashew trees are not properly valued or treated as an asset that could be sold or used for collateral for a loan</p>	<p>Help farmers build assets by documenting and legalizing capital investments of new cashew plantations. <i>(An asset registry would support asset-building for smallholders as well as contribute to information collection on cashew trees in Mozambique).</i> INCAJU (asset tagging) Local administrators (registry management)</p>	<ul style="list-style-type: none"> - Determine the proper method of tagging cashew assets and giving owner proof of ownership - Determine how technology could support in both tagging, recording, and storing registry information - Investigate other country experiences with local asset registries 	<ul style="list-style-type: none"> - Work directly with partners (INCAJU, local administrations, and technology providers) to design the asset registry system and define responsibilities - Engage industry experts to support on system for defining parameters of asset registry - Educate producers on the system and its benefits 	<ul style="list-style-type: none"> - Begin by tagging new seedling purchases in ACi districts (pilot phase) - Monitor system for inefficiencies, fraud potential, or other challenges - Education financial institutions on proper accounting valuations of agricultural assets and use of the registry system 	<ul style="list-style-type: none"> - INCAJU, seedling nurseries, and local government administrators manage the asset registry without external support - Asset data collected at the local level is consolidated and used to produce province wide information on cashew trees (numbers, ages, and varieties) - Financial institutions accept registry issued-documents as proof of cashew tree ownership and valuation

6.2.1 Sustainable Solution #1: Establish voluntary credit & savings groups for farmers, to enable them to save a portion of the funds needed for cashew investments

Several organizations, including CARE and PACT have been promoting savings groups (whether Accumulating or Rotating – the two models are slightly different) in Mozambique for at least a decade as noted above. A description of how an ASCA functions is shown in the box below.

<p style="text-align: center;">How Savings and Credit Groups Work</p> <p>The ACSA (or PCR in Portuguese) product serves as:</p> <ul style="list-style-type: none">- Savings and credit mechanism for the members- Insurance scheme through the social fund (groups save a portion of their funds to help members in case of emergencies)- Increase mutual confidence, social network and organizational capacity and leadership <p>Methodology (organizational)</p> <ul style="list-style-type: none">- They are groups of 10-30 women and men self chosen- The group is administered by executive commission democratically elected- The fund are kept in a small cash box with two padlocks- Padlocks keys and the cash box are kept by the executive commission. <p>Methodology (services)</p> <ul style="list-style-type: none">- The group itself establish fund for social lending- The savings mechanism is done weekly and per pre-determined amount for the group- The lending is granted to the members for small businesses. <p>Training Phases of Rotating Savings and Credit Group</p> <ul style="list-style-type: none">- Mobilization phase – diffusion and methodology presentation- Intensive phase – group organization and training- Development phase – support the group for its autonomy- Maturity phase – assist the group for its independence. <p>Source: Ophavela, 2010.</p>

GIZ, which needs to organize farmers anyways, in order to enable other services such as technical assistance to be delivered, can choose either to facilitate groups directly, using its own staff, or, perhaps more easily, outsource the function to a qualified partner such as Ophavela, SNV (in the case of SACCOs, a more formalized version of a savings group), or RCRN, which would be a village bank model. Given the very inexperienced profile of the cashew farmer in Nampula, the model which promises to provide the highest level of financial literacy and client support at the beginning (usually an ASCA / PCR model) would probably be most suited to ACI clients. Eventually, once they are more established, groups could be converted into SACCOs or caixas.

The promotion of the ACSAs / PCRs will serve two purposes: first, to promote savings and financial literacy amongst clients, but second – and equally importantly – enable farmers to begin to save towards an investment in cashew plantation. If the groups begin saving in the spring (2011), they have six months to save weekly to prepare for the land preparation and planting phase of

cashew beginning in late fall, before the rains start. Priority for participation in the plantation blocks can be given to those farmers who were serious participants in the savings groups and who have saved the minimum amount set at the beginning of the cycle. In addition, other MFIs like RCRN require a savings deposit to access a loan; in the case that the project decides to also pilot a loan scheme this savings will still prove useful to the farmers.

As discussed above, ASCAs require an upfront investment in training of groups, but once established groups continue to self-manage their savings and loans functions. In this sense, the solution is sustainable. At the same time, the group can eventually evolve into a SACCO, caixa,

or other more formal entity if and when they desire and once their level of savings and lending amongst the group warrants additional formalization.

ACI is lucky in that there are several promoters of ACSA / PCR in Nampula province, and it should be relatively easy to contract this support for the project clients. If ACI decides to internalize this skill amongst its own promoters / community activities, it is recommended that they still use an experienced third party to help monitor and trouble-shoot with the groups until the ACI staff is experienced enough to manage this activity without external support.

The research team was not able to determine the costs of ACSA establishment during the research, but given the reliance on local community members, the costs should not be high, and revolve mainly around transportation, staff time, and low investment of a cash box for the groups.

6.2.2 Sustainable Solution #2: Intensively support private sector nurseries and / or community level seedling production

Many other consultants and projects have identified the lack of private sector nurseries as an impediment to development of the cashew value chain. While this is not a strictly financial intervention, as it will require non-financial support as well, we will mention some potential components of a solution that could support the development of viable businesses at the seedlings production level.

- Potential actors: emerging commercial cashew producers (10 ha and up) in some cases already produce seedlings for their own use, as do processors who operate plantations. Both of these groups may be willing to invest in additional seedling product with the correct incentives. Additionally, nurseries that produce other types of plants might be willing to add cashew to line of products. Finally, producers' cooperatives who are advanced, and who have in-house extension, might be capable of producing seedlings for sale to their members.
 - Potential incentives for investment in seedling business:
 - Matching grants from ACI (e.g. match the businesses investment in equipment or land with a one-time grant)
 - Technical support over first several seasons
 - Demand creation: offer vouchers or discounts for seedling purchase in first year or two. In this case, ACI picks up part of the cost of the seedlings, but the seedling producer receives the full amount. For example, producers receive vouchers for 2-for-1 seedlings from ACI- authorized suppliers. ACI pays the supplier for the second seedling.
 - Offer seedling businesses the opportunity to become 'certified' suppliers of seedlings. Task INCAJU with monitoring and issuing licenses to seedling businesses, this increases the value of their product over others in the marketplace.
 - Loan guarantees: ACI could work with existing guarantee funds (USAID DCA, AFD, ADIPSA) to support loans to seedling suppliers from MFIs or commercial banks participating in the loan guarantee schemes.
-

MEDA's Experience with Discount Vouchers as a Market Stimulant in Zambia

In Zambia, MEDA employed discount vouchers for farmers wishing to invest in new kinds of irrigation technologies such as treadle or hip pumps. The project experiences show that stimulation of demand through a discount voucher is feasible. However, success is possible only when demand and supply are stimulated in tandem, which requires attention to the supply side as well:

- Ensuring that the suppliers are willing to invest in the appropriate level of inventory – vouchers become useless if the farmer cannot find the input he or she wants, exactly at the moment when he wants it. The cash the farmer has put aside for his contribution to the purchase will quickly be spent on something else.
- Ensuring that suppliers are involved in directly marketing the product to their customers – if an NGO or project takes on the role of marketing from the business, then the business firstly is not incurring the true cost of doing business, and second, demand may dry up the minute the NGO ceases the marketing activity.
- Ensuring that the location of the supplier ensures both access to customers as well as profitability to the business case. To address this suppliers have an option of developing a wider dealer network that can also include farmer agents.
- Ensuring that there is competition and choice for farmers – that the voucher can be redeemed at more than one business.

Our experience shows that market development projects that wish to use a discount voucher need to ensure that the discount should be a SMART SUBSIDY, designed in such a way that it is used to only stimulate the market and not seen as a real subsidy to the farmers. The more the intervention looks private sector-driven, the better – for example avoiding NGO donation culture and using discount vouchers in the manner that a private company would (think of cell phone company top-up promotions, etc.). In Zambia, the discount vouchers were distributed by the organizations that were training farmers on the new technologies, e.g. the Zambian farmer's union as well as a private company. Farmers were usually not aware of the MEDA project behind the voucher scheme.

Finally, fraud controls are also important. Our experience also shows that electronic vouchers (via SMS) are easier to track and offer less opportunity for fraud or misuse.

Source: MEDA

6.2.3 Sustainable Solution #3: Promote turn-key investment solution for new plantation-style smallholder cashew tree replanting

Most actors and interviewees were in consensus of the need to promote replanting in a plantation (“block”) style, previous reports on the sector also stressed the importance of block replanting. NGOs like CLUSA reiterated their recommendations that effective technical support to small farmers in Mozambique is only possible when the producers are grouped into plantation type locations, and that it becomes easier to encourage uptake amongst producers when focused on a narrow geographic area such as a few administrative posts within one district. CLUSA has been using this approach with soybean in Nampula with good success. While it took time for the arrangement to be fully understood by the community, the upfront investment in the block approach has been paying off in terms of building production and management capacity in the communities.

In the case of cashew, the challenges associated with replanting include obtaining usage rights for the land, the high cost of land clearing and preparation, ensuring proper care of seedlings and young trees, protection of the asset from theft once productive, and the need to construct fireguards. Each of these challenges could be solved more easily if producers were organized into block style plantations. The costs of production are reduced by nearly 100% when the area planted is at least 50 ha. The appendices contain the full cashflow, but below is a breakdown of the expense and revenue generated by cashew when planted in areas of 1 ha, 10 ha, or 50 ha, always assuming that each 1 ha is farmed by a small farmer individually.

Indicator	1 ha	10 ha	50 ha
Investment Costs	597	272	266
Operational Costs (over 5 years)	1,688	1,106	364
Total, COSTS	2,286	1,379	630
Total, REVENUE (5 years)	1,125	1,184	3,819
Net Results on 1 ha - Year 3	(194)	(75)	105
Net Results on 1 ha - Year 5	62	224	355
Cumulative Cashflow on 1 ha - Year 3	(1,160)	(490)	(231)
Cumulative Cashflow on 1 ha - Year 5	(1,161)	(195)	364

(all figures USD)

Technoserve recommends that “Replanting schemes should be led by the private sector to ensure sustainability, with support from the government and NGOs” (TechnoServe, 2009). However, in further detail, they recommend that the investment costs associated with the replanting schemes be covered by donors, government credit, and government subsidies. The private sector’s role under this TechnoServe scenario would be only to buy the cashew product once produced – without any risk or investment on their part. McKinsey also recommends planting campaigns as a high direct impact activity – including nurseries and seedlings together under this heading. They estimate that the gains in production (which naturally will be felt all along the value chain) could mean a gain in earnings for the sector as a whole in Africa of between USD 500 million to 1.4 billion.

Given the long-term nature of the returns to cashew, and the high risk, it seems unlikely that formal financial institutions will be able to fill this financing gap at the smallholder farm level. However, the sector enjoys a strong level of support amongst government and donors, as mentioned above. This can be leveraged to create a package of inputs – both financial and non-financial – that could enable the investment to take place. Here we consider only the upfront investment costs in year one, as many informants insisted that operational costs could be covered from income earned from intercropping as well as other family sources of income. A suggested scenario could be as follows for a 50 ha block:

Turn-key investment costs and sources of finance – 50 ha plantation of 1 ha blocks

COSTS	USD	DIST. GOV'T	FARMER	ACI	Costs remaining
TOTAL INVESTMENT COST	13,314				
Labor (external)	5,342	-	-	-	5,342
Tractor (land prep)	2,950	100% on credit	-	-	0
Inputs total	5,023				
Seedlings	3,063	-	-	50% voucher scheme	1,531
Other inputs (for other crops)	1,960	-	-	-	1,960
Total costs remaining					8,833
Upfront investment required per farmer for a 1 ha plot			\$177		

All figures USD

Under this scenario, the farmer would need to contribute about \$177 towards the investment, from his or her own savings or other sources of capital. Some of this could still be covered in non-cash payments, for example if seedlings suppliers are willing to accept RCN as payment, or if labor could be paid in RCN or other crops. Farmers might have the required input for intercrops and not need to buy them. Additionally, the costs of this credit from the district government have not been factored into the cash flow, and may add some marginal financial costs (interest).

If this overall number is still considered too steep an investment, additional sources of subsidy or financing may be required from the project or its partners. One potential partner under this model could be the Rede de Caixas Rurais de Nampula. RCRN is piloting a new delivery model whereby loans are extended to microclients via associations. They use the sales contract with the buyer as collateral for the loans and the associations help to assess the potential clients. In some cases the buyer has also agreed to repay RCRN directly upon receipt of product from the clients. RCRN has expressed interest in applying this model to the cashew sector, as long as farmers / associations could show current cashew sales contracts (for existing trees). Loan repayment terms would need to be discussed as well, as the normal term of loans at RCRN is 12 months maximum. Other lenders would likely have a similar comfort level with shorter (up to 12 month) loan terms for small farmers.

6.2.4 Sustainable Solution #4: Support the continued expansion of small-scale insecticide sprayer businesses through access to financing

Several actors are already financing farmers to take up the business of small-scale spraying, which seems to be a profitable business and also offers financial benefits to the farmers purchasing the services. The investment costs are less than 20,000 MZN (see detailed information above in previous section) and it appears that the farmer could earn almost twice that amount in one cashew spraying season.

Right now, financing terms for the equipment are not clear as it is being offered by non-financial actors such as NGOs and INCAJU. A better solution would be to support either an MFI or the supplier of the technology to offer financing directly to farmers, as this would be much more sustainable. RCRN noted that they already offer credit for this business line (under their individual loan product), even ProCredit's products could be used for this purpose, if the customer was located close enough to the bank's offices. The research team was not able to meet with the technology supplier to judge their interest in such a scheme. One of the financial instruments mentioned above – leasing – could lend itself well to such a product, since there is a tangible asset that the lender could recuperate in case of non-payment.

The team also identified some medium to longer-term sustainable solutions strategies that would be beneficial to the cashew value chain, but which may either be outside the scope of the ACI project or which could take longer than the remaining two years of the project to see results. The strategies are outlined briefly here.

