microCASE STUDY # 1

Mozambique Rural Financial Services Study

Olaf Kula
Elisabeth Farmer

October 2004

Accelerated Microenterprise Advancement Project

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Accelerated Microenterprise Advancement Project (AMAP) is a 4-year contracting facility that USAID/Washington and Missions can use to acquire technical services to design, implement, or evaluate microenterprise development, which is an important tool for economic growth and poverty alleviation.

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Abbreviations

ACDI/VOCA	Formerly Agricultural Cooperative Development International / Volunteers in Overseas Cooperative Assistance
AMAP	Accelerated Microenterprise Advancement Project
BCI	*Banco Comercial e de Investimentos*
BDM	*Banco de Moçambique*
BDS	Business Development Services
BIM	*Banco Internacional de Moçambique*
CTO	Cognizant Technical Officer
CO	Contracts Officer
CGSM	*Compania Geral de Seguros de Moçambique*
DFID	Department for International Development
DCA	Development Credit Authority
DPA	Provincial Directorate of Agriculture
EGAT	Economic Growth and Agricultural Trade
EUREPGAP	European Retailers Protocol Good Agricultural Practice
FDI	Foreign Direct Investment
GAPI	*Gabinete de Apoio a Pequena Indústria*
GDP	Gross Domestic Product
GOM	Government of Mozambique
GWR	Grain Warehouse Receipts
HACCP	Hazard Analysis and Critical Control Point
IFC	International Finance Corporation
IQC	Indefinite Quantity Contract
IMF	International Monetary Fund
LIBOR	London Inter-Bank Offering Rate
MD	Office of Microenterprise Development USAID/Washington
MFI	Micro-Finance Institution
MIBOR	Market Inter-Bank Offering Rate
MLT	Mozambique Leaf Tobacco
MNC	Multinational Companies
MSE	Micro- and Small Enterprise
NGO	Non-Governmental Organization
PVO	Private Voluntary Organization
RENDER	*Reforçar Negócios Para Desenvolvimento Rural* (Reinforce Business for Rural Development)
SEMOC	Sementes Moçambique Limitada
SO	Strategic Objective
SPV	Special Purpose Vehicle
UCAMA	Manica Provincial Farmers' Union
USAID	United States Agency for International Development

1. Executive Summary

In April 2004, a two-person team from ACDI/VOCA traveled to Chimoio in the Manica Province of Mozambique at the request of USAID/Mozambique, to conduct an assessment of rural financial services in the Beira Corridor through value chain analysis. This assessment was contracted to ACDI/VOCA by USAID's Microenterprise Development office (USAID/EGAT/PR/MD) under the Knowledge and Practice Task Order of the *Accelerated Microenterprise Advancement Project, Business Development Services* (AMAP BDS) IQC.

A key objective of this research task order is the identification of integrated development approaches that (1) increase the competitiveness of industries in which small and very small firms participate, and (2) increase the ability of smallholders to contribute to and benefit from increased industry efficiency. This industry competitiveness approach – which was determined to be consistent with the objectives of the Mission's Strategic Objective (SO) 6, Increasing Rural Household Incomes – became the basis of the assessment.

This study therefore has a two-fold purpose. The more immediate purpose is to provide the Mission with a set of strategic options to increase private sector investment in the dynamic Beira agribusiness cluster, which is concentrated in Manica Province. In order to formulate these options, the study set out to accomplish the following:

- Identify factors critical to increasing industry competitiveness;
- Assess the potential for increased incomes and growth by firms at all levels in the selected value chains;
- Assess the degree to which private sector investment in the cluster is constrained by a lack of financial service access; and
- Identify service, product and institutional options for responding to constraints.

Ultimately, however, the greater purpose of this study is to test a rapid assessment approach for the identification of financial services and product and institutional gaps, based on the identification of key opportunities and constraints to growth in important value chains and clusters.

This assessment found that there is enormous potential for growth in incomes and trade (transactions) through investment in horticulture and oilseeds; increased investment in the horticulture and oilseed value chains is transforming smallholder agriculture and generating significant increases in income for smallholder farmers. Improvements in the enabling environment over the last five years have been significant in attracting domestic and foreign direct investment in the Beira Corridor, and this investment has triggered demand for a wide range of services leading to the emergence of an agribusiness cluster in the Corridor. However, current levels of investment still fall far short of amounts needed to take advantage of existing

market opportunities. The financing gap requires increasing the supply of both equity and debt capital, short and long term, but particularly products tailored to the cash flow characteristics of agriculture enterprises. Moreover, despite relatively rapid growth in investment, business environmental constraints hinder future growth in employment and incomes in the Beira agribusiness cluster. Finally, the team found that coordination and cooperation among all stakeholders – small and large, private, public, and donor – is critical to developing and maintaining the competitiveness of the cluster.

The recommendations in this section are organized into three categories: policy, financial institution, and financial product levels.

Regarding policy and enabling environment, our recommendations are as follows: (1) facilitate the liberalization of the public securities market (T-Bills and bonds) with GoM and BDM; (2) support the development of legislation for regional/rural banks; and (3) facilitate continued improvements in land titling.

On the institution level, our recommendations are the following: (1) support the development of a rural financial services brokerage; (2) support the development of an inventory financing system; (3) ensure that guarantee fund access is linked to bank performance; (4) strengthen rural savings mobilization capacity; (5) support commercially oriented microfinance institutions (MFIs) willing to expand into rural and agricultural financing; and (6) assess the feasibility and need for an agricultural bank.

Finally, on the financial product level, we recommend: (1) lease financing; (2) overdraft facilities; (3) trade financing; and (4) equity and subordinated debt financing.

The study's findings and key recommendations on the policy level as well as the financial institution and financial product level suggest that a value chain approach can successfully lead to a thorough road map for addressing financial service constraints.

Recommendations

2.1 Summary and decision tree

The following analysis of the horticulture and oilseeds value chains has revealed the urgent need for appropriate rural financial services at every level of the value chain. The assessment team's recommendations include interventions on the level of the enabling environment, such as T-Bill market liberalization, as well as interventions on the institutional level, with the creation of a variety of institutions either providing or facilitating financial services: a brokerage firm, an agricultural bank, rural banks, and/or rural savings mobilization and credit groups. Each of these recommendations has specific strengths and weaknesses in terms of time, impact, and cost to the USAID mission. For instance, the option with the potential for the greatest impact – T-bill market liberalization – would likely be the longest and most difficult to implement. This dilemma led the assessment team to conduct an impact and feasibility analysis of its recommendations. These are illustrated in the table below and elaborated upon in the following section.

Table 1: Impact and Feasibility Analysis of Recommendations

Recommendations	Time	Impact	Cost
Option 1: T-Bill market liberalization	⌛⌛⌛	❗❗❗	$
Option 2: Brokerage service	⌛⌛	❗❗	$
Option 3: Agricultural Bank	⌛⌛⌛	❗❗	$$
Option 4: Rural bank(s)	⌛⌛⌛	❗❗	$
Option 5: Rural savings mobilization and credit groups	⌛	❗	$

The wide range of possible solutions and combinations thereof (since they are not mutually exclusive) led the assessment team to map out the various processes and steps leading to their implementation. Since many factors in the implementation process are interconnected, these steps have been laid out in a decision tree which aims to provide a framework for USAID as well as other donors, the Government of Mozambique, NGOs, and possible investors to address constraints at every level.

The most straightforward solution (Option 4 in our decision tree) would be the creation of rural banks which could offer the needed overdraft facilities, as well as lease and working capital financing. For USAID, therefore, the first step in the process of addressing the rural finance

problem in Mozambique should be a review of the Mozambican legislation on rural banks. If the existing legislation permits and facilitates their creation, USAID should consider this as a viable option, and take the necessary steps to identify key investors and management. If created, these banks – which would be smaller and offer fewer services than commercial banks – could fulfill many of the finance needs identified, even if the overall enabling environment does not change.

If, however, legislation does not permit the creation of rural banks, then the process leading to their creation becomes quite lengthy and time-consuming. The enabling environment then becomes the most crucial piece in the rural finance puzzle, and helping to liberalize the public securities market should be USAID's first priority[1]. This process, which we have named as our Option 1, would involve initiating a dialogue with the Government of Mozambique and *Banco de Moçambique*, and asking them to consider liberalizing the public securities market. If the Government and BDM are receptive to the possibility, USAID should conduct an assessment of the implications of liberalization, and recommend an action plan implementation timeline. Finally, assuming continued Government support, a study tour for *Banco de Moçambique* officials could be organized to a country where the securities market is liberalized.

If at any point during this process, the Government and BDM officials decide against liberalization, USAID should investigate the feasibility and probability of the passage of rural bank legislation. If such legislation does not pass, and the Government continues to refuse liberalization, USAID should assess the Government's cooperation, and possibly even reconsider its support. If USAID decides to make assistance contingent on Government cooperation, it may decide to reduce its assistance until a more favorable enabling environment exists. If not, however, there remain several options for intervention, described below.