6.2.5 Sustainable Solution #5: Partner with other actors supporting the financial sector to tackle human resource capacity, risk management, and incentives issues in agriculture lending in the banking /microfinance sectors

Overall, one of the biggest weaknesses and most often cited was the lack of capacity in the banking and microfinance sector to properly evaluate agricultural businesses and their risks. In addition, poor lending practices by other, non-financial actors can prevent financial actors from investing seriously in agri-lending as a viable product line. There are a number of ways that ACI could begin to tackle this issue, in coordination with other actors in the financial and economic development sectors:

- Partner with educational institutes to develop local, appropriate courses on agriculture credit analysis for agronomy students and bank staff
- Lobby current and future donor guarantees to mandate fund use for production rather than less risky processing or commercialization
- Discourage non-FIs from lending to agri-sector (e.g. government, NGOs). Grants are preferable when commercial loans are not possible, to avoid distorting the credit market.
- Encourage the banking sector to work together to build collective information collection / sharing tools to reduce risk and costs, such as commodity price databases, etc. This is another area where the government and/or INCAJU can support (e.g. on data collection, etc.)
- Each of these activities could be coordinated through the donors financial sector working group, AMOMIF, or other coordinating body working on financial services issues in Mozambique

6.2.6 Sustainable Solution #6: Experiment with flexible contract arrangements that could protect both processors and producers from fluctuations in prices and lead to improved value chain finance

ACI can help formalize the value chain and its relationships through experimenting with different types of contract arrangements: Contracts – whether formal, informal, or somewhere in-between – lend legitimacy to business relationships and help to establish credibility and trust between actors. These are critical steps in formalizing and improving value chain transactions, which are key precursors to accessing finance. Already, banks and MFIs are using buyer contracts (in other value chains in Mozambique) as a substitute for formal collateral, which shows that they recognize the inherent lower risk for customers with established selling or buying relationships. The block plantation approach will make contracting with buyers easier for

farmers, but even in the interim processors may be especially interested to pre-arrange purchases before prices rise or before exporters enter the market. ACi – as a neutral third party – can have a facilitation role to play, while being careful not to take on the negotiating responsibilities of either party. Some contracts tips follow:

- By determining floor prices with margin for market price changes, producers can still benefit from increases in prices
- Eventually, contracts could expand to include advancements of working capital or inputs
- Discourage non-market-based ideas such as mandated sales to processors over exporters.
- Help processors that show interest in expanding productive and long-term relationships with producers groups through technical assistance and contract arrangements
- Work with financial institutions (RCRN, Banco Terra) that are already using contracts as collateral for loans
-

6.2.7 Sustainable Solution #7: Help farmers build assets by documenting and legalizing capital investments of new cashew plantations

Farmers are continually capital constrained due to the lack of documented and quantifiable value of the assets they have. In other countries, perennial crops (such as vineyards) have an accounting value based on International Accounting Standards and are often used as collateral or at least as proof of assets for credit analysis purposes. By keeping accurate, transparent records of cashew investments at the outset, ACi can support farmers to legalize their assets which would help them not only to borrow funds potentially but also enable the asset to be transferred (sold) at a market rate should the producer wish to change location or business. It would also help to create a culture of valuing and thereby caring for cashew trees – new and old.

International Accounting Standards for Agricultural Assets

IAS 41 prescribes the accounting treatment for biological assets during the period of growth, degeneration, production, and procreation, and for the initial measurement of agricultural produce at the point of harvest. It requires measurement at fair value less costs to sell from initial recognition of biological assets up to the point of harvest, other than when fair value cannot be measured reliably on initial recognition.

Source: IAS 41 – Agriculture (International Accounting Standards)

A secondary benefit of asset registration is that it will allow districts, provinces, and eventually the country to have accurate information on a large scale around the number of productive trees in the country.

Some steps that could be taken include:

- Empower INCAJU to tag and record cashew seedling purchases by farmers including information such as value, variety, age, owner, and location. This information is then also stored in a secure database.
-

- Work with local administrations or districts to devise asset registration system for cashew trees as a biological asset (in coordination with INCAJU tagging program)
- Educate farmers on variety, value, and asset-building nature of cashew investment
- Establish benchmark valuations standards for cashew trees by age, condition, variety or other parameters as per IFRS accounting standards
- Begin the process of educating bank regulator (Banco de Mozambique) to include biological assets as acceptable collateral for loans, as well as educating MFIs and banks on the use of biological assets as collateral, perhaps using other country regulations as an example.

Simple asset registries for biological assets

In El Salvador, the local administrator issues a 'carta de venta' to cattle owners. The carta serves as proof of ownership and shows the name of the owner and the branding on the animal. If the farmer wishes to take a loan from an MFI or bank, the financial institution accepts the carta de venta as proof of ownership of the asset. The FI takes the carta from the borrower, and stores it in the vault, returning it to the owner upon repayment of the loan. While the carta is not a full guarantee (the animal could still die, or be sold informally), it does serve to assure the FI that the farmer has assets, and serves as an incentive for the borrower to repay in order to avoid losing this important asset, since the bank does have an actual lien on the animal.

Source: Author's own observation.

6.3 Recommended Next Steps

ACI will want to choose amongst these recommended solutions according to their project's priorities and capacities. In some cases, testing of ideas with the market actors involved (producers, associations, local government, INCAJU, etc.) will also be required. Budget may also be a deciding factor – depending on the budget available to dedicate to financial linkages, ACI will need to choose its value chain finance strategy accordingly.

Where financial sector partnerships are needed, ACI will need to make a final selection of partners from the list of recommended options, as well as determine management support and buy-in from the partner. A sample MFI assessment tool follows in Appendix 12; this could also be adapted for use with other types of FI partners such as banks..

Within the ACI project management team, one person should be dedicated as the focal point for value chain finance initiatives and partnerships. This person should have a background in agricultural credit and working with financial institutions, in order to be able to 'speak the language' of financial services operations. The person can have other responsibilities as well, but in our experience one of the major constraints to successful VCF components of projects is a lack of capacity within the implementing agency to manage financial linkages and partners. These activities require good monitoring and follow up, and sometimes a push from the project implementer to ensure that activities stay on track. When it comes to agriculture credit, activities are very time-sensitive, and a delay of even one or two weeks in an activity can mean that the farmer can lose a full season of production. Negotiation skills will also be important, given the number of different stakeholders (public, private, and non-profit) that will need to be managed.

Timing is quite critical for the ACi project and its partners. The long growing cycle, as well as the short window for seedlings planting (in the absence of irrigation) means that the project is on a short timeline to prepare for the next season beginning in November and December 2011. An activities timeline should be constructed, working backwards from an end date of November 2011, and according to deliverables required before then. Some examples include: discussions with potential financial partners (both public and private), signing agreements, determining priority locations, capacitating farmers' organizations in the planning and implementation of the plantations, marketing the business to farmers for participation, organizing the savings' groups, and formalizing agreements with suppliers for year one. A longer-term activities timeline around financial services interventions that will take place over the project life-span should also be constructed.

7.0 CONCLUSIONS

There are challenges in the cashew sector in Nampula province in Mozambique. However, there are also opportunities, given the rise in demand and prices, the solid support of the national and local government for the sector, and the existence of potential partners to the project for financing support. The relevant parties in the sector – public and non-profit, and some private sector actors – seem eager to figure out how to invest in the sector, but lack coordination and a model that would allow them to do so. ACi has the unique opportunity to provide the facilitation needed to encourage cooperation amongst the actors for the benefit of the smallholder farmer and eventually the entire value chain. Investing in cooperation mechanisms (coordinating bodies that involve all stakeholders, education, and information sharing) and creating workplans and assigning tasks among actors could show real results in a short amount of time.

Market development programming in a sector that lacks some of the usual market actors and transactions is not easy. The project will have to be extra careful in its use of subsidies and support to avoid supporting unprofitable businesses or becoming too involved where private sector actors are weak. This is important, because financial services should only be encouraged to flow into private sector activities and to sectors which are relatively market-oriented. Therefore any support that encourages private sector actors to take on bigger roles in the value chain will also have spill-over effects in the flows of capital to the sector.

Financial institutions are still not serving ACi's target value chain actors. However, with the proper incentives – such as support to expand to new areas, and facilitating information about cashew production as a business – there is more than one Nampula-based organization that would be willing to test a new product for ACi's cashew producers. With proper risk management and monitoring, and by strengthening producer – processor relationships, cashew has the potential to become a bankable business in Mozambique. In terms of developing leadership within the value chain itself, as ACi has already noted there is still work to be done. A.I.A. is a good first step, but so far the chain is not coordinated down to the level of inputs and production, which is what will be required in order to manage risks and thus have better access to financing. Testing partnerships using contracts as collateral, and sensitizing local financial institutions in Nampula to this potential market could make a significant contribution. Social marketing techniques around the promotion of certain regions and locations as the “cashew province” or “cashew districts” and the benefits of investing in the sector will also be required to gain the buy in of local communities and businesses. As the value chain matures, these activities – around coordination, partnership development and marketing – can be slowly transferred to these actors themselves. The best incentives for financial institutions are proof of

concept – examples of an institution that has successfully (e.g. profitably) served a rural segment with financial services. Therefore ACi should take special care to dedicate time and effort in the initial phase to prove the viability of the scheme, as well as documenting the experience, in order to attract attention and interest from other financial actors in the future.

Appendix 1

Draft Terms of Reference

Value Chain Finance in the cashew sector in the Province of Nampula in Mozambique

African Cashew initiative (ACi)

PN 09.2207.0-400.00

1. Background:

GIZ, in collaboration with TechnoServe, FairMatchSupport and the African Cashew Alliance, is implementing the African Cashew initiative (ACi), which aims to strengthen the global competitiveness of cashew production and processing in five pilot countries in Sub-Saharan Africa, namely Mozambique, Ghana, Burkina Faso, Ivory Coast and Benin.

Like in other African countries, Mozambican cashew farmers face several constraints that hinder them in increasing the profitability of their cashew production. Besides sub-optimal agricultural practices and few economies of scale in the production and marketing it is also the **limited access to credit** that prevents cashew farmers e.g. to invest in their trees or to plant good quality seedlings.

Agro-processing industries also play a crucial role towards achieving sustainable economic development. Nevertheless, the majority of nuts are exported raw, mostly to India, rather than processed locally. The development of a functioning national cashew nuts processing industry could help diversify Mozambique's economy, capture an increased part of the achievable added value, and create employment opportunities for the population.

Therefore, one of the objectives of the programme is to improve the access to finance for agricultural production (producers need financing (short-term capital, but some also investment capital) for improved technology, inputs such as fertilizers, seeds, agrochemicals, fuel, tools and equipment and the labour used to plant, harvest and transport their crops to the market) and processing (to finance expansion, this preventing capping the amount of produce processors buy from local producers) and to introduce **value chain finance** to the cashew industry in Mozambique.

Value chain finance is a concept that enables financial institutions (FIs) to better understand their clients' needs and mitigate risks through the clients' integration in the value chain. The value chain methodology requires that FIs **take into account the financial potential of the entire value chain** and not just the creditworthiness of a single individual. There are additional benefits to bringing in formal financial entities to finance value chains complementing value chain actors supplying agricultural finance along the value chain, mostly in form of "in-kind" transfers (e.g. *trader credit*: produce buyers (processors, traders) advancing credit (short-term, seasonal loan) to small producer for payment at a later date (often in the form of produce at harvest time); producer organizations (input suppliers) providing inputs such as seed or fertilizer on credit to members; *contract farming/outgrower schemes*: buyers of agricultural products lend funds to producers (either cash or in-kind) and may even provide additional services such as technical assistance; loan is tied to a formal purchasing agreement; can be complemented by the involvement of a FI; usually for high-value markets). The **main challenge** lies in creating more and stronger bridges between the value chain and FIs and in establishing viable, long-term financing relationships. By providing poor and low-income people with access to formal finance, a financial service provider can reduce the liquidity and production constraints that weaken the negotiating power of smaller producers. As a third party, the institution can also facilitate consensus building and align the incentives of different value chain actors, **increase value chain competitiveness**, and improve end products. **Value chain finance can help moving people who typically use only informal finance into safer FIs**, thereby increasing

their access to a greater range of services, including savings, transfer and investment credit. This may also allow the rural population in general to benefit from a broad range of financial products.

The objective of this survey is to **identify potential approaches for successful introduction of value chain finance schemes in the cashew industry in the Nampula Province**, taking advantage of the know-how and the relationships of trust built-up through the ACi Programme in Mozambique.

2. Scope of Work and Responsibilities

The consultant should

- a. Provide a detailed **overview of the status quo on the finances in the cashew sector** based on existing data (the market power of farmers, traders and processors, annual turnover, costs and economic profitability of five processing companies previously to be defined by ACi). Existing studies shall be accumulated and taken into account.
- b. Specify **demand** for financial services, both informal (other value chain actors) and formal (FIs) services along the value chain (input suppliers, farmers, processing companies).
- c. Specify the **supply** of financial services (informal and formal) and propose viable and effective instruments to meet the needs for agricultural finance.
- d. Develop **customer profiles**, including their exposure on risks

3. Detailed Specification of Work and Responsibilities

- a. **Review past and current policy initiatives** on agricultural finance and their impact and sustainability. Undertake consultations with public-, private-sector and civil society representatives on past and current agricultural finance initiatives and their relative impact on the cashew sector. Existing studies shall be taken into account. A detailed list of contacts will be provided to the consultant by the project.
 - b. Suggest criteria for **classification of cashew producers** (e.g. export orientation, smallholder, and subsistence production) and identify the mayor bottlenecks for agricultural finance for each class of producers.
 - c. Build an **understanding of the cash flows** and finance linkages at the level of each actor in the value chain. The analysis further comprises an investigation of the gained incomes and margins by different smallholders, producers and traders, the role of seasonality and specific risks (e.g. draughts, cyclones, and market price fluctuations) as well as risk mitigation strategies.
 - d. **Analyze the supply of formal financial services** along the cashew value chains. This includes an overview of the structure of the **formal financial sector** in Nampula Province and an analysis of the market knowledge of FIs involved in agricultural finance and mapping of available guarantee funds.
 - e. Provide a structured overview of **semi-formal and informal finance schemes** in the cashew value chains, their institutional arrangements and common practice, as well
-

- as the availability and design of crop insurance schemes (e.g. warehouse receipts, cash transport, in-kind credit etc.).
- f. Evaluate to what extent the supply of financial services meets the demand and **identify inappropriate or missing financial linkages, services and products**. Identify reasons for potentially unmet demand (e.g. due to the specific characteristics of the cashew crop, like seasonal income, high transaction costs and risks as well as the lack of valid collateral, land title etc.).
 - g. Propose formal and informal financial instruments that meet the financial needs of actors along the analyzed value chains. **Identify potential linkages of the formal and informal financial instruments** and thoroughly evaluate the viability of potential financing schemes.
 - h. Investigate on the **availability of innovative financial products and services** for the cashew value chain in Mozambique (including use of guarantees, contract farming, investment loans, warehouse receipt systems etc.).
 - i. **Identify potential areas of intervention for GIZ** in order to strengthen the FIs' ability to deliver financial services to small rural enterprises and producers (e.g. training and pilot efforts that link value chain actors and FIs).
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Appendix 2. Schedule of Interviews

Date	Location	Organization	Participants
15-Nov-10	Maputo	Alexim Lda.	Ali Cherif Deroua
18-Nov-10	Maputo	AgriFUTURO / USAID	Carlos Costa
			Carlos Moamba
18-Nov-10	Maputo	GTZ/GIZ - African Cashew Initiative	Ernest Mintah, Kathrin Seelige, Johanna Bollhorst, William Diaz
19-Nov-10	Maputo	AFD	Laurence Hart
19-Nov-10	Maputo	Consultant	Carvalho Neves
22-Nov-10	Nampula	CLUSA	Stephen Gudz
22-Nov-10	Nampula	Condornuts Lda.	Silvino Martins
22-Nov-10	Nampula	Miranda Lda.	Felipe Miranda
22-Nov-10	Nampula	Muecate Union Ass. De Natuko	Mogovolas
22-Nov-10	Nampula	RCRM - IRAM	Marino José Pascoal
23-Nov-10	Nampula	INCAJU	Emilio Furede (Delegado provincial)
23-Nov-10	Nampula	Individual farmer	Aron Incaju
23-Nov-10	Nampula	Individual farmer	Joao Mecuceti Sekera
23-Nov-10	Nampula	Private Nursery, Farmer	Ababacar Ibrahim
24-Nov-10	Nampula	Mugovolas Producer groups and service providers	service provider, farmer cashew, farmer non cashew
25-Nov-10	Nampula	MIRUKU	Joao Soares Guedes Júnior, Chissungue Haje António
26-Nov-10	Nampula	Banco Oportunidade	Mateus Mondlane
26-Nov-10	Nampula	Banco ProCredit	Atanásio Matsinhe, Luisa Guiamba
27-Nov-10	Nampula	AgriFUTURO / USAID	Julio Costa
27-Nov-10	Nampula	GAPI - Delegação Nampula	Nazir Abdul Mussa
30-Nov-10	Maputo	AMOMIF / GFA	Ricardo Taca, Marielle Zeidler
30-Nov-10	Maputo	KfW Development Bank	Gerd Juntermanns
30-Nov-10	Maputo	Technoserve	Jake Walter
1-Dec-10	Maputo	Banco Terra	Kathryn Larcombe
1-Dec-10	Maputo	INCAJU	Eng. Lucia
3-Dec-10	Maputo	ELIM Consulting	Tatiana Mata
3-Dec-10	Maputo	USAID	Elsa Mapilele
3-Dec-10	Maputo	Consultant	Fion de Vletter
10-Dec-10	Maputo	GAPI	Aurora Malene
13-Dec-10	Nampula	Olam, Lda.	Niranjan Reddy Rachamalla
13-Dec-10	Monapo	SDAE - Monapo	Alfonso Abasul
14-Dec-10	Nampula	ADPP	Else-Marie Fogtmann
14-Dec-10	Nampula	INCAJU Angoche	Isac Mabote
14-Dec-10	Nampula	Individual farmer	Sr. Cypriano
14-Dec-10	Nampula	Ophavela	Sr Anibal

Producer Interviews / FGD – Questions & Data Collection Sheet

15-Dec-10	Nampula	AMODER Ass. Moz de desenvolvimento rural	Sr Gilberto
15-Dec-10	Nampula	Caixas das Mulheres	Fatima Kambuile
15-Dec-10	Nampula	Instituto de Algodao	Eng Frei
15-Dec-10	Mogovolas	SDAE - Mogovolas	
11-Jan-11	Maputo	Standard Bank	Marcelino Botão
11-Jan-11	Telephone	RCRM - IRAM	Shannon Johnson
12-Jan-11	Maputo	DANIDA/ADIPSA	Abdul Adamo/ Sven Nilson

Appendix 3 – VCF Research Tools

Producer Interviews/FGD – Questions & Data Collection Sheet

Name of Respondent/s	
Role of Respondent/s	
Interview Date/Time	
Contact Information	
General Comment	
Research Questions	Information Gathered from Respondent/s
Family Structure/Income Sources <ol style="list-style-type: none"> 1. How many people live in your home? 2. How many are men : women? 3. How many members are involved in cashew production, harvesting, selling? (<i>are any youth involved?</i>) 	
Production <ol style="list-style-type: none"> 4. How long have you been producing cashew? 5. How long have you been selling cashew? 6. What else do you produce and sell? 7. Do you have any non-agriculture sources of income in your household? 8. How important are cashews to your overall income? (more than 25%? more than 50%? More than 75%?) (How has this changed over past 3-5 years?) 9. How much time do you spend on activities related to cashews production or selling? How does this compare to other activities you need to do? 10. How much money did you have to spend related to cashew production or selling? (for example, fumigation, labor, transport to sell it, etc.) 11. Do you produce and sell any by-products made from cashew trees? (like from the cashew fruit, or any other part of plant?) 12. During the past 3-5 years what changes have you seen in the demand for cashews? Has it been higher, lower, the same? What about any changes in price over same time frame? 13. Have you seen any positive benefits to your family or household as a result of producing and selling cashews? 14. What are your future plans for your cashew activities? Do you want to grow this activity, keep it the same, or let it go down (e.g. as plants get old?) Could you continue to support your household in the same way if you did not have income from cashew? 	

Producer Interviews / FGD – Questions & Data Collection Sheet

<p>Marketing</p> <ol style="list-style-type: none"> 15. Who do you sell your cashew to? 16. Do you sell to the same buyer each time? Why or why not? 17. How do you decide who to sell to? 18. How do you know at what price you should sell your cashew? (ask friends, ask traders, check at market, etc?) 19. Does the price for cashew change frequently? Are there months were it is higher than others? 20. How do you deliver your cashew product to the buyer? (buyer comes to farm; farmer must transport; bus, car , donkey etc.) What are the costs of this to you? 21. Who in the family is responsible for the selling activity? (e.g. husband, wife, children, other?) 22. When you do receive payment for your cashew? (immediately same day, after few days, etc.) 23. Does anyone assist you in selling? If yes, who? 24. How many times a season do you sell cashew? (e.g. only once, or several times) 25. What is the quantity that you usually sell at one time? (largest and smallest quantity) 26. Do you ever collaborate with other cashew farmers (neighbours, family) to sell together? Why or why not ? (e.g. better price, share on transport etc) 27. How much did you earn from cashew sales? 28. Do your buyers (traders) ever offer you advanced payment for your cashew? What are the terms of this arrangement? (e.g. do they set the price, quantity etc.) 29. Do you keep track of your sales? (do you know when you sold more or less?) 30. Do your buyers want to buy more cashew? (e.g. if you had more cashew, would you be able to sell it?) 31. Did you ever refuse to sell your cashew? If so, why? 32. Do you ever store your cashew (on farm or elsewhere) to sell at a later date? If so, why did you store it? 33. If you sell any cashew by-product: who do you sell to? Price? Etc. 	
<p>Inputs</p> <ol style="list-style-type: none"> 34. Which inputs do you use? 35. Where do you obtain your inputs from? 36. Are there any special arrangements with your suppliers? (do you use the same suppliers each time, or different ones? Why?) 37. Have you ever planted new cashew seedlings? Where did you get them? Did you have to pay for them? How did you know how to plant and maintain them? Did the seedlings survive? 38. Do you ever fumigate your cashew trees? If so, who did this for you? Did you have 	

Producer Interviews / FGD – Questions & Data Collection Sheet

<p>to pay for it? What was the benefit? (e.g. less disease, higher yield, better cashew price, etc.?)</p> <p>39. How do you assure the quality of inputs? Are there any problems with quality?</p> <p>40. What price do you pay for _____ ?</p> <p>41. How do you pay for these inputs? Do the suppliers ever allow you to pay for the purchase at a later date? (details)</p> <p>42. Do you receive training or instruction on how to use inputs? From whom?</p>							
<p>Technologies & Training</p> <p>43. Have you ever received training on cashew production, quality, or other?</p> <p>44. If yes from whom? How long was the training? Did you pay for the course?</p> <p>45. Was the training accessible to both women and men?</p> <p>46. Have you received any training from government?</p> <p>47. What kind of technologies do you use? Where do you obtain these from?</p> <p>48. Would you be willing to try new technologies or methods?</p> <p>49. How do you store your product?</p>							
<p>Financial services usage and literacy</p> <p>50. Have you ever borrowed money for your farm or household?</p> <p>51. If YES, from formal source?: <input type="checkbox"/> Cooperative <input type="checkbox"/> MFI <input type="checkbox"/> Bank <input type="checkbox"/> Other: _____</p> <p>52. Or from informal source?: <input type="checkbox"/> Relatives <input type="checkbox"/> Friends <input type="checkbox"/> Business Partners <input type="checkbox"/> Other: _____</p> <p>53. What did you borrow for? Inputs, equipment, household expense, other?</p> <ol style="list-style-type: none"> 1. How much did you borrow? _____ 2. How long did you have to repay? _____ months; 3. How often did you make payments? <input type="checkbox"/> every week; <input type="checkbox"/> every two weeks; <input type="checkbox"/> every month; <input type="checkbox"/> after each market sale; <input type="checkbox"/> flexible/when I could; <input type="checkbox"/> Other: _____ 4. Did you repay in full? <input type="checkbox"/> Yes <input type="checkbox"/> No; If NO, why not? _____ 5. Did you have to pay interest on the loan? If so how much? (test to see if they understand concept of interest and know how much they paid). 6. Were you required to put some kind of collateral for the loan? If so, what? <p>54. Would you like to have access to credit in the future? <input type="checkbox"/> Yes <input type="checkbox"/> No If NO, why not: <input type="checkbox"/> Don't need a credit; <input type="checkbox"/> No place to borrow from; <input type="checkbox"/> Don't think I can repay; <input type="checkbox"/> Don't like the loan terms; <input type="checkbox"/> Don't know where to borrow from; <input type="checkbox"/> Other: _____</p> <p>55. Where would you prefer to borrow from? Which one, why?</p> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width:5%; text-align: center;"><input type="checkbox"/></td> <td style="width:70%;">Informal Source</td> <td style="width:25%;"></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>A Buyer or Supplier</td> <td></td> </tr> </table>	<input type="checkbox"/>	Informal Source		<input type="checkbox"/>	A Buyer or Supplier		
<input type="checkbox"/>	Informal Source						
<input type="checkbox"/>	A Buyer or Supplier						

Producer Interviews / FGD – Questions & Data Collection Sheet

<input type="checkbox"/>	Cooperative	
<input type="checkbox"/>	Microfinance Institution	
<input type="checkbox"/>	NGO	
<input type="checkbox"/>	Bank	
<input type="checkbox"/>	Other (specify)	

56. If you were able to take a loan, what would you borrow for? How much would you borrow for that?

- a. Not interested in taking a loan;
- b. My household;
- c. Inputs: _____
- d. Equipment: _____
- e. Other use (specify): _____

57. How much interest could you pay on the loan? None- I do not want to pay interest on the loan – 0%; state %: _____

58. What is more important: Lower interest rate or More time to pay back the loan?
Why?

59. What is more important: Lower interest rate or Not having to give a guarantee?
Why?

60. If you do not use credit why not? (what are the challenges?)

61. Do you save money?

- a) If no, why not? Not able to save, don't know how, don't have anywhere to save?
- b) If yes, where or how do you save money? (indicate name etc.)

<input type="checkbox"/>	Informal group or family	
<input type="checkbox"/>	Xitiki	
<input type="checkbox"/>	Buy small animal	
<input type="checkbox"/>	Cooperative (SACCO)	
<input type="checkbox"/>	Microfinance Institution	
<input type="checkbox"/>	NGO	
<input type="checkbox"/>	Bank	
<input type="checkbox"/>	Other (specify)	

62. If you had a safe place to save money, would you save?

63. If you have savings, what do you use it for?

64. Do you know what insurance is? For example, funeral insurance, health insurance, life insurance?

Producer Interviews / FGD – Questions & Data Collection Sheet

<p>65. Have you ever had an insurance policy? What was your experience? 66. If you could buy insurance for your agriculture production, would you do that?</p> <p>Investment 64. If capital were not a constraint what types of investments would you like to make in your farm or household? 65. Is it worthwhile to invest in cashew production? (yes / no). If yes – why? If no – what is more worthwhile than cashew?</p>	
<p>Co-operation / Relationships 66. Do you belong to any farmers groups or organizations / associations? 67. If yes, a) how do they assist/help you? Do they provide training? Do you pay a membership fee? b) Do they offer any inputs on credit, or cash credit? c) What is the association, and what is its mandate etc? d) Is the association open to both men and women? What is membership ratio? 68. If no, do you think joining an association would have any benefits? 69. How else do the farmers cooperate together? 70. Do you know what a contract is? Have you ever had a contract? (the contract could be written or verbal). What was the contract for? (e.g. a loan contract, marriage contract, supplier contract, etc.) 71. What was your experience with the contract? Did each party hold up his or her responsibility under the contract? 72. Do you think it is good to have contracts (written or verbal)? Why or why not? 73. Do you think the people in the cashew sector you do business with are trustworthy? Why or why not? 74. Which ones do you think would be best for you to work more with?</p>	
<p>Constraints/Opportunities 75. What are the main challenges to your cashew business on your farm? What are the main challenges to the cashew sector that you have observed (outside of your business?) 76. If you could solve your most important constraint in your cashew business what would that be?</p>	

Cooperative/Association – Questions & Data Collection Sheet

Name of Respondent	
Role of Respondent	
Interview Date / Time / Location	
Contact Information	
General Comments	
Research Questions	Information Gathered from Respondent
<p>Organizational Background</p> <ol style="list-style-type: none"> 1. When was your organization formed? 2. Are you legally registered? If yes, by who? 3. Who do you represent? (e.g. producers, exporters) 4. What is the size of your membership? How has this changed over the previous 5 years? Is it limited to cashew or is it multi-purpose? - 	
<p>Services</p> <ol style="list-style-type: none"> 5. What is the purpose of your organization? 6. What services do you offer to your members? <ul style="list-style-type: none"> ○ Collective purchase of inputs? ○ Provision of services? ○ Collective sale of outputs? ○ Disseminating market information? ○ Advocacy? ○ Financing? ○ Other? 7. What percentage of your membership uses these services? 8. How do you cover the costs of these services (e.g .membership dues, fee for service, grants from NGOs or government)? 9. Are there other services that you would like to offer but currently do not? Why not? 10. Are there other services that are needed but currently unavailable to value chain actors in the cashew subsector? What are they? How do you think they could best be provided? 11. Are there other associations or cooperatives representing the cashew sector? Who are they? What is there contact information? 12. What % of cashew farmers are engaged in these types of organizations? 	