If the Government and BDM should prove to be cooperative, and commit to liberalizing the market, USAID should offer its full support as the Government establishes and implements a viable action plan, working with existing financial institutions. As the securities market is liberalized, private companies and individuals will be able to purchase treasury bills, which will lead to a drop in the T-bill rate. As this enabling environment changes, banks will have lost their monopoly on easy, no-risk investments, and will be forced to engage in commercial lending. The impact of this option would be widespread, and the cost to the USAID mission would be relatively low, but the process would be lengthy with only a modest probability of success.

If, ultimately, the Government and BDM decide against liberalizing the market, USAID should consider supporting the creation of a private agricultural bank – a full-service, specialized commercial bank – or a brokerage service. The process for the creation of an agricultural bank would be similar to that of rural banks, with the necessary identification of investors and management, and the end result of a viable financial institution offering the much-needed overdraft facilities, lease financing, and working capital financing with balloon repayment plans.

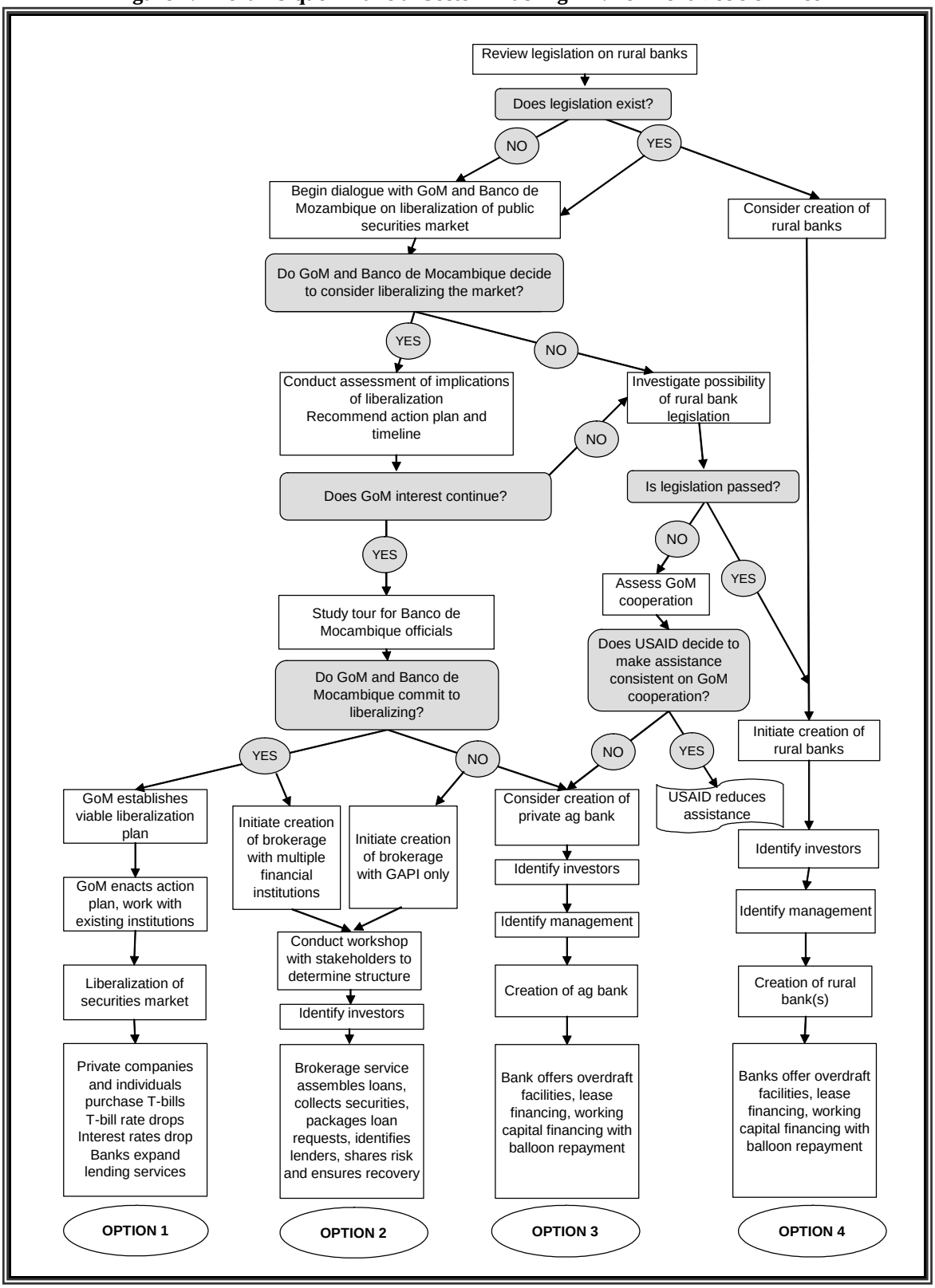
[1] This process would still be desirable (although not critical) if rural banks were to be created as well.

This third option would have a fairly widespread impact, but would have a higher cost than other options.

Regardless of the Government's ultimate decision for or against the liberalization of the market, USAID should consider the creation of a rural finance brokerage service (Option 2). This service could be limited to GAPI, currently the only viable finance provider, if the necessary enabling environment is not in place. If, however, the enabling environment were to change and permit the creation of other viable financial institutions, the broker could work with all of the key players (banks, leasing companies, finance companies, venture capital companies, and MFIs) to provide risk-sharing and ensure that the financial services being offered are tailored to the needs of their clients. The details of how such a brokerage might work are explained in section 2.3 below. This option would be relatively low-cost and have the potential for significant impact, without an excessively lengthy implementation timeframe.

A fifth and final option would be supporting the creation of rural savings mobilization and credit groups, which would be a low-cost and quick to implement solution, although its impact would be more limited. This option is independent of the others and is therefore not included in the decision tree.

Figure 1: Mozambique Financial Sector Enabling Environment Decision Tree



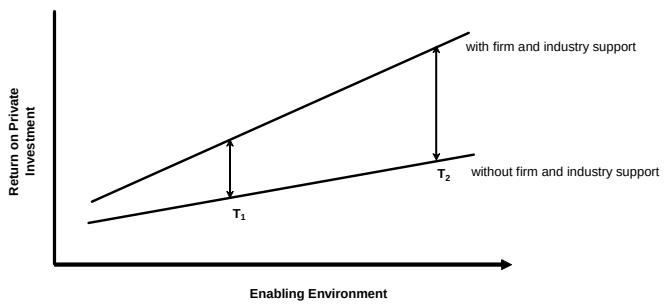
The decision tree outlined above underscores the need for intervention at three distinct levels: policy and enabling environment, financial institution, and financial product. Below are the assessment team's recommendations on each of these levels.

2.2 Policy and Enabling Environment

Interviewing owners and managers of farm and non-farm enterprises in the Beira Corridor provides a consistent explanation for the growth in investment in the cluster: a conducive enabling environment. The governor is dynamic, and responsive to investors, and despite some constraints, investors state that they can obtain land access (though not title), and licenses.

In a recent review of 50 USAID-funded economic development projects, enabling environment was identified as the most critical determinant of project success (Snodgrass, Winkler, 2004). This finding is also supported by leading economic cluster researcher Albert Berry (Berry, 2001, 2003). The recommendation from the USAID report is that enabling environment is so important that direct assistance investments should be linked to positive improvements in the enabling environment.

Figure 2: Significance of Enabling Environment on Impact of Economic Development Investments



In the Beira agribusiness corridor, remaining enabling environment constraints are:

- Bank monopoly in the public securities market
- Absence of clear land titles
- Long and confusing company and association registration process
- Customs (this was not consistently identified, and customs reform is very difficult).

Facilitate liberalization of the public securities market (T-Bills and bonds) with GoM and BDM. The biggest constraint to increased private sector investment in the agribusiness cluster is current regulations that give banks a monopoly on the purchase of T-Bills. Liberalizing this market by allowing the public to purchase these securities at relatively low denominations ($1,000) will force banks to seek alternative investments. Potential impact on a still fragile banking sector needs to be considered. GoM using public funds to take subordinated debt positions with weak banks will mitigate adverse impact of liberalization. It is unlikely that guarantee funds alone will have a significant impact on commercial lending in an environment where banks can earn 100 percent returns from T-bill purchases.

Support the development of legislation for regional/rural banks. Worldwide commercial banks have difficulty penetrating rural and agricultural markets. An alternative is the creating of a regulatory framework for smaller rural or regional banks. These banks would be able to mobilize deposits, be licensed to operate only in specific geographic areas, and have significantly lower capital requirements than the $3 million required to obtain a commercial bank license. Rural and regional banks have fewer rights than commercial banks (often they are not allowed to buy or sell public securities). Because they have much smaller capital base they often face lending ceilings that limit their clientele to small businesses. That said, there is an enormous unmet need for finance at this level in the Beira Corridor.