Cooperative / Association – Questions & Data Collection Sheet

<p>Association/ Relationships</p> <p>13. -Do you partner or work together with any other businesses (e.g. buying together, selling together, other?)</p> <p>14. Would you be willing to work together with other businesses? How could that benefit your business?</p> <p>15. Are you part of the AICAJU? What services do they provide for you? What do you pay for this? Are there additional services you would like them to provide?</p> <p>16. If not a member – why not?</p> <p>17. Do you know about AIA? Would it be of interest of your organization to work with AIA? Why or why not?</p> <p>18. Do you think the cashew actors you do business with are trustworthy? Why or why not?</p> <p>19. Which ones do you think would be best for you to work more with?</p> <p>20. Has your organization ever had a contract? (the contract could be written or verbal). What was the contract for? (e.g. a loan contract, supplier contract, etc.)</p> <p>21. What was your experience with the contract? Did each party hold up his or her responsibility under the contract?</p> <p>22. Do you think it is good to have contracts (written or verbal)? Why or why not?</p>	
<p>Management</p> <p>23. Do you have a constitution?</p> <p>24. Are there regular elections?</p> <p>25. What is the organization's management structure?</p> <p>26. What is the % of women who are involved in management? What roles do they play?</p> <p>27. Has there been any turnover in management since the organization was formed?</p> <p>28. What is your link with the Government of Mozambique?</p>	
<p>Opportunities / Challenges</p> <p>29. How do you expect your organization to evolve over the next 5 years?</p> <p>30. What are the major constraints or challenges facing your organization?</p> <p>31. What would be potential solutions to overcome those?</p>	

Input Suppliers/Service Providers – Questions & Data Collection Sheet

Name of Respondent	
Role of Respondent	
Interview Date/Time/Location	
Contact Information	
General Comments	
Research Questions	Information Gathered from Respondent
<p>Products/End Markets/Customers</p> <ol style="list-style-type: none"> 1. Who are your customers? Is your customer base growing? Why or why not? (do you sell to the same customers each time, or not? Why?) 2. What type of products or services do you sell? 3. How do you do quality control? Do you guarantee your products or services? 4. How do you decide which products or services to offer? Which products or services are the most profitable for you? (and how do you determine profitability) 5. Do customers ever ask for other products or services that you do not offer? 6. What are the payment options for your customers (cash only, some credit, etc.?) If you offer credit what are terms? Do you accept in-kind payments (e.g. other goods, products?) 7. Are your customers' women and men both? (what percent of each) 8. Who is your competition? 9. Do you keep business or sales records? (manual or computer?) how do you know when to increase stock, which months were better than others etc? <i>(if possible: is the business registered, do they pay taxes?</i> 10. During the past 3-5 years what change have you seen the demand for your products or services? Increase? Decline? About the same? 	
<p>Suppliers</p> <ol style="list-style-type: none"> 11. Where do you source your inputs? 12. Are you satisfied with these suppliers? 13. If producing seedlings: how do you decide which varieties to produce? 14. Are they produced locally or imported? 15. What price do you pay for _____ 16. Are there any special arrangements with your suppliers? (do you use the same suppliers each time, or different ones? Why?) 17. Do you buy supplies or inputs on credit? From who/ what are the terms? 18. Are you a producer or trader yourself? 	
<p>Technologies & Techniques</p> <ol style="list-style-type: none"> 19. Do you provide technical information and instruction to your customers? 	

Input Suppliers / Service Providers– Questions & Data Collection Sheet

<p>20. If so, where do you get this information?</p> <p>21. Are you part of a program or project that supports you with free or subsidized products or services for you to sell? How does this work? Who is involved?</p> <p>22. - Do you have a mobile phone? (<i>and how do you use it for your business?</i>)</p>	
<p>Distribution/Pricing/Seasonality</p> <p>23. How do you market your products?</p> <p>24. Where are your shops located – rural and/or urban areas?</p> <p>25. How do you determine pricing?</p> <p>26. At what prices do you sell _____ (same supplies as above)?</p> <p>27. How do you transport products? Do you sell directly to producers or via agents or traders?</p> <p>28. How many production cycles do you have in one year? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> >5</p> <p>29. In which months do you supply the most? <input type="checkbox"/> Jan, <input type="checkbox"/> Feb, <input type="checkbox"/> Mar, <input type="checkbox"/> Apr, <input type="checkbox"/> May, <input type="checkbox"/> Jun, <input type="checkbox"/> Jul, <input type="checkbox"/> Aug, <input type="checkbox"/> Sept, <input type="checkbox"/> Oct, <input type="checkbox"/> Nov, <input type="checkbox"/> Dec</p> <p>30. In which months do you supply the least? <input type="checkbox"/> Jan, <input type="checkbox"/> Feb, <input type="checkbox"/> Mar, <input type="checkbox"/> Apr, <input type="checkbox"/> May, <input type="checkbox"/> Jun, <input type="checkbox"/> Jul, <input type="checkbox"/> Aug, <input type="checkbox"/> Sept, <input type="checkbox"/> Oct, <input type="checkbox"/> Nov, <input type="checkbox"/> Dec</p>	
<p>Financing</p> <p>31. Have you ever used external financing for your business?</p> <p>a) If YES, from formal source?: <input type="checkbox"/> Cooperative <input type="checkbox"/> MFI <input type="checkbox"/> Bank <input type="checkbox"/> Other: _____</p> <p>b) From informal source?: <input type="checkbox"/> Relatives <input type="checkbox"/> Friends <input type="checkbox"/> Business Partners <input type="checkbox"/> Other:</p> <p>32. What did you borrow for? Inputs, equipment, other?</p> <p>33.</p> <p>7. How much did you borrow? _____</p> <p>8. How long did you have to repay? _____ months;</p> <p>9. How often did you make payments? <input type="checkbox"/> every week; <input type="checkbox"/> every two weeks; <input type="checkbox"/> every month; <input type="checkbox"/> after each market sale; <input type="checkbox"/> flexible/when I could; <input type="checkbox"/> Other: _____</p> <p>10. Did you repay in full? <input type="checkbox"/> Yes <input type="checkbox"/> No; If NO, why not? _____</p> <p>11. Did you have to pay interest on the loan? If so how much? (test to see if they understand concept of interest and know how much they paid).</p> <p>12. Were you required to put some kind of collateral for the loan? If so, what?</p> <p>34. Would you like to have access to credit in the future? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>35. If NO, why not: <input type="checkbox"/> Don't need a credit; <input type="checkbox"/> No place to borrow from; <input type="checkbox"/> Don't think I can repay; <input type="checkbox"/> Don't like the loan terms; <input type="checkbox"/> Don't know where to borrow from; <input type="checkbox"/> Other: _____</p>	

Input Suppliers / Service Providers– Questions & Data Collection Sheet

36. Where would you prefer to borrow from? Which one, why?

<input type="checkbox"/>	Informal Source	
<input type="checkbox"/>	A Buyer or Supplier	
<input type="checkbox"/>	Cooperative	
<input type="checkbox"/>	Microfinance Institution	
<input type="checkbox"/>	NGO	
<input type="checkbox"/>	Bank	
<input type="checkbox"/>	Other (specify)	

37. If you were able to take a loan, what would you borrow for? How much would you borrow for that?

- a. Not interested in taking a loan; b. My household;
 c. Inputs: _____
 d. Equipment: _____
 e. Other use (specify): _____

38. How much interest could you pay on the loan? None- I do not want to pay interest on the loan – 0%; state %: _____

39. What is more important: Lower interest rate or More time to pay back the loan? Why?

40. What is more important: Lower interest rate or Not having to give a guarantee? Why?

41. if you do not use credit why not? (what are the challenges?)

42. Where do you go to save money?

43. How do you make or receive payments? (*cash only, bank transfer, credit card, in-kind product, etc.*)

Association/ Relationships

44. Do you partner or work together with any other businesses (e.g. buying together, other)

45. Would you be willing to work together with other businesses? How could that benefit your business?

Constraints/Opportunities

46. What are the main growth opportunities in your business? What about for the cashew sector?

47. What are the main challenges to your business? What are the main challenges to the cashew sector that you have observed?

48. - If you could solve your most important constraint in your business what would that be?

Input Suppliers / Service Providers– Questions & Data Collection Sheet

NGO and Government Agency – Questions & Data Collection sheet

Name of Respondent	
Role of Respondent	
Interview Date/Time/Location	
Contact Information	
General Comments	
Research Questions	Information Gathered from Respondent
Role and Mandate What is your main role in the cashew sub sector? Why did you decide on the cashew sub sector? Do you consider this sector as a viable sector? If yes, why?	
Services and target group What types of services or support do you offer to public and private sectors in the cashew sector? Who is your main target group?	
Perception of the sector Do you consider cashew as one of growth agricultural sub sectors in Mozambique? What are the notable growth opportunities? What are your main observations of this sector over the last 5 years?	
Constraints and Challenges What do you consider as the major challenges and constraints? Would you be able pinpoint constraints and challenges for various market actors? Producers? Wholesalers, Retailers, Exporters, Importers?	
Potential Solutions What are the potential solutions to the challenges and constraints above? Which of the constraints and challenges is your organization/agency addressing? What are results so far? Successes? Failures? Lessons learned? Experiences?	
Financing Are you aware of any financing arrangements for the cashew sector? If yes, what are they? Do you think these financial arrangements are sufficient? Are there any gaps? What potential solutions do you see in the sector?	

NGO and Government Agency – Questions & Data Collection Sheet

<p>Constraints/Opportunities What are the main growth opportunities for cashew producers like you? What opportunities exist to improve the production and sales of local cashew? Are there opportunities for adding value to local cashew? If yes, what are these opportunities? What are the main challenges?</p>	
<p>Gender What do think are some of main gender considerations in the cashew sub sector? Which functions in the value chains are dominated by women? Input supply? Production? Processing? Wholesaling? Retailing? Exporting? Importing? Why?</p>	
<p>Environment Are you aware of environmental laws/restrictions/certification/standards relating to the cashew sub sector?</p>	
<p>Enabling Environment Do you think there is an enabling environment for cashew sub sector? If yes, why? Do you think there are sufficient support services and markets for cashew sub sector? What support service markets are you aware? Who are the service providers? Do you think they are adequate? Are there any notable barriers to access by various actors in the cashew sub sector? What role has the government been playing in creating an enabling environment for cashew? What role has your organization or agency played in creating an enabling environment for cashew sector? Are you aware of any organizations subsidizing the cashew sector through product or support services? What has been the impact?</p>	
<p>Other Contacts Could you provide us with the contact information on companies, organizations involved in cashew? Importers, Exporters? Wholesalers? Processors? Retailers? Extension officers? Support organizations, NGOs, other government agencies?</p>	

Processing Factory – Questions & Data Collection Sheet

Name of Respondent	
Role of Respondent	
Interview Date/Time/Location	
Contact Information	
General Comments	
Research Questions	Information Gathered from Respondent
<p>Products/End Markets/Buyers</p> <ol style="list-style-type: none"> Who are your buyers? Is your customer base growing? Why or why not? (do you sell to the same buyers each time, or not? Why?) What type of products do you sell? (e.g. cashew plus other businesses?) Why did you decide enter the processed cashew business? How long have you been operating this business? How do you do quality control? Do you guarantee your products to the buyer? What are the requirements of your buyers (e.g. volume, quality / grade, date of delivery, packaging, etc.)? Are you able to meet these requirements? Do your buyers ever ask more or different product that you cannot offer? Do you sign supply contracts with your buyers? If so what are the terms? What are the payment terms your buyers offer you (cash on delivery, 30 day invoice, 60 day invoice, etc.)? Do they respect the terms of the payment invoice? Who is your competition? How do you differentiate yourself from the competition? (or do you need to?) In which months do you supply the most? <input type="checkbox"/> Jan, <input type="checkbox"/> Feb, <input type="checkbox"/> Mar, <input type="checkbox"/> Apr, <input type="checkbox"/> May, <input type="checkbox"/> Jun, <input type="checkbox"/> Jul, <input type="checkbox"/> Aug, <input type="checkbox"/> Sept, <input type="checkbox"/> Oct, <input type="checkbox"/> Nov, <input type="checkbox"/> Dec In which months do you supply the least? <input type="checkbox"/> Jan, <input type="checkbox"/> Feb, <input type="checkbox"/> Mar, <input type="checkbox"/> Apr, <input type="checkbox"/> May, <input type="checkbox"/> Jun, <input type="checkbox"/> Jul, <input type="checkbox"/> Aug, <input type="checkbox"/> Sept, <input type="checkbox"/> Oct, <input type="checkbox"/> Nov, <input type="checkbox"/> Dec Do you keep business or sales records? (manual or computer?) During the past 3-5 years what change have you seen the demand for your product? Increase? Decline? About the same? 	
<p>Suppliers</p> <ol style="list-style-type: none"> Where do you source your RCN? How often do you source? How much do you buy on average (monthly or annual)? What is the minimum volume you can purchase at a time? Do you offer a better price for a higher volume of RCN? Do you buy directly from producers (farm gate) or do you go through intermediaries? What is the process? Where do you get a better price, where are your costs lower? How do you judge the quality of the RCN? Do you pay a premium for higher quality RCN? (if yes, how much premium? ___%) 	

Processing Factory – Questions & Data Collection Sheet

<p>16. Are there any special arrangements with your suppliers? (do you use the same suppliers each time, or different ones? Why?)</p> <p>17. Are you satisfied with these suppliers? What are the challenges on the supply side?</p> <p>18. How do you decide what price to pay for RCN?</p> <p>19. What is the average price for RCN this month?</p> <p>20. What are the payment terms with your suppliers (cash on delivery, 30 days, etc.)?</p> <p>21. Who is responsible for the transport of the RCM (e.g. you or the supplier?)</p> <p>22. Do you have any formal or informal purchase order (contracts) with your suppliers? If so, what are the terms? If not, why not?</p> <p>23. Are you able to forecast the approximate volume of RCN you will be able to purchase in a season? (e.g. in order to forecast working capital needs). How do you get this information?</p> <p>24. Are you a producer or trader yourself?</p> <p>25. Does your supply of RCN last throughout the year for processing? (or, for how many months is the processing plant actively working?)</p> <p>26. What are the expenses associated with storing a large volume of RCM throughout the year?</p>	
<p>Technologies & Techniques</p> <p>27. Do you provide technical information or instruction to your suppliers about the type of product you will want to buy?</p> <p>28. If so, where do you get this information?</p> <p>29. Do you cooperate with any program or project that supports your suppliers with free or subsidized products or services? How does this work? Who is involved?</p> <p>30. If you need information about technology or techniques, where do you get it?</p> <p>31. Are you aware of the additional (secondary) processing techniques used in cashew? Have you ever considered implementing this? (why or why not?)</p>	
<p>Financing</p> <p>32. Have you ever used external financing for your business? If YES, from formal source?: <input type="checkbox"/> Cooperative <input type="checkbox"/> MFI <input type="checkbox"/> Bank <input type="checkbox"/> Other: _____ From informal source?: <input type="checkbox"/> Relatives <input type="checkbox"/> Friends <input type="checkbox"/> Business Partners <input type="checkbox"/> Other: _____</p> <p>33. What type of financing products or services do you use? (from whom?)</p> <p>13. Working capital Loans / line of credit _____</p> <p>14. Equipment or long term loan: _____</p> <p>15. Letter of credit (trade credit): _____</p> <p>16. Promissory note: _____</p> <p>17. Lease: _____</p> <p>18. Factoring / invoice discounting: _____</p> <p>19. Prepayment from buyer: _____</p>	

Processing Factory – Questions & Data Collection Sheet

20. Long term investment participation / equity financing: _____

34. For each product you used, what were the terms of the agreement?

21. How much did you borrow? _____

22. How long did you have to repay? _____;

23. How often did you make payments? every week; every two weeks;

every month; after each market sale; flexible/when I could;

Other: _____

24. Did you encounter any problems with the payment terms? Did it meet your needs?

25. Did you have to pay interest or fees? If so how much?

26. Were you required to put some kind of collateral? If so, what?

27. Did you receive any guarantee fund support? If so how much?

35. What type of financing products or services would you like to use in the future?

28. Working capital Loans / line of credit _____

29. Equipment or long term loan: _____

30. Letter of credit (trade credit): _____

31. Promissory note: _____

32. Lease: _____

33. Factoring / invoice discounting: _____

34. Prepayment from buyer: _____

35. Long term investment participation / equity financing: _____

36. Where would you prefer to borrow from? Which one, why?

<input type="checkbox"/>	Informal Source	
<input type="checkbox"/>	A Buyer or Supplier	
<input type="checkbox"/>	Cooperative	
<input type="checkbox"/>	Government entity	
<input type="checkbox"/>	Bank	
<input type="checkbox"/>	Other (specify)	

37. What are the terms you would prefer? __ (e.g. how much will you require, for what period, etc.?)

38. If you do not use credit why not? (what are the challenges?)

39. Where do you go to save money?

40. How do you make or receive payments? (*cash only, bank transfer, credit card, in-kind product, etc.*)

Processing Factory – Questions & Data Collection Sheet

<p>41. Do you have any insurance currently? For example: asset insurance, liability insurance, health insurance, life insurance, product insurance (for stored cashews), etc.?</p> <p>42. Are you interested in buying insurance? If so, what kind would be of most interest? What are the risks of not having insurance?</p>	
<p>Association/ Relationships</p> <p>41. Do you partner or work together with any other businesses (e.g. buying together, selling together, other?)</p> <p>42. Would you be willing to work together with other businesses? How could that benefit your business?</p> <p>43. Are you part of the AICAJU? What services do they provide for you? What do you pay for this? Are there additional services you would like them to provide?</p> <p>44. Are you a shareholder of AIA? What services do they provide for you? What do you pay for this? Are there additional services you would like them to provide?</p>	
<p>Constraints/Opportunities</p> <p>45. What are the main growth opportunities in your business? What about for the cashew sector as a whole?</p> <p>46. What would need to be done to take advantage of these opportunities?</p> <p>47. What are the main challenges or constraints to the growth of your business? What about to the cashew sector as a whole?</p> <p>48. What could be done to solve these constraints?</p> <p>49. If you could solve your most important constraint in your business what would that be?</p>	

Processing Factory – Questions & Data Collection Sheet

Name of Respondent	
Role of Respondent	
Interview Date/Time	
Contact Information	
General Comment	
Research Questions	Information Gathered from Respondent
<p>Products/End Markets/Customers</p> <ol style="list-style-type: none"> 1. What type of products do you trade? 2. How do you decide what to trade? 3. Where do you get market information about the products you sell? 4. Who are your major customers (buyers)? Is your customer base growing? Why? (do you sell to the same customers each time, or not? Why?) 5. Do you have contracts or agreements with your buyers to supply a certain quantity of cashew? If so what are they terms of these written or verbal contracts? 6. Do you sell to exporters? Do you sell to processing factories? 7. Which buyers offer better prices? 8. What are the terms of payment from your buyers? (e.g. cash on delivery, delayed payment, no. of days delay etc.) 9. Do you export directly? Where? 10. How much product do you sell in a week or month? Are sales seasonal? 11. Do you keep business or sales records? (manual or computer?) how do you know when to increase stock, what months were better than others etc? <i>(if possible: is the business registered, do they pay taxes?)</i> 12. Who is your main competition? How do you compete? (offer better price, offer better service, have better location, etc.) 13. During the past 3-5 years what change have you seen the demand for cashews? Increase? Decline? About the same? 	
<p>Suppliers</p> <ol style="list-style-type: none"> 14. Where do you buy your cashew product? 15. How often do you buy? What quantity is normal? 16. Do you buy from producers directly or buy from traders or farmers groups? 17. [Do you purchase products from the market? Which market?] 18. How do you determine what price to offer for cashew? (check with market, check with other traders, check on prices your buyers are offering, etc.) 	

Processing Factory – Questions & Data Collection Sheet

<p>19. Are there any special arrangements with your suppliers? (do you use the same suppliers each time, or different ones? Why?)</p> <p>20. Are you satisfied with these suppliers?</p> <p>21. What is the quality of cashew product you are buying? (high low etc.) How do you determine the quality? Do you pay a higher price for higher quality cashew?</p> <p>22. Do your suppliers deliver product to you or do you travel to them?</p> <p>23. Do you ever provide market information to suppliers i.e. what products are most in demand, quality requirements, design and colour requirements etc?</p> <p>24. Do you buy and sell cashew all year round? Or only certain months? Do you store product (short-term or long-term) and if so, where? Why do you store?</p> <p>25. Do you plan exactly how much product you will buy and sell? (do you project?)</p> <p>26. How do you pay your suppliers? (cash on delivery, delayed payment, in-kind payment, other?)</p>	
<p>Technologies & Training</p> <p>27. Do you have to perform any additional activities prior to selling cashew? (e.g. cleaning, grading, packing, etc.)</p> <p>28. Who performs these activities?</p> <p>29. How much does it cost?</p> <p>30. Do you ever receive support from your buyers on how to perform these activities?</p> <p>31. Do you ever help your suppliers to learn how to properly perform these or other activities related to cashews?</p>	
<p>Financing</p> <p>32. Have you ever used external financing for your business?</p> <p>33. If YES, from formal source?: <input type="checkbox"/> Cooperative <input type="checkbox"/> MFI <input type="checkbox"/> Bank <input type="checkbox"/> Other: _____</p> <p style="margin-left: 20px;">a. From informal source?: <input type="checkbox"/> Relatives <input type="checkbox"/> Friends <input type="checkbox"/> Business Partners <input type="checkbox"/> Other: _____</p> <p style="margin-left: 20px;">b. What did you borrow for? Inputs, equipment, other?</p> <p style="margin-left: 20px;">c. How much did you borrow? _____</p> <p style="margin-left: 20px;">d. How long did you have to repay? _____ months;</p> <p style="margin-left: 20px;">e. How often did you make payments? <input type="checkbox"/> every week; <input type="checkbox"/> every two weeks; <input type="checkbox"/> every month; <input type="checkbox"/> after each market sale; <input type="checkbox"/> flexible/when I could; <input type="checkbox"/> Other: _____</p> <p style="margin-left: 20px;">f. Did you repay in full? <input type="checkbox"/> Yes <input type="checkbox"/> No; If NO, why not? _____</p> <p style="margin-left: 20px;">g. Did you have to pay interest on the loan? If so how much? (test to see if they</p>	

Processing Factory – Questions & Data Collection Sheet

understand concept of interest and know how much they paid).

h. Were you required to put some kind of collateral for the loan? If so, what?

34. Would you like to have access to credit in the future? Yes No

35. If NO, why not: Don't need a credit; No place to borrow from; Don't think I can repay; Don't like the loan terms; Don't know where to borrow from;

Other: _____

36. In the future, where would you prefer to borrow? Which one, why?

<input type="checkbox"/>	Informal Source	
<input type="checkbox"/>	A Buyer or Supplier	
<input type="checkbox"/>	Cooperative	
<input type="checkbox"/>	Microfinance Institution	
<input type="checkbox"/>	NGO	
<input type="checkbox"/>	Bank	
<input type="checkbox"/>	Other (specify)	

37. If you were able to take a loan, what would you borrow for? How much would you borrow for that?

a. Not interested in taking a loan; b. My household;

c. Inputs: _____

d. Equipment: _____

e. Other use (specify): _____

38. How much interest could you pay on the loan? None- I do not want to pay interest on the loan – 0%; state %: _____

39. What is more important: Lower interest rate or More time to pay back the loan? Why?

40. What is more important: Lower interest rate or Not having to give a guarantee? Why?

41. if you do not use credit why not? (what are the challenges?)

42. Where do you go to save money?

43. How do you make or receive payments? (*cash only, bank transfer, credit card, in-kind product, etc.*)

Processing Factory – Questions & Data Collection Sheet

<p>Investment</p> <p>44. If capital were not a constraint what types of investments would you like to make in your farm or household?</p> <p>45. Is it worthwhile to invest in cashew production? (yes / no). If yes – why? If no – what is more worthwhile than cashew?</p>	
<p>Co-operation Level</p> <p>46. Do you think the cashew actors you do business with are trustworthy? Why or why not?</p> <p>47. Which ones do you think would be best for you to work more with?</p> <p>48. Do you know what a contract is? Have you ever had a contract? (the contract could be written or verbal). What was the contract for? (e.g. a loan contract, marriage contract, supplier contract, etc.)</p> <p>49. What was your experience with the contract? Did each party hold up his or her responsibility under the contract?</p> <p>50. Do you think it is good to have contracts (written or verbal)? Why or why not?</p>	
<p>Constraints/Opportunities</p> <p>51. What are the main opportunities you have seen in the cashew sector? What about for your own business in cashews?</p> <p>52. What do you think would need to be done to take advantage of these opportunities?</p> <p>53. What are the main challenges to your cashew related business?</p> <p>54. What are the major constraints/challenges to the cashew sector that you have observed (external to your business)?</p> <p>55. If you could solve your most important constraint in your cashew business what would that be? Do you have an idea of how it could be solved?</p>	

Appendix 4: List of persons and Organizations Contacted

Organization	Contact Person	Title	Address	Location	Email contact	Telecontact
ADPP	Else-Marie Fogtmann		Ithukulo; Monapo district, frequently in Nampula	Nampula	cajito@tdm.co.mz	826772380; 26520024
AFD	Laurence Hart	Chefe de Projectos	Av. 24 Julho, no. 1500	Maputo	hartl@afd.fr	21303747
AgriFUTURO / USAID	Carlos Costa	Director	Rua Comandante Moura Bras, 27, Bairro de Malanga	Maputo	carlos.costa@agrifuturoproject.com	2132749; 825162102
AgriFUTURO / USAID	Carlos Moamba	Enabling Environment Director	Rua Comandante Moura Bras, 27, Bairro de Malanga	Maputo	carlos.costa@agrifuturoproject.com	2132749; 8431 94810
AgriFUTURO / USAID	Julio Costa	Maize Value Chain Leader	Prédio Girasol, 1° andar; Nampula	Nampula	julio.costa@agrifuturoproject.com	824690710
Alexim Lda.	Ali Cherif Deroua		Maputo	Maputo	alexim@mail.com	826581381
AMODER Ass. Moz de desenvolvimento rural	Sr Gilberto		Nampula Cidade	Nampula	amodernampula@tdm.co.mz	82 6840030
AMOMIF	Ricardo Taca	Director Executivo	25 de Setembro	Maputo	direccao.amomif@tvocabo.co.mz	2132 8703 / 84 3993070
AMOMIF / GFA	Marielle Zeidler	Ag. & Business Economist	25 de Setembro	Maputo	zeidler@tvocabo.co.mz	84 8278564
Banco Oportunidade	Mateus Mondlane	Gerente da Delegação de Nampula	Av. Paulo samuel Kankomba 13A	Nampula	mateus.mondlane@banco-opportunidade.com	82 3004374
Banco ProCredit	Atanásio Matsinhe	Gerente Regional	Av. Zedequias Manganhela, N°267, JAT, 6° Andar; Maputo	Met in Nampula	amatsinhe@bancoprocredit.co.mz	82 8565610
Banco ProCredit	Luisa Guiamba	Coordenadora de Serviços Bancários	Av. Francisco Manyanga, No. 6	Nampula	lguiamba@bancoprocredit.co.mz	2621 5715 / 82 041 4580
Banco Terra	Kathryn Larcombe		Av. Samora Machel, no. 47, 1st floor	Maputo	klarcombe@bancoterra.co.mz	21359903
Caixas das Mulheres	Fatima Kambule		Nampula Cidade	Nampula		82 4249396
CLUSA	Stephen Gudz	Director Nacional, CLUSA Moçambique	Av. Eduardo Mondlane, prédio Girassol, 3° andar; Nampula	Nampula	stephen@teledata.mz	26215826 / 823031745
Condornuts Lda.	Silvino Martins	Sócio-Gerente	Av. da Independência, 333; Nampula	Nampula	condornol@teledata.mz	26217206 / 826015560
Consultant	Carvalho Neves		0	Maputo	carvalho.neves@tvocabo.co.mz	823139530
DANIDA/ADIPSA	Abdul Adamo/ Sven Nilson			Maputo	aadama@adipsa.org.mz, sni@adipsa.org.mz	21413211
ELIM	Tatiana Mata	Directora Executiva (Agro-Economista)	Rua da Resistencia 480 R/C	Maputo	tatiana.mata@elimservicos.com	82 0622490
GAPI	Aurora Malene		Maputo, Cidade	Maputo	aurora.malene@gapi.co.mz	84 325 1600
GAPI	Nazir Abdul Mussa	Gerente da Delegação de Nampula	Av 25 de Setembro, no. 1023	Nampula	gapi.nampula@tdm.co.mz	2621 8276 / 820734389
GTZ/GIZ - African Cashew Initiative	Ernest Mintah	Investment Advisor	32, Nortei Ababio St., Accra Ghana	Met in Maputo	ernest.mintah@giz.de	233 302 77 41 62 / 233 24 431 2817
GTZ/GIZ - Cooperação Técnica Alemã	Kathrin Seelige	Gestão de Qualidade e Comunicação	Francisco Orlando Magumbwe Road No. 976	Maputo	kathrin.seelige@giz.de	2149 1245 / 8438 92688
INCAJU	Eng. Lucia		Rua Resistência, 1746-4° andar; Maputo	Maputo	0	21416898
INCAJU	Emilio Furede (Delegado provincial)		Av. 25 de Setembro 11; Nampula	Nampula	setsan.efurede@gmail.com	0
INCAJU Angoche	Isac Mabote	Rep. of INCAJU Angoche	Angoche	Nampula		
Individual farmer	Aron Incaju		Mugovolas	Nampula	Mugovolas	
Individual farmer	Joao Mecuceti Sekera		Namaponda	Nampula		82 8549095
Individual farmer	Sr. Cypriano		Angoche	Nampula		
Instituto de Algodão	Eng Frei		Nampula	Nampula		84 2283993
KfW Development Bank	Gerd Juntermanns		Av. Francisco Orlando Magumbwe, 976; Maputo	Maputo	gerd.juntermanns@kfw.de	826123560
Miranda Lda.	Felipe Miranda	Director Geral	Av. Francisco Manyanga, prédio JFS, 5° andar; Nampula	Nampula	mirandacaju@teledata.mz; felipemiranda_moz@hotmail.com	26218217 826094660 846094660
MIRUKU	Joao Soares Guedes Júnior	Consultor	Av. Francisco Manyanga no. 739, C. Postal 628	Nampula	guedju66@gmail.com; miruku@tdm.co.mz	82 667 5900
MIRUKU	Chissungue Haje António	Sócio-Gerente	Av. Francisco Manyanga no. 739, C. Postal 628	Nampula	haje.miruku@gmail.com	26 216805 / 824 4541310