Facilitate continued improvements in land titling. The difficulty in obtaining title to land impedes the development of a market for these assets. Weak land markets and almost no clear title to land limits agricultural enterprises' ability to provide acceptable collateral for loans. According to the DPA in Chimoio, only 10 enterprises in Manica have title to the land on which they operate. Improved and expanded titling of land will facilitate credit access to commercial farms and formal enterprises.

2.3 Institution level recommendations

Banks have very little experience with commercial and especially agricultural lending, and there are no specialized agricultural lending institutions. As a result there is minimal institutional and human resource capacity to assess activity, firm, management and character risk of rural and agricultural enterprises, and to package loans with the terms and conditions that are applicable to rural enterprise needs.

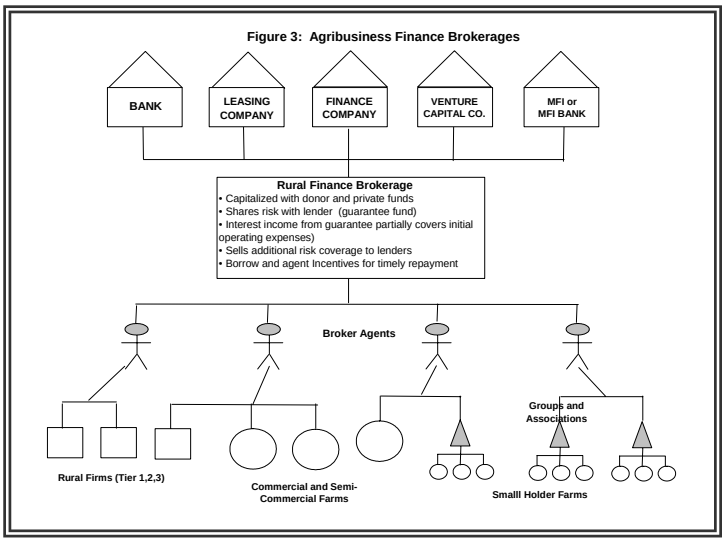
In most countries, banks have little or no advantage at acquiring the capacity to assess the above risk, generate bankable loan requests, and ensure highly efficient and timely loan recovery. Salaries of bank workers are relatively high. Bank employees tend to favor the prestige that comes from working in a bank office to that of slogging around a field in rubber boots. Banks often avoid action to recover debts, if those actions tarnish its polished service oriented image. Therefore, we recommend that USAID:

Support the development of a rural financial services brokerage which would assemble loans, collect documentation and securities, package similar loan requests, identify receptive lenders, share risk and ensure recovery. The brokerage service will have the greatest impact in a liberalized securities environment where banks lack the skills and human resources to expand their agriculture lending. In the absence of liberalization, a rural credit brokerage could still broker loans for finance and leasing companies lowering lending transaction costs. In Niger a rural credit brokerage has facilitated micro-, small and medium firm access to commercial credit for 12 years (Kokari, CGAP, 2002).

Brokerages are firms that create comparative advantage in offering services because they are better able to achieve scale and minimize overheads, and have the capacity to motivate staff and deliver a set of services more cheaply and efficiently that the customer could on its own. Brokers are well accepted and widely used to deliver a range of services in the region. The assessment team identified brokers who value equipment for lenders, obtain license approvals for investors, and identify sources of inputs equipment and spares for farmers. In the financial services market brokers commonly package specialized portfolios for lenders for whom the particular portfolio is not large enough to invest in the in-house capacity to manage the portfolio.

Given the lack of bank capacity to assess commercial and agricultural risk, a rural finance brokerage could facilitate financial service access for a wide range of rural clients with an equally broad range of financial institutions.

Brokerages work best when they are private, for-profit institutions able to attract outside investment, and provide financial incentives to their staff.



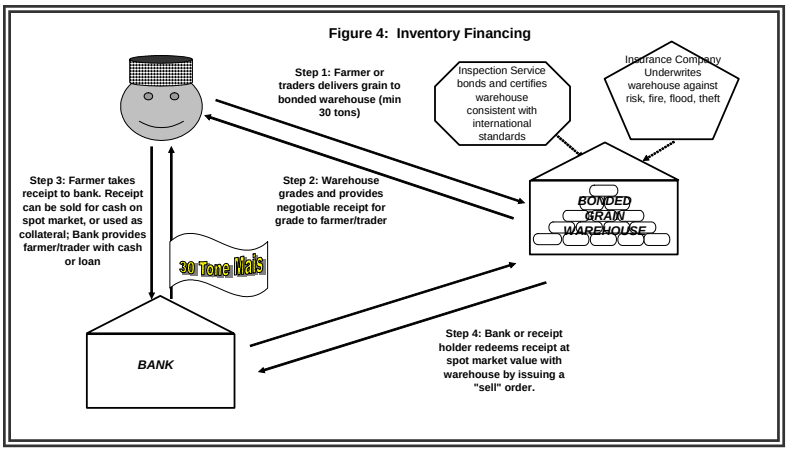
In order for a rural finance brokerage to succeed, it needs to be able to convince lenders that it can and will provide quality risk assessment, collect necessary security, and initiate recovery procedures for loans in arrears. This is achieved through the establishment of risk sharing by the brokerage (the team recommends 25 percent automatically with the sale of additional coverage up to 75 percent for additional points). It is also achieved by ensuring human resource capacity building with training provided by an implementing contractor, with input from local financial institutions.

There was a high degree of interest in a rural finance brokerage by participants in the Beira Corridor agribusiness cluster. The NGO ADIPSA further indicated an interest in co-capitalizing the brokerage assuming USAID initiative and co- investment.

Establishment of the brokerage requires careful design to create adequate controls and incentives (Kula 1994).

Support the development of an inventory financing system (otherwise called Grain Warehouse Receipts (GWR)). The principal advantage of a GWR system is that it facilitates farmer access to credit through the development of a fungible receipt instrument backed up by certified and inspected commodity. This system facilitates farmer, including smallholder, access to credit guaranteed by the receipt as well as providing the conditions for the establishment of a cereals futures market which would effectively begin to stabilize cereal prices.

At a minimum an inventory financing scheme requires the following: partnership between a commercial bank to redeem receipts, an insurance firm to underwrite warehouse risk, a warehouse owner with a warehouse brought to international standards (HACCP), an inspection and certification service to bond and secure the warehouse, and investors to ensure management operation of the system. Also important is public sector support and lack of government intervention in price stabilization policies (at least under normal conditions) as these would undermine incentives to hold grain.



Most of these mechanisms are in place in Mozambique. SEMOC has a 2,000 MT warehouse which they would be willing to use for this purpose. There are four commercial banks in the region. There are four insurance companies and two inspection and certification companies. USAID/Kenya provided support for the development of a commercial GWR in Kenya in 2003. Expansion of an inventory financing system to include extensive public owned warehouse facilities may be easier after developing a private system with a single warehouse.

Ensure guarantee fund access is linked to bank performance. USAID has developed a guarantee fund instrument to encourage financial institution delivery of financial services to rural and agricultural enterprises. The fund as currently structured will provide a maximum 2:1 leverage (USAID deposits 50 percent of loan value into the participating institution). As balances are paid, if USAID keeps the funds in the bank, the leverage falls. More importantly the guarantee provides *additionality*. The guarantee will enable firms who would not have otherwise been able to access funds do so. The terms of the current guarantee with BIM Leasing are significantly more attractive that those of the DCA facility. Current T-Bill policies create strong disincentives for financial institutions to expand commercial lending. USAID is encouraged to link guarantee fund access overtime to expanded participation and risk assumption by participating financial institutions.

Strengthen rural savings mobilization capacity Except for informal RoSCAs, there are no significant savings mobilization services in isolated rural communities. Once financial services become available, smallholder access to them will be constrained by their inability to mobilize their own funds for investment. The organization of rural savings mobilization services is a powerful tool in many countries to increase productive investment and access to credit by smallholders.

Support commercially oriented microfinance institutions (MFIs) willing to expand into rural and agricultural financing. MFI penetration into agricultural markets is almost nonexistent. Most MFIs surveyed by the *Center for the Promotion of Rural Financial Services* project lack a commercial focus. MFIs' ability to expand is hampered by limited access to capital. USAID could provide incentives for commercially oriented MFIs to develop loan products for smallholder clients, through technical assistance grants, provision of loan capital, and facilitating participating MFI access to commercial sources of capital.

Assess feasibility and need for an agricultural bank. This recommendation is limited to the case in which USAID is determined to promote increased investment in the agriculture sector despite GoM resistance to critical enabling environment reforms.