Muecate Union Ass. De Natuko	Mugovolas		Muecate	Nampula	Meeting organize through MIRUKU	Meeting organize through ACi
Mugovolas Producer groups and service providers	service provider,farmer cashew,farmer non cashew		Contact arrange via ACi Nampula	Nampula	Mugovolas	Meeting organize through ACi
Olam, Lda.	Niranjan Reddy Rachamalla		Av. do Trabalho; Nampula	Nampula	0	26620017 823045041 847860099
Olam, Lda.	Factory manager		Olam factory Monapo	Monapo		
Ophavela	Sr Anibal	Director	Nampula- Cidade	Nampula	anibalo@tdm.co.mz	82 5160173
Private Nursery	Ababacar ibrahimi		Nampula	Nampula		82 3247860
RCRM - IRAM	Marino José Pascoal	Coordenador	Rua Cidade de Moçambique, No. 11	Nampula	iram.marino@teledata.mz	2621 3643 / 8230 10768
RCRM - IRAM	Shannon Johnson	Manaqing Director	Rua Cidade de Moçambique, No. 11	Nampula	shannoni42@hotmail.com	826 168 386
SDAE - Mogovolas		District director	SDAE - Mogovolas	Mogovolas		
SDAE - Monapo	Alfonso Abasul		SDAE - Monapo	Monapo		
Standard Bank	Marcelino Botão		Av. 25 de Setembro,	Maputo	marcelino.botao@standardbank.co.mz	825427750
Technoserve	Jake Walter	Director	Av. Zedequias Manganhela, N°267, JAT, 5° Andar, Maputo	Maputo	jakewalter@tdm.co.mz	<u>21326171/73 823121950</u>
USAID	Elsa Mapilele		Rua 1231, no. 41, Prédio JAT III	Maputo	emapilele@usaid.gov	21352000

Appendix 5

Name of FSP: Standard Bank

General Information	
Contacts:	Marcelino Botao Marcelino.botao@standardbank.co.mz Cell:+258 825427750 Av.25 Setembro
Legal structure:	Foreign owned Commercial quoted on the Johannesburg and London SE
Areas of operation / coverage:	Present in all Provincial capitals. Has two branches in Nampula and another in Nacala. Does not have representation in the cashew districts.
Local outreach:	Has two branches in Nampula with an agric officer in the agribusiness section
National outreach:	Is one of the five big banks in Mozambique within reach of all economically active persons or entities in Mozambique.
Number of paid staff:	900 – 1000
Target clients:	Traditional commercial bank clients e.g. corporate clients, small businesses, and higher / middle income households.
Lending Methodology¹:	Individual lending, corporate lending
Funding sources:	Own funds and bilateral arrangement with NGOs, savings etc
Products and Services:	
→ Savings:	Savings account - 12% pa interest rate
→ Credit:	Gives credit to commerce, investment, personal and agriculture.
→ Other services:	Leasing and insurance services
Analysis	
Strengths:	Has a customized agric product – CRED-AGRO a risk initiative sharing has US\$30m earmarked for small to medium agriculture finance. Developing an agribusiness unit that will specialize in agriculture finance.
Weaknesses:	Have the same attitude as other banks in Mozambique- not very willing to take risks in financing agriculture. Lacks capacity for a quick take off. Not knowledgeable on how to handle agriculture projects.
Opportunities for partnership:	Agriculture finance is a future growth area that will make the bank grow as it gains more experience and capacity.
Challenges to partnership:	The bank requires a buyer contract as a requisite for finance. Finance is through special vehicles a) farmer's associations b) Agro –dealers c) Agro- business. Does not finance plantation set.
Type of VCF:	Can be linked to emerging farmers small to medium plantations, processors and traders who want to export RCN.

¹ There may be variations on this methodology depending type of FSP

Name of FSP: Ophavela

General Information	
Contacts:	Sr Anibal anibal@tdm.co.mz Cell: +258 82 5160173
Legal structure:	National NGO. Ophavela is a not-for-profit Mozambican association focused on social-economic development through promotion of sustainable rural financial services through training, technical assistance and advocacy in Mozambique.
Areas of operation / coverage:	Operational in 11 districts in Nampula
Local outreach:	Since 2000, have mobilized 3,600 groups and about 62,000 members (usually 10 to 15 per group). have savings exceeding 200,000.00mts
National outreach:	Operates only in Nampula province
Number of paid staff:	33-45
Target clients:	Target the rural poor who cannot be served by traditional financial institutions.
Lending or Savings Methodology²:	Has 9 district technicians and 260 community activists (animadores comunitarios). Train groups of rural households on how to self-manage a savings group, save money, and lend to members of the group to mobilize funds in the community for productive use. Ophavela is also starting to help transform some of the ASCAs into Savings and Credit Cooperatives (SACCOs) starting with three SACCOs in 2008 in Monapo, Murrupula and Ribaué. The organization plans to substitute SACCOs in districts where it has worked for at least 5 years, as its exit strategy.
Funding sources:	donors
Products and Services:	
	It takes about US\$50 -\$60 to train a member per year.. However they do not participate or influence groups on where to invest their funds. Each technician can train 20 groups per year, each activist can train 2 groups per year. However they have started in Monapo to train an association of activists who then train groups and are also engaged in agrobusiness – commercialization.
Analysis	
Strengths:	Have an existing set up network in 11 districts. Trusted by the rural population due to grassroots approach and long-term presence in communities with local staff.
Weaknesses:	Do not have enough funds to satisfy demand. Have no downstream products eg after saving then what.
Opportunities for partnership:	Utilize the Ophavela group mobilization methodology (based on CARE VSLA model) to create savings groups amongst the cashew plantation bloc groups. The facilitation could either be outsourced to Ophavela (for a fee), or Ophavela could train ACi facilitators and help monitor the activities over time.
Challenges to partnership:	All activities are very informal and based on trust. Difficult to have appropriate downstream products for this sector other than in agriculture- investment requirement is high and more of long term, more risky
Type of VCF:	To train SHF to save and then develop plantation using their own savings, or to use the savings as collateral for a loan.

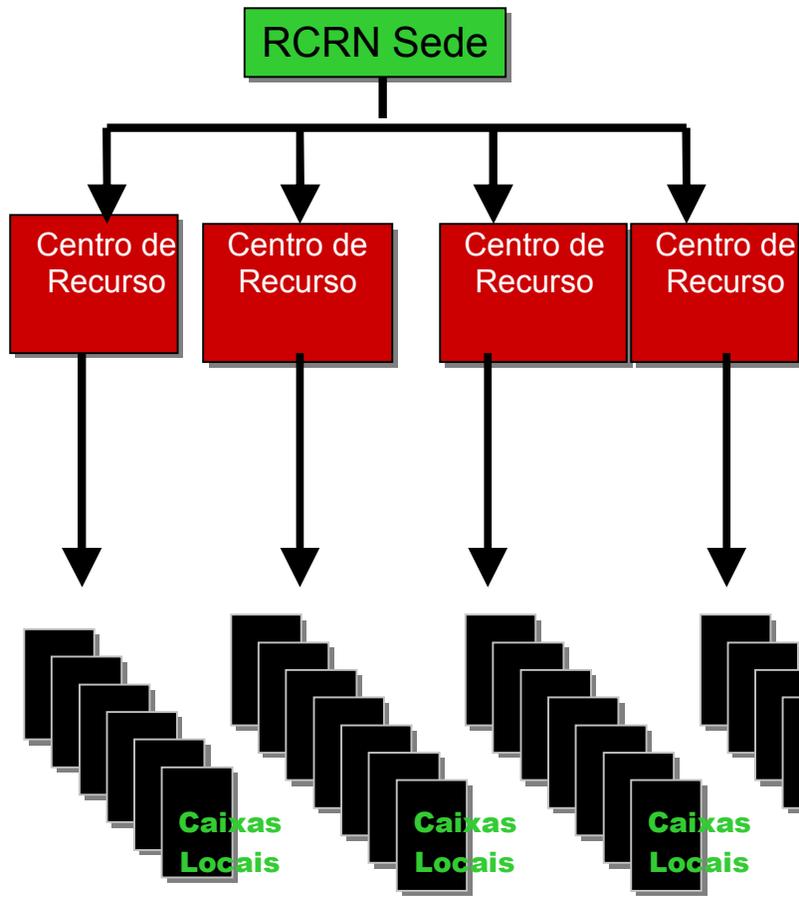
² There may be variations on this methodology depending type of FSP

Name of FSP: Red de Caixas Rurais de Nampula (RCRN)

General Information	
Contacts:	Shannon Johnson shannonj42@hotmail.com Don Marino José Pascoal Cell: +258 826 168 386
Legal structure:	In 1997, IRAM launched its CCCP programme in Maputo and Chokwe using a village bank type methodology of associations of solidarity groups called <i>caixas comunitárias</i> . The Caixas in Nampula are financed by Swiss Cooperation and UNHCR and is still organized as a project (e.g. does not have an independent legal structure.) The RCRN plans to formalize into a microbank in 2012 and are in discussions with BDM to this end.
Areas of operation / coverage:	Presence in Meconta, Muecete, Ribaua, Mecuburi, Monapo, Erati, and Nampula, 42 caixas across these districts.
Local outreach:	14.000 members (23% women) Active Loans <ul style="list-style-type: none"> • Grupo Solidário (agricultura): 3.832 • Grupo Solidário (comercio): 4.783 • Individual: 990 • Total: 9.605 Outstanding Portfolio (Capital) (000 MZN): <ul style="list-style-type: none"> • Solidário (agricultura): 8.718 • Solidário (comercio): 10.859 • Individual: 10.861 • Total: 30.438 Portfolio quality <ul style="list-style-type: none"> • Carteira em risco (crédito solidário): 15,7% • Carteira em risco (crédito individual): 12,5% • Carteira em risco (total): 14,1% (because of project funding from UNHCR, RCRN had to lend to refugees. 40% of this refugee portfolio is delinquent, whereas the other portfolios are in better condition). Guarda Valor (similar to savings) <ul style="list-style-type: none"> • Clientes: 800 • Saldo depósitos: 1.654.000 MZN
National outreach:	Operates only in Nampula province.
Number of paid staff:	Have 50 staff and director, plus 300 seasonal collaborators that do promotion and marketing, working on commission.
Target clients:	Target the rural and urban poor who are not served by traditional financial institutions.
Lending or Savings Methodology³:	See diagram below. RCRN establishes “Centros de recursos”, which then manage several locally placed caixas. This is similar to a village banking model except with more flexible borrowing and savings terms for members.
Funding and partners:	UNHCR, Swiss Cooperation, IRAM, Danida (fishing product)
Products and Services:	Offers the following products: Solidarity loans: <ul style="list-style-type: none"> • groups of 5 persons, up to 2,000 MZN per member for the first loan cycle, with increases of up to 2,000 MZN for each subsequent cycle • 1% life insurance on the loan as well as a 5% security deposit on the value of the loan. The 5% is returned to the client upon successful repayment.

³ There may be variations on this methodology depending on type of FSP

	<ul style="list-style-type: none"> • Members must have a business activity • For agriculture: loans given Nov/Dec for repayment in July/Aug; during grace period only 3% flat monthly interest is payable with balloon payment of principle due at end of cycle • For commerce/trade loans: offered from April until Nov, terms from 4-8 months in length, interest is 2.5% flat monthly, principle and interest payable monthly <p>Individual loans:</p> <ul style="list-style-type: none"> • Must be a member of RCRN • Must have assets for collateral valued at 2 times the value of loan • Must have a business activity • Monthly repayments from 3-12 months in length, 2.5% flat interest rate • Same charges as solidarity loans (insurance and security deposit) • Have previous experience lending to cashew traders as well as for spraying equipment investment <p>Guarda valores</p> <ul style="list-style-type: none"> • Take compulsory deposits from loan clients as part of collateral / guarantee requirements • Not officially licensed for general deposit taking yet <p>Association loans</p> <ul style="list-style-type: none"> • Are piloting a new product that works through associations, in construction and soon the fisheries sector • In Ilha de Moçambique have used this method with women's dance association. Collateral for loan is savings of association members. • If association has a contract with a buyer, buyer reimburses caixa directly. The contract also serves as the collateral for loan. • Caixa and association representatives work together to make lending decisions
Analysis	
Strengths:	Target client is rural households including farmers. Have already developed products suited to working with agriculture and through cooperatives / associations.
Weaknesses:	Right now, not yet established as a legal entity. Probably will obtain microbank license, but some risk around partnership with a project (as opposed to a registered financial institution). Portfolio at risk is somewhat high, but some of these is due to high PAR (40%) amongst refugee population loans.
Opportunities for partnership:	Partner with RCRN to pilot a loan product for cashew investment at smallholder level. If an association has a buying contract with buyer for <i>current</i> cashew production, that could serve as collateral. RCRN may also be able to lend to producers who want to invest in spraying equipment. RCRN may also be a potential partner in group mobilization since by its nature the caixa methodology requires households to work together and agree to share and allocate resources amongst the group.
Challenges to partnership:	Right now, RCRN does not have a presence in the locations where ACI is operating. They would require support to open a centre in project locations; however this centre could potentially be multi-purpose (e.g. for ACI staff or partner organizations as well) to save on costs.
Type of VCF:	Financial linkage with semi-formal financial institution, based on value chain relationships (producer with buyer and producer with technical support agency – ACI).