2.4 Financial Product level

Lease Financing USAID Mozambique has already initiated this facility with BIM Leasing.

Overdraft facilities This service is critical to reducing the financial cost of bridging cash flow gaps associated with agriculture activities. Two interviewed banks claim to have overdraft services though no firms interviewed during this assessment were aware of this.

Trade financing The only trade financing for agriculture identified in this study are overdraft services provided by international buyers in paprika, tobacco, cotton, and maize. Improved trade finance through open ended letters of credit will significantly reduce the financial costs associated with exporting, particularly for firms who purchase their product in advance from outgrowers.

Equity and subordinated debt financing Equity and subordinated debt financing are critical options for firms with high fixed and working capital needs. A number of firms interviewed are constrained in the expansion of their outgrower services because they cannot access more working capital finance in part because they already hold too much long term debt for machinery and equipment. USAID Mozambique is already working with a venture capital fund to attract equity investments in agribusinesses in the Beira Corridor. These activities should be aggressively developed

Background

Mozambique has enjoyed significant economic growth and development since the end of its civil war in 1992, in large part because of the transformation of its financial system from an oligopolistic, state-dominated structure into a more diversified and potentially more competitive market-based economic system. Today the Mozambican economy remains strongly agricultural, with 80 percent of the labor force employed in agriculture and two-thirds of the total population identified as rural in 2001.[2] The agricultural sector is growing at a rate of 7.2 percent annually, and as of 2002, agriculture accounted for 27 percent of total GDP.[3] Certain regions of the country have also benefited from the investments of commercial farmers who have immigrated to Mozambique from Zimbabwe in recent years.

Despite certain promising trends, however, there exist several major constraints to rural enterprise development and significant growth in important subsectors in Mozambique. The most prominent and enduring constraint is the lack of financial services tailored to the needs of the industry and the small and medium-sized firms operating within it. According to the *Mozambique Industrial Performance and Investment Climate* (2002), Mozambican firms ranked credit as their greatest constraint (with 78 percent claiming it was a 'large problem'), ahead of government, policy uncertainty, administrative barriers, and infrastructure. This was confirmed as ACDI/VOCA conducted a mid-term evaluation of its *Reforçar Negócios para Desenvolvimento Rural* (RENDER) Project in the Manica Province of Mozambique in October 2003, and discovered that impact of project interventions on rural households was significantly constrained by a lack of access to financial services by firms at all levels of the value chains in which smallholders participate.

Recent World Bank studies indicate that the overwhelming majority of financial services provided to the rural poor are delivered by informal providers, often private sector firms supplying inputs and/or purchasing products from smaller firms. Though important, banks and MFIs are far from playing the dominant role in rural financial service delivery.[4] Factors accounting for the importance of informal financial services include the geographic distribution of agricultural clients, the lack of registered collateral held by smallholders, the highly perishable nature of poorly handled products, and the importance of managing risk. The private sector response to these constraints has been to link financial services with other transactions, either to equipment under leasing or lease financing, stored commodity under inventory financing, input purchasing under supplier credit, or in-kind credit as a form of advance by buyers.

[2] See FAOSTAT, World Bank World Development Indicators, 2002.
[3] See CAS Annex B7, World Bank Report, 2003.
[4] See Kula and Pearce, 2002.

3.1 Study Objectives

In light of these constraints, this study was commissioned with the following objectives:

- To identify factors critical to increased efficiency and competitiveness of the Beira agribusiness cluster;
- To assess the potential for increased incomes and growth by firms at all levels in the horticulture and oilseeds value chains;
- To assess the degree to which opportunities for private sector investment in the cluster is constrained by a lack of financial service access; and
- To identify service, product and institutional options for responding to existing constraints.

3.2 Approach and methodology

These objectives were met through a series of meetings and interviews with 35 key stakeholders, conducted mainly in Manica Province over a two-week period in April 2004. Interviewees included participants from two value chains, horticulture and oilseeds, from input suppliers to exporters and from smallholder farmers to large international firms, as well as representatives from banks, MFIs, NGOs, and various firms providing a range of services to participants in the agribusiness cluster. The two-person ACDI/VOCA assessment team was accompanied in the field by Mr. Philip Tonks, Rural Finance Activity Manager for the USAID/Mozambique Mission. These interviews were designed to obtain the following:

1) Information from key participants in the value chain, and from suppliers of products and services to these participants, regarding services they currently receive, services they provide, and services that they would be willing to pay for if offered.
2) Information from financial institutions regarding the internal and external obstacles they face in delivering financial services in rural areas.
3) Information from the non-traditional suppliers of financial services regarding the types of credit or loan programs they offer, the reasons for these programs, and whether they are successful.
4) Information from all sources as to what financial services are currently available, how much demand there is for them, what the constraints of these services are, and what new services are needed.[5]

In preparation for field work, the ACDI/VOCA assessment team conducted an extensive review of existing literature on rural finance (agriculture and agribusiness) in southern Africa, value chain analysis, and the horticulture and oilseeds industry in regional and global markets. In addition to these initial secondary source documents, the assessment team reviewed a number of primary and secondary documents in Mozambique, including business plans, sector studies and

[5] For more information on the team's scope of work, please see Appendix II.

reviews of the financial sector. A recently completed study of the horticulture sector, conducted by Technoserve, proved to be particularly useful.[6]

The field research was conducted in the Chimoio area of Manica Province, a 65,000 sq km area in the central-western part of Mozambique. This region was chosen because of its rural location, strong agriculture base and potential, and recent influx of new businesses, many of whom provide services to participants in the dominant value chains including banks, microfinance institutions, NGOs, PVOs, agro-processors, input suppliers, equipment dealers, engineering firms and supportive provincial government officials. ACDI/VOCA's office in Chimoio provided logistical support to the assessment team.

3.3 Rationale

This rural finance rapid assessment study is based on the critical assumption that financial services are but one component of a larger bundle of services required by firms in value chains, industries, and clusters with high growth potential. This underscores the importance of focusing on a unit of analysis wider than the financial sector—namely, the value chain. Value chains are defined as the series of transactions necessary to bring a product from its raw inputs to the final consumer through a process which increases the value of the product at every stage. Value chains provide a framework for looking at industries and the relationships among the firms within them, which provides insights into how the chain performs – this is the concept of *governance*, which will be further defined in section 3.1 – and under what conditions it could perform better. Finally, they help to identify the services and solutions that are critical to increasing the productivity and competitiveness of a given industry, and that enable MSEs to contribute to and benefit from this increased productivity and competitiveness. This is called *upgrading* (see text box at right).

Upgrading

Hubert Schmitz (2004) distinguishes between four categories of upgrading:

- *Process upgrading:* transforming inputs into outputs more efficiently by reorganizing the production system or introducing superior technology
- *Product upgrading:* moving into more sophisticated product lines
- *Functional upgrading:* acquiring new functions in the chain to increase the overall skill content of activities
- *Inter-sectoral upgrading:* using the knowledge acquired in particular chain functions to move into different sectors

Schmitz, Local Upgrading in Global Value Chains: Recent Findings (DRUID Summer Conference Paper, 2004)

Operational definitions vary, but the components of a value chain typically include research/extension, input supply, production, processing, wholesale, retail and export. For the purposes of this study, we have broadened the scope of the value chain slightly to include the first-tier firms that are not participants in the value chain, but provide services directly to participants. In the value chains of agricultural production, these first-tier firms include farm

[6] See Technoserve, "Assessing the Competitiveness of the Horticultural Sector in Manica Province." International Finance Corporation, 2003.

machinery and equipment retailers, irrigation suppliers. These first-tier firms are part of the wider "cluster"[7], which also includes second- and third-tier firms, which are related in a less direct way to the value chain. Banks and other financial institutions, more aptly located in the second tier, are also considered in our value chain analysis.

Dorothy McCormick and Hubert Schmitz have identified some key questions that value chain analysis can help address, namely the identification of challenges and opportunities for different participants in the value chain, the distribution of gains and power among the different levels of the chain, and the identification of appropriate technical assistance to the value chain.[8]

> Multilateral and bilateral donor agencies wanting to provide effective technical assistance to developing country producers are beginning to look at value chains as a way of reaching these producers. They use lead firms as the entry point for reaching out to many distant small and medium sized suppliers. These efforts are still in the experimental stage, but they promise to offer a new way of ensuring that more of the gains from chain participation reach small producers. (McCormick & Schmitz, p. 47)

Value chain approaches or analyses provide a framework for looking at both macro- and micro-economic goals. On a macro-economic level, it has been used to identify constraints to economic growth and trade, increased productivity and competitiveness, and the effects of globalization. On a micro-economic level, it has been used to address constraints at all levels of the value chain, and specifically to optimize impacts on the rural household level and reduce rural poverty.

For the purposes of this study, two value chains were identified by the USAID SO6 team in collaboration with the management of the *Center for the Promotion of Rural Financial Services* project. Oilseeds (sunflower, sesame and soybean) and horticulture were selected for their potential to increase rural incomes and impact large numbers of smallholders. These value chains, together with the range of firms providing services to their participants, served as the units of analysis used to identify financial service gaps in the sector. The unit of analysis for this study was the financial product, with the initial goal being the identification of financial products and services critical to growth in the selected subsectors.

Factors critical to industry growth and obstacles to increased industry competitiveness can be grouped into the following categories:

- *Upgrading*, both in terms of technology and in terms of capacity, to increase the performance of participants. In the case of the oilseeds and horticulture subsectors in Manica Province, this meant primarily irrigation equipment and oil processing equipment (particularly extruders for soybean processing).

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[7] We use the term "cluster" here in the sense of Michael Porter's definition: "Clusters are geographic concentrations of interconnected companies and institutions in a particular field" (Porter, 1998).
[8] "Manual for Value Chain Research on Homeworkers in the Garment Industry" Institute for Development Studies Sussex (2002).

- *Enabling environment*[9]*:* securities, licensing, registration of associations.
- *Inter-firm cooperation.* This is necessary on three levels:
    - Small-to-small: necessary for economies of scale. This is typified by the formation of smallholder associations.
    - Vertical inter-firm cooperation: the growing trend of contract farming. Outgrower schemes are another form of small to large inter-firm cooperation, although the relationship is not necessarily vertical.
    - Large-to-large: horizontal inter-firm cooperation, necessary to define the product (branding). The Manica Investors' Association is a good example of this.
- *Control and governance:* there are different types of power structures in value chains. In the chains studied in this assessment, it was interesting to note that some of the major wielders of power were not necessarily part of the actual production chain: for example, the tobacco companies who supplied credit to farmer associations and commercial farmers.

[9] The enabling environment refers not only to the laws and regulations governing business transactions but also to the interpretation and application of these laws by government officials.

4. The Horticulture and Oilseed Value Chains in Beira's Agribusiness Cluster

The assessment team observed that rapid expansion in investment in the oilseeds and horticulture value chains served as the nucleus of a new agribusiness cluster providing a range of services in the Beira corridor. The bulk of the initial investment in the two value chains is being made by Zimbabwean farmers recently driven out of Zimbabwe—a consequence of Robert Mugabe's land redistribution scheme. This initial investment in the oilseed and horticultural value chains has attracted additional investment in new services to meet the needs of these recently arrived farmers and the smallholders with whom they subcontract [10]. This expansion of services has created a core or mass of services to participants in the two selected value chains which has begun and continues to attract additional services providers leading to the emergence of an economic cluster. The assessment team for this study noted three distinct tiers in this emerging cluster. It is interesting that none of these tiers existed five years ago.

Tier one is comprised of firms providing direct services to principally to participants in the commercial production for export value chain. These include equipment and spare parts dealers, engineering firms to manufacture spares, a diesel fuel depot, and agents to assist new farmers through the myriad regulations to obtain land, register leases, and source spaces. Tier 1 services are not cross-cutting: they serve participants in a particular chain or chains within the same subsector.

Tier two is the set of firms providing cross-cutting services to firms in the value chain and to tier one firms. These firms include construction material suppliers, improved banking services, new legal firms, and an internet provider. With regards to this study, the commercial banks and the one finance company in the region are expanding their activities as a result of growth driven by expansion agriculture in the area. It is important to note that the demand for services by participants in the value chain alone had not been adequate to stimulate a service response by banks in the region. With expansion in the subsectors including a rise in Tier 1 enerprises, this is changing and several banks indicated plans in the near future to develop products for firms linked to the agricultural production and marketing cycle.

Tier three of the Beira agribusiness cluster consists of a wide and rapidly growing set of firms whose target market is the growing workforce supplying labor to firms in the selected value chains and the tier one and two firms responding to growth in the area. These include hotels,

[10] Early expansion in the two value chains led to a strategic decision to facilitate linkages between small holders and commercial farmers under the USAID-funded RENDER project, implemented by ACDI/VOCA in Manica Province.

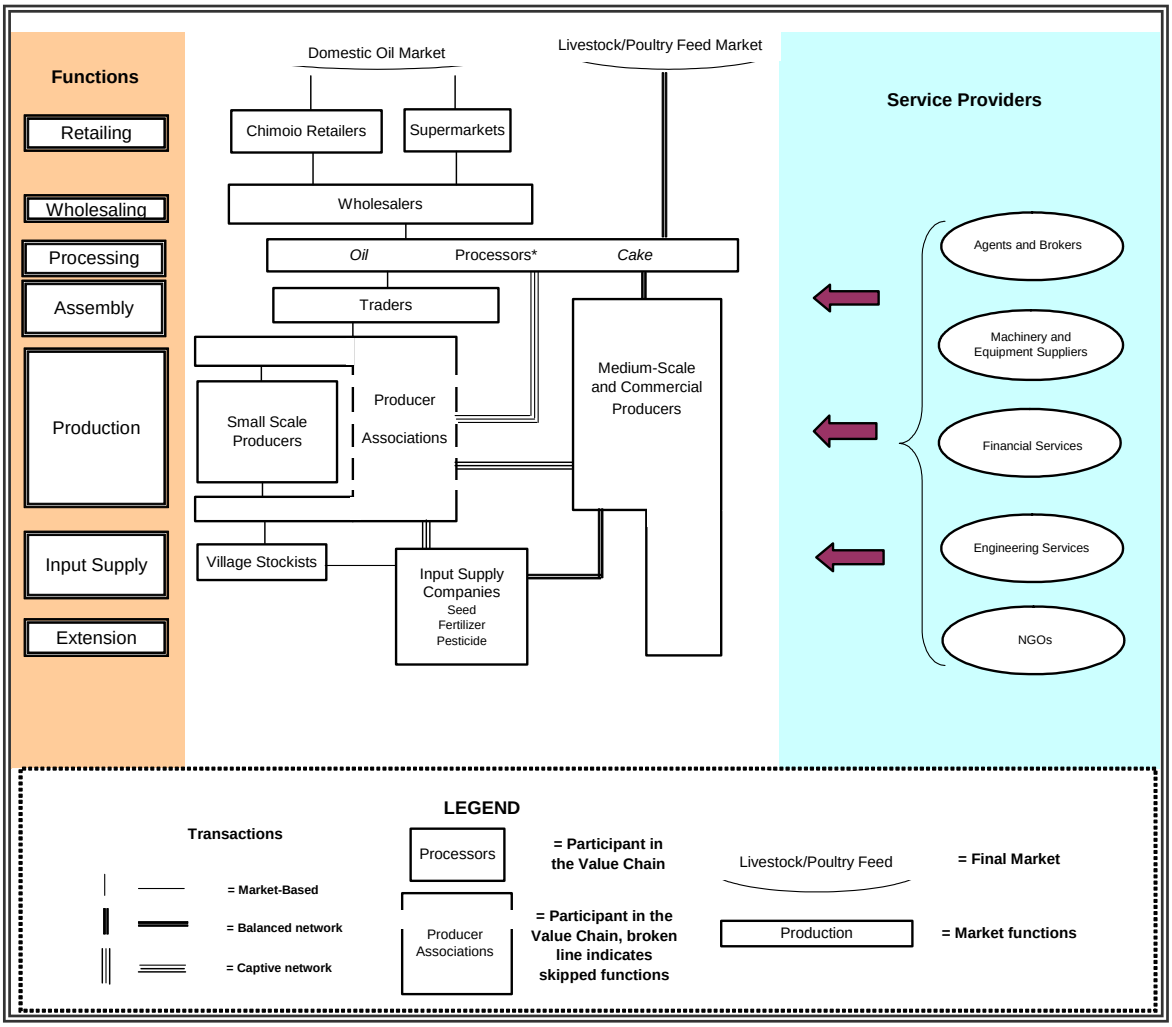
guest houses, restaurants, food service providers, clinics, an upgraded local supermarket, a photo development service, a new vehicle dealership, and many others.

4.1 The Oilseeds Subsector

Summary and subsector map

As illustrated in the diagram below, the oilseeds subsector consists primarily of input suppliers, smallholder producers (who participate in the value chain through associations), commercial producers, processors, wholesalers, and retailers, with the feed industry on the verge of becoming an important player. Four large input suppliers provide seed and chemicals (fertilizer, insecticide, etc.) to producers through rural stockists, farmer associations, or in some cases directly (for the medium- and large-scale farmers). These farmers produce sunflower or sesame (with soybean production beginning this year), which they market through farmers' associations or sell directly to traders such as V&M Trading Company. V&M processes its own oil; Optima Industrial and smaller processors process oil from sunflower and sesame purchased from smallholder associations. The oil is then sold to wholesalers, and finally makes its way to the Chimoio area retail market. The byproduct of oil processing, called oilcake, is sold to millers in Beira for the production of poultry (and potentially livestock) feed. Issues of governance relationships within the chain are complex and will be explained in more detail in the following sections.