Roles of Sede (HQ)

- Recruitment, training of management & staff
- Funding negotiations
- Audit of operations

Roles of Centros

- Supervise and monitor activities of Caixas locais
- Disburse individual loans
- Manage “savings” activities of caixas (“guarda de valores”)

Roles of Caixas

- Offer majority of retail services: crédito solidário, guarda de valores, savings groups

Source: Rede de Caixas Rurais de Nampula (2010).

Appendix 6:

Cost of Seedling Production -12 000 seedlings

32

ITEMS	UNIT	Quantity	Price in MZM	Total cost	Total cost - USD	
Inputs						
Seeds	kg	154	10	1,540.00	48.13	
Plastic bags	kg	144	150	21,600.00	675.00	
Tap	CX	7	350	2,450.00	76.56	
Alcohol	lt	2	100	200.00	6.25	
Manua	kg	1200	1	1,200.00	37.50	
Capucho	Embalagem	13	150	1,950.00	60.94	
Cotton	kg	3	90	270.00	8.44	
Pesticides	lt	2	800	1,600.00	50.00	
Total inputs				30,810.00	962.81	
Instruments						
		3	600	1,800.00	56.25	
Grafting tool		1	2	550	1,100.00	34.38
Pruning tool		1	3	250	750.00	23.44
Watering cans		1	1	1,000	1,000.00	31.25
Pulverizador / sprayer		1	1	100	100.00	3.13
Pedra esmeril		1	30	10	300.00	9.38
Placa de identificacao	cx		3	100	300.00	9.38
Carinho de mao		1	2	800	1,600.00	50.00
Balanca decimal		1	1	700	700.00	21.88
Carda de sisal	rola		1	200	200.00	6.25
Banquinhos		1	3	50	150.00	4.69
Anchinho		1	1	50	50.00	1.56
Pa		1	2	200	400.00	12.50
Catana		1	3	150	450.00	14.06
Sacos de juta		1	12	25	300.00	9.38
Machado		1	1	250	250.00	7.81
Enxada		1	4	75	300.00	9.38
Alcate		1	1	50	50.00	1.56
Martelo		1	1	45	45.00	1.41
Prego		1	1	10	10.00	0.31
Fitmetro		1	1	100	100.00	3.13
Serote de poda		1	1	250	250.00	7.81
Colher de pedreiro		1	2	80	160.00	5.00
Total instruments				10,365.00	323.91	
Infrastructure						
		1	1	1,000	1,000.00	31.25
Alpendre - shed		1	3	500	1,500.00	46.88
Ripado						
Total infrastructure				2,500.00	78.13	
Labor						
Labor			1	1,750	42,000.00	1,312.50
Manager		1	1	1,500	36,000.00	1,125.00
Total Labor				78,000.00	2,437.50	
Protection material						
Boots/ botas		1	3	250	750.00	23.44
mascaras		1	3	280	840.00	26.25
luvas		1	3	50	150.00	4.69
oculos		1	3	60	180.00	5.63
fato macaco		1	3	300	900.00	28.13
Total Protective Gear				2,820.00	88.13	
Transport						
		1	3	1,500	4,500.00	140.63
Bike / bicicleta		1	3	150	450.00	14.06
Repair kit / kit da reparacao						
Total transport				4,950.00	154.69	
Total custo de producao				129,445.00	4,045.16	
GRAND TOTAL				129,445.00	4,045.16	
Production costs per plant				10.79	0.34	

Appendix 7: Cashflow Analysis: Smallholder cashew production (1 ha)

INVESTMENT AND CASHFLOW CASHEW - SHF

1 1HA

ITEM		Year									
		1	2	3	4	5	6	7	8	9	10
INVESTMENT COSTS		597.28	-	-	-	-	-	-	-	-	-
Labor		305.78									
Land Clearing	43	35.00									
Land marking	6	8.40									
Holes and planting	14.2	19.88									
Tools	2	242.50									
Construct fireguard		57.14									
Tractor		-									
Ploughing/grading	2										
Slashing											
Cleaning fireguards											
Fuel											
Inputs		291.50									
Seedlings	70	49.00									
Other inputs (for other crops)		242.50									
<hr/>											
OPERATIONAL COSTS	Person days	179.20	377.09	379.69	374.55	377.88	381.26	383.80	386.43	389.12	391.88
Labor		35.00	43.40	43.40	35.00						
Weeding		35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Pruning		-	8.40	8.40	-	-	-	-	-	-	-
Spraying pesticides		8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Harvesting / drying		-	8.40	8.40	11.76	23.05	32.27	32.27	32.27	32.27	32.27
Tractor		77.20	-	-	-	-	-	-	-	-	-
Ploughing/grading		36.00									
Slashing		16.80									
Cleaning fireguards		8.40									
Fuel		16.00									
Inputs		67.00	67.00	67.60	68.80	70.00	71.20	71.50	71.80	72.10	72.40
Pesticides		52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
Jute Bags		-	0.60	1.80	3.00	4.20	4.50	4.80	5.10	5.40	5.40
Other inputs (for other crops)		15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Repair and Maintenance	would be zero	-	66.69	68.69	70.75	72.88	75.06	77.30	79.63	82.02	84.48
Equipment		19.19	19.76	20.36	20.97	21.60	22.24	22.91	23.60	24.31	24.31
Boreholes and water supply		22.50	23.18	23.87	24.59	25.32	26.08	26.87	27.67	28.50	28.50
Instalations		25.00	25.75	26.52	27.32	28.14	28.98	29.85	30.75	31.67	31.67
Vehicles		-	-	-	-	-	-	-	-	-	-
Administration expenses		-	200.00								
Salaries		50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Social benefits		50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Services		50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Fuel		50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Costs		776.48	377.09	379.69	374.55	377.88	381.26	383.80	386.43	389.12	391.88
Cost per tree		15.85	4.01	2.05	1.20	0.86	0.67	0.63	0.59	0.56	0.52
Total, REVENUE		94.00	94.00	185.35	311.80	439.50	568.70	609.55	652.56	698.16	746.87
Cashew expected yield		-	-	0.10	0.30	0.50	0.70	0.75	0.80	0.85	0.90
Cashew (RCN)		-	-	60.00	180.00	300.00	420.00	450.00	480.00	510.00	540.00
Apple		-	-	31.25	37.50	45.00	54.00	64.80	77.76	93.31	111.97
Other crops		94.00	94.00	94.00	94.00	94.00	94.00	94.00	94.00	94.00	94.00

Results	
Cashflow	

(682.48)	(283.09)	(194.34)	(62.75)	61.62	187.44	225.75	266.13	309.04	354.99
(682.48)	(965.57)	(1,159.91)	(1,222.66)	(1,161.04)	(973.60)	(747.85)	(481.72)	(172.68)	182.32

Cost of Investment- Establishment and maintenance of 1 hectare plantation

Direct costs operations	Units/year	Cost /unit	1	2	3	4	5	6	7	8	9	10
Logging	25	1.40	35.00									
Fuel	16	1.00	16.00									
Removal/gathering	12	1.40	16.80									
Grading in hours	3	12.00	36.00									
Land Cleaning	6	1.40	8.40									
Land Marking	6	1.40	8.40									
Opening of holes	9.2	1.40	12.88									
Planting	6	1.40	8.40									
Coroamento	8.2	1.40	11.48	11.48	11.48							
Weeding	25	1.40	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Spraying	6	1.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Pruning for growth	6	1.40	8.40	8.40	8.40							
Pruning maintainance	8.4	1.40	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76
Harvest		1.40		8.40	11.76	11.76	23.05	32.27	32.27	32.27	32.27	32.27
Totals			197.76	77.04	86.44	70.92	83.21	93.43	94.43	95.43	96.43	97.43

Direct costs - Inputs

Mudas - grafted	70	0.70	49.00
Pesticides:			52.00
Anvil in litres	2	13.00	26.00
Bayfidan in litres	2	13.00	26.00
Jute bags	10	1.00	10.00
Total inputs			163.00

Instruments

Hoes	5	5.00	25.00
Shavels/watering cans	3	12.50	37.50
Saws for pruning	3	20.00	60.00
Pruning Scissors	3	40.00	120.00
Atomizadores	0.05	650.00	32.50
Spares			3.25
Total instruments			278.25
Total			441.25

Total tools
242.50

Appendix 8: Cashflow Analysis: Smallholder cashew production (10 ha plantation)

INVESTMENT AND CASHFLOW CASHEW - Plantation

10 HA

ITEM	Units	Year										
		1	2	3	4	5	6	7	8	9	10	
INVESTMENT COSTS		2,724	-	-	-	-	-	-	-	-	-	-
Labor		1,068										
Land Clearing		518										
Land marking		84										
Holes and planting		199										
Tools		268										
Construct fireguard		84										
Tractor		590										
Ploughing/grading		240										
Slashing		350										
Inputs		1,066										
Seedlings		674										
Other inputs (for other crops)		392										
<hr/>												
OPERATIONAL COSTS	Person days	934	2,358	2,595	2,573	2,601	2,629	2,650	2,673	2,697	2,723	
Labor		-	493	603	635	971	1,307	1,643	1,643	1,643	1,643	
Weeding			115	115	-	-	-	-	-	-	-	
Pruning			210	236	131	131	131	131	131	131	131	
Spraying pesticides			168	168	168	168	168	168	168	168	168	
Harvesting / drying				84	336	672	1,008	1,344	1,344	1,344	1,344	
Tractor		-	-	-	-	-	-	-	-	-	-	
Ploughing/grading												
Slashing												
Cleaning fireguards												
Fuel												
Inputs			447	638	661	684	709	726	744	764	786	
Pesticides			351	527	527	527	527	527	527	527	527	
Jute Bags				6	18	30	42	45	48	51	54	
Other inputs (for other crops)			96	106	116	128	140	155	170	187	206	
Repair and Maintainance			117	120	124	128	131	135	139	144	148	
Equipment			19	20	20	21	22	22	23	24	24	
Boreholes and water supply			23	23	24	25	25	26	27	28	29	
Instalations			25	26	27	27	28	29	30	31	32	
Vehicles			50	52	53	55	56	58	60	61	63	
Administration expenses			860	903	948							
Salaries			500	525	551	551	551	551	551	551	551	
Social benefits			50	53	55	55	55	55	55	55	55	
Services			50	53	55	55	55	55	55	55	55	
Fuel			260	273	287	287	287	287	287	287	287	
Costs		3,659	2,358	2,595	2,573	2,601	2,629	2,650	2,673	2,697	2,723	
Cost per tree		3.80	2.45	2.70	2.67	2.70	2.73	2.75	2.78	2.80	2.83	
Total, REVENUE		934	934	1,847	3,285	4,836	6,407	7,100	7,453	7,807	8,163	
Cashew expected yield		-	-	10%	30%	50%	70%	75%	80%	85%	90%	
Cashew (RCN)		-	-	600	1,800	3,000	4,200	4,500	4,800	5,100	5,400	
Apple		-	-	313	644	995	1,366	1,759	1,811	1,866	1,922	
Other crops		934	934	934	841	841	841	841	841	841	841	

Results		(2,724)	(1,424)	(749)	712	2,235	3,778	4,450	4,780	5,110	5,440
Cashflow		(2,724)	(4,148)	(4,897)	(4,185)	(1,950)	1,828	6,278	11,058	16,169	21,609
Farmer Contribution		\$ 415.00									

Cost of Investment- Establishment and maintainance of 10 hectare plantation

Direct costs operations	Units /yr	Cost /unit	1	2	3	4	5	6	7	8	9	10
Logging	250	1.40	350.00									
Clearing logs	60	1.40	84.00									
Blocking	60	1.40	84.00									
Grading in hours	20	12.00	240.00									
Land Cleaning	60	1.40	84.00									
Land Marking	60	1.40	84.00									
Opening of holes	82	1.40	114.80									
Planting	60	1.40	84.00									
Coroamento	82	1.40	114.80	114.80	114.80							
Weeding	250	1.40	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00
Spraying	60	1.40	84.00	168.00	168.00	168.00	168.00	168.00	168.00	168.00	168.00	168.00
Prunning for growth	60	1.40	84.00	105.00	105.00							
Prunning maintainance	60	1.40	84.00	105.00	131.25	131.25	131.25	131.25	131.25	131.25	131.25	131.25
Harvest	60	1.40	84.00		84.00	336.00	672.00	1,008.00	1,344.00	1,344.00	1,344.00	1,344.00
Totals			1,926.60	844.80	956.05	989.25	1,326.25	1,663.25	2,000.25	2,001.25	2,002.25	2,003.25

Direct costs - Inputs

Mudas - grafted	963	0.70	674.10	Provision for 25% motality
Pesticides:				
Anvil in litres	13.5	13.00	175.50	
Bayfidan in litres	13.5	13.00	175.50	
Jute bags	100	1.00	100.00	
Total inputs			1,125.10	
Instruments				
Hoes	10	5.00	50.00	
Shavels/watering cans	3	12.50	37.50	
Saws for prunning	3	20.00	60.00	Total tools
Pruning shears	3	40.00	120.00	267.50
Atomizadores	0.5	650.00	325.00	
Spares			32.50	
Total instruments			625.00	
Total			1,750.10	

Farmer Contribution

Cost of Investment- Establishment and maintenance of 50 hectare plantation

Direct costs operations	units/yr	Cost /unit	1	2	3	4	5	6	7	8	9	10
Logging	1250	1.40	1,750.00									
Clearing logs	300	1.40	420.00									
Blocking	300	1.40	420.00									
Grading in hours	100	12.00	1,200.00									
Land Cleaning	300	1.40	420.00									
Land Marking	300	1.40	420.00									
Opening of holes	410	1.40	574.00									
Planting	300	1.40	420.00									
Coroamento	410	1.40	574.00	574.00	574.00							
Weeding	1250	1.40	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00
Spraying	300	1.40	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00
Pruning for growth	300	1.40	420.00	420.00	420.00							
Pruning maintainance	300	1.40	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00
Harvest	300	1.40	420.00	420.00	420.00	588.00	823.20	1,152.48	1,613.47	2,258.86	3,162.41	4,427.37
Totals			9,629.00	3,586.00	4,007.00	3,182.00	3,418.20	3,748.48	4,210.47	4,856.86	5,761.41	7,027.37