Figure 5: Mozambique Oilseeds Subsector Map



*Processors also play an important role in the extension service provision and input supply; however, these relationships are too complex to show on a broad map. They are detailed more precisely in "zoom-in" maps in Appendix VI.

Subsector Participants, Market Functions, and Governance

- ***Extension***

Extension services in the oilseeds subsector are provided primarily by commercial farmers (through outgrower schemes), oil processors (through contract farming), and occasionally input suppliers. Significant technical assistance is also provided by NGOs in the region. A more detailed analysis of extension services can be found in section 3.2 below.

- ***Input Supply***

Most of the inputs used in oilseed production in Manica Province are produced in South Africa or Zimbabwe and transported over land into Mozambique, although some seed is grown locally. There are a limited number of incorporated input suppliers in the Beira Corridor. Large vendors (holding over $50,000 in inventory) include *Sementes Moçambique Limitada* (SEMOC, a member of the Seed Company Group, Zimbabwe) and Panaar, which sell certified seed, as well

as Savon Trading and Agrifocus, which sell seed, fertilizer, insecticides, and some imported equipment. Agrifocus is a national chain based in Maputo with two branches in the Beira Corridor (Beira and Chimoio). Savon Trading is a new arrival, responding to opportunities in the emerging agribusiness cluster, and sells the widest range of products from inputs to irrigation equipment and machinery. SEMOC is one of the largest suppliers of seed in Manica Province, and is the only input supply company that sells only seed.

All of these vendors sell directly to medium-scale and commercial farmers, or to rural stockists, although some are attempting to target the smallholder market. Despite the marketing of seed and fertilizer in small packets and bags, however, these vendors' clientele remains largely commercial. All of these input suppliers provide limited credit to their clients[11]. Savon Trading has begun offering credit terms to a small number of the quasi-formal stockists. Input suppliers are often obligated to limit credit to the 30-60 day terms set by their own suppliers, which do not match the cashflow cycle of their clients. This mismatch of cashflow limits the input sales that can be made directly to resource constrained smallholders. Commercial buyers and processors often fill this credit gap, which could alternatively be bridged by input supplier access to overdraft lines and/or smallholder access to marketing credit.

Although village level stockists (who generally hold under $10,000 in inventory) and commercial suppliers maintain savings and checking accounts with one or more commercial banks, none of those interviewed had accessed financing from any formal financial institution. Most stockists purchase from the commercial suppliers on cash and sell to preferred customers on 30-day terms. Smallholder farmers sometimes source their inputs through these rural stockists directly, but more often through other participants within or around the oilseeds value chain. Brokers and processors such as V&M and Optima Industrial provide seed to farmers on contract, with the understanding that the farmers will then sell their produce to them. This is advantageous for both parties, as it provides farmers with a guaranteed market for their produce, and gives the trader or processor a guaranteed supplier. These contracts are generally not made directly with individual farmers, but rather with associations of 30 to 40 smallholders in an arrangement that provides an additional guarantee through trust and social pressure, giving assurance to the buyer that the grower will not engage in side-selling.

Smallholders produced virtually all of SEMOC's 1,200 tons of seed (for maize, beans, sunflower and sesame) grown in 2003. The company reports having a high degree of control over contracted production, being able to ensure that the fertilizer provided to the producers is applied to the right crops. SEMOC identified its largest constraint as being a lack of finance. At the time of the interview in April 2004, the company had 4,000 tons of seed to buy and no cash with which to make such a purchase. This lack of liquidity, which could be easily solved through a six-month overdraft facility, has inhibited the company's expansion.

[11] See Annex VII for detailed subsector maps illustrating the flows of input credit.

As with all relationships between different links in the chain, the relationships between input suppliers and producers are governed by various contracts and standard practices that impact how power is distributed in the transaction[12]. Some of these governance relationships, such as the relationship between formal input suppliers and producers, are simple, market-based transactions. Others can be defined as balanced networks (see text box, right), as is the case for the relationship between processors and commercial producers. Finally, relationships can be "captive" (see text box). Processors and smallholder producers are a good example of this, as processors set the terms of the relationship and smallholders are dependent upon them for their inputs as well as (in some cases) technical assistance.[13] It is important to note here that governance relationships are dynamic (changing over time as the market changes and the value chain develops) and rarely fall exclusively into one category. A captive network such as the processor-smallholder relationship can contain elements of a balanced relationship – in this case, because processors do not operate at full capacity and are therefore dependent upon smallholders for their product. However, this leverage that smallholders maintain is likely to diminish as more and more associations become viable business entities and compete with one another for a limited market. Another example of captive networks with an element of interdependency is outgrower schemes.[14]

Governance

Hubert Schmitz (2004) distinguishes between four types of governance relationships in value chains:

- *Market-based:* enterprises deal with each other in arms-length transactions
- *Balanced network:* enterprises cooperate and have complementary competences
- *Captive network:* the lead firm sets the parameters under which others in the chain operate; the relationship is quasi-hierarchical
- *Hierarchy:* enterprises are vertically integrated; the parent company controls its subsidiaries

Schmitz, Local Upgrading in Global Value Chains: Recent Findings (DRUID Summer Conference Paper, 2004)

- ***Production***

The majority of producers in the oilseeds value chain are smallholder farmers with one-half to one hectare of land, on which they produce maize, horticultural crops, and/or sunflower. Sesame is a newer, higher-value crop, and soybean (also a high-value crop) is still in the process of being introduced. Many of these farmers are members of smallholder associations, which enable them to obtain inputs more cheaply and to market their produce more effectively. These associations also enable them to participate in outgrower schemes, which are becoming more common as commercial farmers realize the competitiveness of smallholder production. Outgrower schemes are "a more integrated form of contract farming, whereby agribusiness has greater control over

[12] A 'zoom-in' subsector map providing further detail regarding the governance relationships at the input supply and production level can be found in Appendix VI.

[13] For more information on processors' role as informal extension agents and input suppliers, see the breakout subsector map in Appendix VI.

[14] In outgrower schemes, smallholders are dependent on commercial farmers for inputs, credit, and a market for their product, but the interdependency comes as commercial producers view subcontracting to smallholders as a key to acquiring political capital, and thus as an investment in maintaining a positive enabling environment.

smallholder production: smallholder producers basically offer their land and labor in return for a package of inputs and extension services."[15]

Commercial producers in the Chimoio area include both Mozambican (generally medium-scale) farmers and white Zimbabwean farmers who have come to Mozambique in recent years as the Mugabe regime has forced them to leave Zimbabwe. The latter group bring with them substantial skills and expertise, although many of them are starting operations with very few assets in Mozambique. Large-scale farms typically use sprinkler or center-pivot irrigation systems, with equipment imported from Zimbabwe, the United States or Asia. The farm equipment and implements used by medium-scale farmers are generally financed by the large tobacco companies that have invested in Manica.

Many producers do not possess their own means of transporting their produce, and therefore have to rely on commodity traders such as Guillermo and V&M Trading Company (a commodity broker that sells uncertified seed) to transport their product to the various processors operating in Manica Province.

- ***Processing***

Oilseeds processors in Manica Province include small-scale, rural enterprises with traditional manual oil presses, as well as medium-scale agribusinesses with modern, electricity-powered equipment. There are no very large processors in the province, although several of the medium-scale operations are growing as fast as production and financing will allow. Many processors are operating below capacity, as production is not sufficient to meet the ever-growing demand. This demand is not limited to sunflower and sesame oil: oilcake (the byproduct of oil production) can be used in animal feed, and several processors have or are developing contracts with local poultry producers. Another important potential market is the livestock feed industry, but this remains as yet undeveloped in the region.

Participant Profile: *Optima Industrial*, oilseeds processor

Seed suppliers: 1,800 smallholders
Market: local wholesalers (*Chimoio Mercantil* and *Mafuia Comercial*)
Processing capacity: 2,500 MT sunflower seed
Actual processing volume: 1,200 MT sunflower seed in 2003
Oilseed processed: currently sunflower only; with soybean planned for 2005.
Financing needs: overdraft facility ($100,000 over 6 months), leasing or venture capital for equipment upgrading.

For further information on Optima Industrial and other participants in the value chain, please see Appendix III - Participant Profiles.

Most processors, such as Optima Industrial or Girasol de Manica, operate on a contract basis with smallholders, and in some cases this is coupled with technical assistance. In 2003, Optima Industrial (previously SAGREV) contracted with 2,400 smallholder farmers for sunflower seed for oil processing, and provided technical assistance and training on quality and standards at the association level. The company continues to provide these services, although the number of

[15] See Pearce, "Buyer and Supplier Credit to Farmers: Do Donors have a Role to Play?" CGAP, 2002?

smallholders on contract has dropped to 1,800 in 2004 due to Optima's cash flow constraints. If these constraints can be addressed, Optima hopes to contract with the associations for the production of soybean, which would be rotated in with sunflowers during the next phase.

In addition, Optima wishes to contract associations to reserve the sunflower cake, as it can be used for poultry feed when milled. With this objective, the company is contracting with Abilio Antunes, a local poultry producer, for the supply of feed. The feed industry is still developing, and it is anticipated that local mills will become important markets for oilcake. Mobeira, a large American-owned wheat and maize miller, currently runs the only mill in the Beira Corridor, although a second mill is currently under construction. Mobeira does not currently purchase or process oilseeds, but is considering entering the animal feed business.

- ***Wholesale, retail and consumption***

After processing, oil is sold to local wholesale markets. It is then sold on to retailers, transferred to 1-liter bottles, and marketed on a local level in small shops. Mozambicans buy locally produced oil as well as imported oil from South Africa, which is competitively priced. *Shoprite*, the large South African supermarket chain with a retail outlet in Chimoio, sells mainly South African oil.

Analysis of Upgrading Opportunities in the Oilseeds Subsector

The purpose of this table is to determine the potential for upgrading at the various levels of the value chain, and identify the constraints hindering these upgrading opportunities. [16]

Table 2: Analysis of Upgrading Opportunities in the Oilseeds Subsector

Function/Participant	Upgrading Opportunity	Constraints to upgrading
Input Supply	Higher-quality seed grown by smallholders, and provision of inputs on credit to producers	Lack of inventory financing
Smallholder Production	Outgrower schemes through producer associations, and contract farming with technical assistance	Difficulty of association registration and inadequate access to inputs
Commercial Production	Production of higher-value products (soybean)	Lack of access to credit for expansion of production
Processing	Processing of higher-value products (soybean), and oilcake processing (poultry and livestock feed industry)	Lack of equipment financing Lack of trade financing[17]

[16] These opportunities and constraints are linked to the analysis of financial institutions in Table 3.

[17] The absence of trade financing constrains investment in equipment because it ties up entrepreneur capital in short-term transactions.

It is clear from this analysis that although the oilseeds subsector has significant opportunities for upgrading at every level of the value chain, it continues to be constrained at every level by the lack of access to financial services. Interventions designed to address these constraints are developed in Table 3 in Section 4.4.

4.2 The Horticulture Subsector[18]

For purposes of this study, the assessment team also conducted a value chain analysis of the horticulture subsector – this analysis can be found in Appendix VIII.

[18] For a more detailed analysis of this subsector and its opportunities see Technoserve, "Assessing the Competitiveness of the Horticultural Sector in Manica Province." International Finance Corporation, 2003.

5. Mozambique's Financial Sector

The purpose of this section is to analyze the Mozambican financial sector in the context of investment gaps identified in Sections 2 and 3. The financial sector in Mozambique is comprised of regulated and non-regulated institutions. Regulated institutions include commercial banks and non-bank financial institutions such as insurance companies, leasing companies, and finance companies. Unregulated institutions include a range of micro-finance institutions including self-help groups, village banks, and credit unions.

This section is organized into three parts. The first part summarizes the financial sector enabling environment and its impact on investment in the Beira agribusiness corridor. The second part provides a brief description of the institutional participants that comprise the financial sector. The third part links the discussion on constraints to upgrading in the horticulture and oilseeds subsector to financial products and interventions that could help mitigate those constraints.

5.1 Financial Sector Enabling Environment: Fiscal and Monetary Policy

Although the Mozambican financial system remains small and dominated by state owned banks, there are a number of positive movements in GOM financial policy. Commercial Banking Law consolidates all supervision and regulatory authority of banks and non-bank financial institutions with the *Banco de Moçambique* (BDM). The most likely result of centralizing regulatory authority is improved supervision of regulated bank and non-bank financial institutions.

This year the BDM is expected to maintain tight controls over the money supply in order to offset inflationary pressures resulting from poor agricultural harvests and the appreciation of the rand (the currency in which most imports are denominated, as South Africa accounts for over 40 percent of Mozambican imports). The BDM has lowered its rediscount and T-Bill rates to reflect lower inflation rates, and has expressed some frustration that banks have been slow to reduce their lending rates.

Capital Requirements for Bank Licensing

Under the current law the minimum capital requirements to obtain a bank license is US$3 million. This is in line with bank law in other countries in the region. It is, however, prohibitively high for the development of smaller regional or boutique (specialized market) banks. A number

of interviewees during this study indicated that there was a proposal in the new bank law allowing for the creation of regional or rural banks with deposit taking authorization[19].

The April 2004 EIU Intelligence Report states that the commercial banking sector remains unlikely to lower rates resulting from a continued adverse environment for bad debt recovery, including weaknesses in the judicial system and low levels of transparency in the business operating environment.

T-Bill Policy

Current public securities regulations remain the biggest constraint to increased financial flows to private investors in agriculture or any other sector in two ways. First, current regulations limit the right to purchase T-Bills to commercial banks. Second, the high denomination on T-bill rates allows commercial banks to earn high profit margins on deposits. Standard Bank (formerly *Banco Standard Totta de Moçambique*, BSTM)'s reported cost/income ratios were 49.6%, 45.2% and 53.1% for 2000, 2001, and 2002 respectively, indicating incomes equal to two times operating costs inclusive of cost of funds operating and provisions for bad debt in 2000 and 2001. Banks are using these high returns to rebuild assets depleted by writing off bad debt losses.

Although this policy has been effective in recapitalizing banks, the effect on the domestic economy is that public sector demand for funds is crowding out the private sector. Standard Bank's loans to Mozambican companies accounted for just over 10% of their total assets. BIM's Chimoio branch reported an outstanding commercial loans and advances balance as a percentage of deposits in the first quarter of 2004 of 0.07%. Without significant liberalization of public securities policy, the commercial banking sector is unlikely to become a significant player in commercial lending to the agribusiness cluster in the Beira Corridor.

Specialized banks can deepen intermediation in rural communities

Licensing of specialized rural or regional banks has been a highly effective mechanism for increasing deposit mobilization and commercial investment in rural areas in many countries including Nigeria, Ghana, the Philippines, Indonesia and Taiwan. Generally, the rights of these banks are more limited than commercial banks, in part because governments use specialized banking licenses to encourage financial service penetration into underserved markets. As an example, in Indonesia and Ghana rural banks are not authorized to purchase T-Bills; the result is a substantial increase in commercial and consumer credit over regional banks authorized to purchase government securities. Rural banks in Indonesia and Ghana have loan/deposit ratios exceeding 60 percent.

Two areas of liberalization could significantly eliminate the current constraint. The first would be to reduce T-bills denominations to amounts that would allow Mozambicans to invest in them in their pension and other savings activities. The second change would be to authorize banks to sell T-Bills to the public. This liberalization would likely have two immediate impacts. The first is that demand for T-Bills would likely increase. This would

[19] At the time of this writing a new bank law had just passed parliament. The terms provisions and final amendments of the law were not available when the study team departed.

increase the supply of funds into the government treasury. The government would be able to significantly reduce T-Bill rates while increasing overall revenues. The second impact is that commercial banks would be forced to make other investments including commercial lending.

One downside of T-Bill liberalization is that allowing the public to purchase T-Bills would break the banks' monopoly on this investment and delay commercial bank recapitalization. An alternative instrument could be used by the BDM to mitigate the adverse impact on the banking sector by taking a subordinated debt position with undercapitalized commercial banks. Instead of granting banks a monopoly on securities allowing them to earn 100 percent returns by buying T-Bills, a subordinated debt instrument would enable the BDM to establish performance conditionalities on the borrowing bank; the debt instrument can be reported on the banks' balance sheets as equity, thus protecting banks' critical ratios and ability to borrow funds. These subordinated debt instruments can be retired by borrowing banks as they repay them back at negotiated terms in five to 10 years.

5.2 Mozambique's financial institutions

The banking sector[20]

The financial sector is highly concentrated, with the four largest banks accounting for 96 percent of total banking deposits, compared to 83 percent in sub-Saharan Africa and 71 percent in other low-income countries (IMF 2004). The financial sector is concentrated around Maputo (with secondary centers in Nampula and Beira). Bank savings total approximately $1 billion shared between four institutions: Banco Austral, Standard Bank, *Banco Internacional de Moçambique* (BIM) Group, and BCI Group.

Most Mozambican commercial banks continue to carry high levels of non-performing assets on their books. According to a Financial System Stability Assessment conducted in 2003, the ratio of nonperforming loans to total loans was 21 percent at the end of 2002[21]. Writing off these assets to reflect more accurate capitalization is essential, although in the short term it creates a risk that commercial banks may not be adequately capitalized.