Direct costs - Inputs

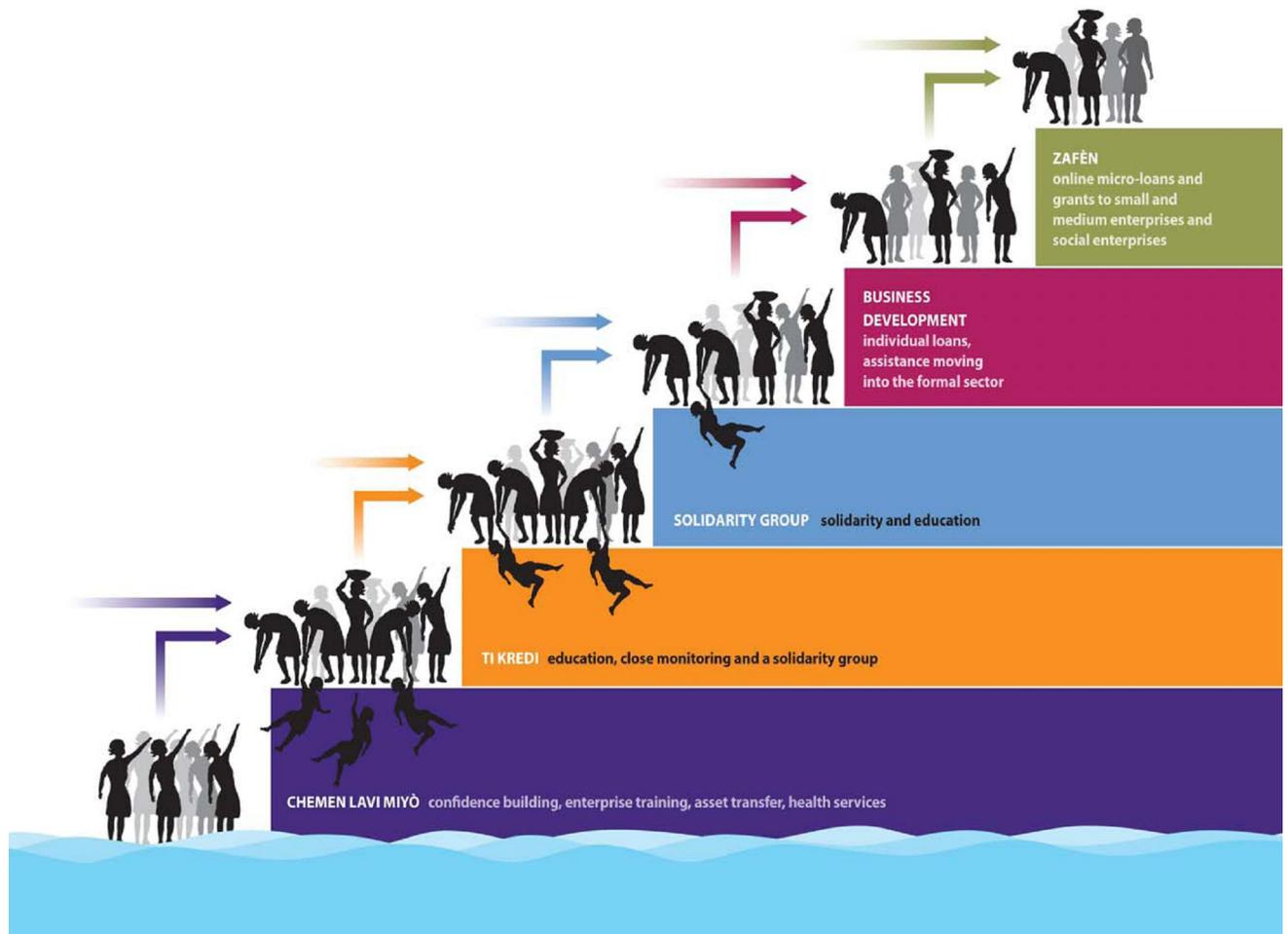
Mudas - grafted	4375	0.70	3,062.50	Provision for 25% mortality								
Pesticides:												
Anvil in litres	67.5	13.00	877.50									
Bayfidan in litres	67.5	13.00	877.50									
Jute bags	500	1.00	500.00									
Total inputs			5,317.50									
Instruments												
Hoes	50	5.00	250.00									
Shovels/watering cans	15	12.50	187.50									
Saws for pruning	15	20.00	300.00									
Pruning Scissors	15	40.00	600.00									
Atomizadores	2.5	650.00	1,625.00									
Spares			162.50									
Total instruments			3,125.00									
Total			8,442.50									

Total tools
1,337.50

18,071.50 17,984.00
14,946.50

Appendix 10: Illustration of Fonkoze’s “Staircase out of poverty” approach to dealing with very poor clients

Several different types of products and services accompany clients on their ascent out of extreme poverty. The program begins with asset transfer and education, and leads slowly to small group loans and eventually individual enterprise loans. The entire process can take two years or more.



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APPENDIX 12

MFI INSTITUTIONAL ASSESSMENT CHECKLIST AND GUIDE

I. MANAGEMENT AND LEADERSHIP

Leadership

- Are leadership teams complete?
- Are there key leadership positions empty?
- If so, is this affecting the ability of the MFI to operate fully?
- Can you identify key leaders to work with (committed, informed, strong buy-in)?
- Does effective management extend to branches, especially to those you will be working with in the field (MFI field staff)?

Technical Capacity

- *Does the MFI leadership and those you will be working with demonstrate capacity to manage the pilot?*
- *Will the MFI require training and technical support to be an effective partner?*
- *What training and technical support is required? For whom? Who will provide?*

Planning

- Does the MFI plan effectively?
- Does it involve all the appropriate people in planning and implementing plans?
- What tools does the MFI have for planning?

II. INSTITUTIONAL GOVERNANCE

Legal Status

- What is the legal status of the MFI?
- Does the legal status affect how you plan to work together (for lending to or investing in the MFI)
- Is it operating within the framework of current laws? Is it regulated?

Vision and Goals

- Is the vision and goal of the MFI in tune with that of your organization?
- Does the business plan contain a long term vision for the future of the MFI and describe adequately how this will be achieved?

Board / Committees

- Does the MFI require the approval of the Board or key committees to partner with you? How long will that take and how does it affect how you partner?
- Are the Board/Committee members fully active in governing the MFI (i.e. all members attend meetings, actively participate in decision-making, good at bringing consensus, etc).
- Does the Board fully support the partnership initiative? Will it play a role at all? (i.e. fund raising, monitoring, decisions on future scale up, etc)

Linkages

- Does the MFI demonstrate good linkages and good relations with clients, community, financing partners, mother bodies, etc?

- Does the MFI partner with other NGOs, the Church, others? Will this affect your partnership?

III. MARKETS & CLIENTS / DISTRIBUTION & OUTREACH

Approach to Competition

- Are leaders and managers aware of the competition in the areas where you will be working together?
- Do they have a realistic view of the competition?
- Do they know about their products and services and plans for the future and take this into account in deciding if they enter a new market / pilot in a new market?

Image/Marketing

- Does the MFI have a strong, positive image in the marketplace?
- Will the MFI be able to effectively market its products and services to the target group?

Target Markets

- Where are the MFIs main target market(s)?
- Are you going to be targeting an existing market or new market area with the MFI?
- Has there been sufficient market research done to ensure there is demand for the MFIs services (there needs to be opportunity for growth/viability beyond the scope of the pilot in the pilot area and/or elsewhere)

Profile of Clients (Savers and Borrowers respectively)

- Who typically saves with/borrows from the MFI?
- What is the actual profile of a) savers b) borrowers? Is this in line with the business plan/goal of the MFI?
- Will you be adding a new client profile through the partnership? Is it a good fit for the MFI?

Product Development

- What products and services does the MFI currently offer?
- Will your partnership require the development of a new product and service for the MFI?
- If so, does the MFI have the in-house capacity and resources to research and develop a new product and service?

Client Outreach

- How successful is the MFI in providing access to its products and services in rural areas? What % of portfolio is in rural areas?
- Is the MFI successfully attracting female members/clients? What % of members/clients is female?

Growth Strategy and Actual Growth

- Does the MFI have a clearly defined strategy for growth?
- Is actual growth in line with planned growth? Is the MFI leadership and management actively involved in activities for growth?

- What are the trends over the past 1-2 years in growth of borrowers (and /or deposits/savings)?

Satellite Branches

- Does the MFI have a well functioning branch in the area(s) where you plan to partner?
- Can the branch(es) handle the partnership? Does it have the resources and capacity at that level to effectively play its role in the partnership?

IV. CREDIT, SAVINGS, DEPOSITS AND PERFORMANCE

Product Design

- Does the MFI engage in product design? Has the MFI introduced a new products in the past year?/past two years?/since inception?
- Has the MFI received training and/or technical support in product development? Do the leadership and management see scope for/hold an interest in new product design?

Eligibility Criteria

- Does the MFI have clearly defined and up to date policies for who is eligible for membership and/or savings and credit services?
- Will your partnership require different eligibility criteria? (e.g. land title, buyer's contracts, etc)

Savings and Deposits

- Does the MFI have clearly defined policies for savings and deposits?

Credit Delivery

- Does the MFI have clearly defined and up-to-date policies for lending?
- Do borrowers sign formally for credits?
- Is there a well-qualified loan approval committee?
- Is there a good clear process from application to loan disbursement?
- What are the challenges/obstacles to credit delivery?

Delinquency Management

- Have leaders and management developed clear policies and procedures for dealing with late clients and collecting late payments?
- Is good delinquency management demonstrated in the MFI's day to day operations/documentation/loan officers' activities, etc?

Delinquency Performance

- Are leadership and management accurately tracking delinquency?
- Are PAR indicators being recorded accurately?
- Is the MFI able to see clearly month on month PAR?
- Is PAR increasing/decreasing?
- Is there a clear policy for keeping PAR below a certain limited? Is this adhered to in fact and respected across all branch/satellite operations?

V. HUMAN RESOURCES MANAGEMENT

Organization

- Does the MFI appear to have good organizational management – clear division of roles and responsibilities, good team work, strong management, etc?

Policies

- Have leaders and managers developed clear policies for those involved in the day to day operations
- Have leaders and managers developed clear policies for those involved in leadership and management roles?
- Are policies adhered to, updated, referred to in case of need?

Training

- Do leaders and management pay attention to training needs, budget for training? How is training made available?

Satisfaction and Culture

- Is there a sense of ownership and responsibility on the part of leaders and manager?

VI. INFORMATION SYSTEMS

Policies

- Does the MFI have clear policies for tracking savings, deposits, loans?

Performance

- Does the MFI produce timely and accurate reports?
- Does the MFI have well organized files/records/automated system for tracking savings, deposits and loans?

VII. FINANCIAL MANAGEMENT

Financial statements and reporting

- Does the MFI have a clear system and structure for producing financial information?
- Does it have adequate personnel / capacities for sound financial management?
- Does the MFI produce accurate and timely financial statements?

Provisioning

- Is the MFI provisioning correctly for loan losses?
- Do policies reflect best practices in microfinance?

Management Information System (MIS)

- Does the MFI produce accurate financial information from its MIS and use this in financial reporting/management?

Forecasting / Projections

- Does the MFI have an accurate forecast of its capital funding needs on an annual basis? For the next three year period?

Budgeting

- Does the MFI have an accurate budget for the current fiscal year? Does it produce a longer term budget (three years)?
- Does the MFI monitor actual expenditures against budget?

Pricing

- How does the MFI determine its pricing for its financial products?
- Does it have a clear pricing policy?
- How do the MFI's prices compare with other competitors in the market?

Cash flow

- Does the MFI maintain an accurate cash flow report?
- Does the MFI maintain a minimum liquidity level? Is this policy?/As per policy?
- Does the MFI maintain a clear distinction on sources of funds?
- Does the MFI have sufficient cashflow to partner with you effectively
- Will it need additional capital to be able to partner? Will this be a grant or loan and on what terms?

Debt management

- Does the MFI have outstanding debt? Is it making timely and correct repayments?
- Are outstanding debts accurately reflected in the financial statements?
- Do you plan to lend the MFI? What will be the terms for use of capital? Can the MFI effectively track and repay your loan?

Leverage

- What is the MFI's debt to equity ratio?

Audit

- Does the MFI demonstrate transparency in its financial reporting?
- Does the MFI have a qualified internal auditor? Does the MFI have a full audit committee? Is it active?
- Does the MFI contract a reputable external auditor?
- When was the MFI last audited? What were the results?

VIII. FINANCIAL PERFORMANCE

Operational Self-Sustainability

- Is the MFI demonstrating positive trends towards OSS? Current OSS? Previous year? Past three years?

Financial Self-Sustainability

- Is the MFI demonstrating positive trends towards FSS? Current FSS? Previous year? Past three years?

IX. THE MIX

Performance Indicators

Below are the key indicators tracked by the MIX market (www.mixmarket.org); In general a well functioning MFI should be able to report against these key indicators.

Financial indicators:

- | | | |
|---|---|---|
| <input type="checkbox"/> Total assets | <input type="checkbox"/> Return on Equity | <input type="checkbox"/> Cost per Borrower |
| <input type="checkbox"/> Gross Loan Portfolio | <input type="checkbox"/> Profit margin | <input type="checkbox"/> Operating Expense / Loan Portfolio |
| <input type="checkbox"/> Total Equity | <input type="checkbox"/> Operational Self-Sufficiency | <input type="checkbox"/> Portfolio at Risk > 30 days Ratio |
| <input type="checkbox"/> Savings | <input type="checkbox"/> Borrowers per Staff member | <input type="checkbox"/> Write Off Ratio |
| <input type="checkbox"/> Return on Assets | <input type="checkbox"/> Savers per Staff member | |

Outreach indicators:

- | | | |
|--|--|--|
| <input type="checkbox"/> Number of Active Borrowers | <input type="checkbox"/> Loans below US\$300 | <input type="checkbox"/> Clients below poverty line (%) |
| <input type="checkbox"/> Number of Savers | <input type="checkbox"/> Women Borrowers (%) | <input type="checkbox"/> Clients in bottom half of the population below the poverty line (%) |
| <input type="checkbox"/> Average Loan Balance per Borrower | <input type="checkbox"/> Average Loan Balance per Borrower/ GNI per Capita | <input type="checkbox"/> Clients in hh earning less than US\$1/day per hh member (%) |
| <input type="checkbox"/> Average Savings Balance per Saver | <input type="checkbox"/> Average Savings Balance per Saver/ GNI per Capita | |

X. MONITORING IMPACT

Loans to the poor

- Does the MFI have a policy for pro-poor lending? Does its actual lending reflect this policy? What is the average loan size? What is the number or percentage of clients below the poverty line?

Savings and loans to target groups

- Does the MFI have a policy for targeting specific population groups? What are actual growth trends for past 6 months/past year for savings/borrowing by these specific groups?

Impact of Products and Services

- Does the MFI attempt to track the impact of its products and services on its members/clients? Can they provide data on this?

Impact of Partnership

- Will you want to monitor and track the impact of your partnership? How will you do this? Who will be responsible?