There is considerable evidence to suggest that most non-performing loans result from poor lending decisions rather than from factors external to the lending institution. Therefore, these non-performing loans are a weak justification for not lending or for maintaining interest rates too high to encourage investment. Other reasons for these high rates include high overhead costs[22] (due to the relatively small size of the country's financial system), wide profit margins (thanks to

[20] Mozambique's newest commercial bank, Novo Banco, is a micro-finance bank capitalized by local banks, the IFC, and private investors. This bank is discussed in more detail under microfinance institutions for its portfolio similarities despite its bank license.
[21] IMF 2004
[22] According to the IMF study, the ratio of overhead costs to total assets is much higher in Mozambique (at 8.1%) than in the median Sub-Saharan African country (5.6%) or low-income country (also 5.6%).

a lack of competition in the sector), the lack of credit-worthy projects, and weak repayment culture resulting from a series of non-performing loans to the politically well-connected.

- ***Commercial bank lending***

One of the greatest challenges to expanding commercial bank lending to the agribusiness sector is that banks do not have the in-house expertise to assess agricultural risk and develop products whose repayment cycles match borrower cash flow. Although three of the banks interviewed communicated a willingness to lend to agribusiness clients, only one (Group BIM) has loan products to accommodate agriculture cash flows, and another (Standard Bank) has plans to hire an agribusiness expert. There is no agricultural bank. BIM out-sources specialists from *Ferrera Construçoes* (which is authorized by the Ministry of Public Works) for agricultural loan risk evaluation, although these specialists do not have to be agronomists. All of the banks interviewed have centralized credit departments in Maputo, which increases lending costs and delays as branches can analyze loans and give opinions, but cannot make decisions.

The impact of high T-Bill rates is evident in commercial bank lending rates, *Banco Austral* (BA) (formerly the *Banco Popular de Desenvolvimento*)'s total of 40 outstanding loans is almost impressive compared to Standard Bank's loan portfolio of four. Standard Bank in is a similar situation, with a miniscule 0.07 percent of its liquid assets in loans. The lending schemes offered by these institutions do not favor smallholders or even MSEs; the smallest loan size for BA is 30 million Mts (USD 1,250). Even commercial farmers in Manica Province are considered high-risk, because most of them are Zimbabwean farmers with no asset base.

Commercial bank interest rates range between 29 and 31 percent in Mts. (five to six percent in USD) at BA and 42 percent at Standard Bank. Foreign currency loans are LIBOR-based (usual minimum LIBOR+5%). Local currency loans are MIBOR-based (usual minimum MIBOR+5%). MIBOR on April 16, 2004, was 29 percent.

Some banks (such as BA and Grupo BIM) claim to offer an overdraft system (*discuberto autorizado*), but none of them actually have such systems in use, and no one in the area seems to be aware of this. Others, such as Standard Bank, have expressed the desire to offer overdraft facilities and supplier-buyer financing; and in the long term, the bank wants to offer a lease financing product.

Non-bank Financial Institutions

Non-bank financial institutions include pension funds, insurance companies, leasing companies, venture capital funds and finance companies. Credit unions also fall within the rubric of non-bank financial institutions, but there are none operating in rural communities in the Beira Corridor. Pension funds do not conduct lending activities and were not included in this assessment.

- ***Insurance Companies***

There are currently four insurance companies operating in Mozambique. Of these, only CGSM has offices in the Beira Corridor. The assessment team was not able to meet with any of the insurance companies. Insurance companies are an important player in agriculture finance, as insurance is critical to reducing lender risk where physical capital is used as collateral. Moreover, the establishment of an inventory financing scheme, discussed below, requires the participation of insurance institutions to underwrite warehouse risk.

- ***Leasing Companies***

Manica Province has two leasing companies: BIM Leasing (which offers two kinds of leasing services) and BCI Leasing. Through its *Center for the Promotion of Rural Financial Services* project, USAID is working with BIM Leasing to offer leasing services for the financing of agricultural equipment. To date (and after over three years of project activity), one lease has been signed. Leasing offers tremendous potential to increase capital flows to the agribusiness sector, particularly given the lack of commercial bank incentives to expand in this area. One of the challenges facing these leasing companies is capitalization. Leasing is unlikely to provide its commercial bank owners the returns they will earn from T-bill purchases. Today FDI remains an important source of leasing company capital.

- ***Finance Companies***

There is only one finance company operating in the Beira Corridor. GAPI operates in Chimoio and throughout Mozambique, and is committed to expanding its agribusiness lending. The institution's activities include the provision of financing to members of the Sunflower and Sesame Association in Sussundenga, and a recently-signed loan agreement for the construction of a EUREPGAP pack-house and cold store for horticulture products.

GAPI's General Director recognizes the challenges smallholders face in accessing commercial credit, and has begun to provide marketing loans directly to associations. The advantage of lending to associations is that all members share risk in self-regulating mechanisms.

Despite its willingness, GAPI faces challenges as a viable agricultural lender. The institution's interest rates remain high and its excessive operating costs prevent it from offering small loans. Indeed GAPI's smallest loan size is 100 million Mts (US $4,167), which precludes many farmer associations from obtaining credit. GAPI CEO Antonio Souto has affirmed that "GAPI's role is that of a 'wholesaler' of borrowed funds to MFIs and not that of a provider of micro financial services directly to farmers and micro enterprises."

- ***Venture capital companies (sociedade de capital de risco)***

There are no venture capital funds investing in the agribusiness sector in Mozambique. The IFC has established an Investment Facility, which will provide agribusiness financing and investment capital. Capitalized with public sector, commercial bank, private and IFC investment, the Investment Facility will invest primarily through participating instruments in amounts generally

ranging from US $100,000 to US $1,000,000[23] per investee. Targeted average investments size is less than US $500,000. Financing provided by the Investment Facility will be made through three products: mixed equity-loan in the $250,000 to $700,000 range; subordinated debt investments with no equity position in the $250,000 to $500,000 range; and term loans in the $100,000 to $250,000 range.

The IFC is considering establishing the Investment Facility as a *sociedade de capital de risco* under Mozambican law.

- ***Micro-finance Institutions***

MFI's are not regulated in Mozambique and are not therefore categorized as non-bank financial institutions. MFIs' loan portfolio stands at $8.5 million, shared between 15 institutions (not all of which are business-oriented) and 52,000 clients. Most Mozambican MFIs continue to mix social and financial objectives, and have poor repayment rates and high operating costs[24]. One exception – and the largest MFI in Mozambique – is Novo Banco, which holds 34 percent of the business and 15 percent of the clientele, but it currently operates only in urban areas and does not have a branch in Manica Province.

The Chimoio area in Manica Province does have several microfinance institutions, the largest and most professional of which is Cresce, an MFI funded by CARE and DFID. Others in the area include Socremo and Kwaedza Simukai. These institutions offer small loans to groups, individuals and associations. However, these loans are not suited for agricultural lending because of their very short repayment plans.

The absence of MFI penetration into rural communities is a significant constraint to the rate of growth of the agribusiness sector. Smallholder producers lack institutions through which surplus savings can be mobilized for productive investment. Smallholder inability to secure credit transfers all capitalization risk for commercial horticulture and oilseed production to buyers in the form of supplier credit. Supplier credit is an efficient and important mechanism to finance smallholder production, but it limits commercial buyers' ability to invest in expanding their own operations.

Alternative financing

Alternative forms of financing include input financing, lease financing, supplier and buyer financing, and inventory financing, as well as family financing, remittances, and informal loans. All of the above – except lease financing and inventory financing – provide access to capital for smallholders in the horticulture and oilseeds subsectors. Lease financing, in which equipment

[23] Investments will likely be made in both local and foreign currencies. For the purposes of this document US dollars are used to indicate both US dollars and US dollar equivalents in other currencies.

[24] Carvalho Neves, Director of the Center for the Promotion of Rural Financial Services in Maputo, indicated that the microfinance sector faces multiple challenges to sustainability, including capitalization, absence of a regulatory framework, weak management capacity, and operational inefficiencies.

companies provide the lease to borrowers with their own or borrowed capital, is widely used in automobile, motorcycle and scooter financing, but is not utilized for agricultural equipment in Mozambique. Inventory financing – the extension of loans against stored commodity in a bonded facility – has been highly successful in many countries in increasing capital flows to agriculture, particularly in non-perishable crops. Currently, there are no inventory financing schemes in Mozambique; the establishment of an inventory financing mechanism is one of the recommendations described in section 6.

- ***Supplier and buyer financing***

Supplier and buyer financing is the dominant form of credit delivery to smallholders in the horticulture and oilseeds subsectors – it may also be the dominant form of agribusiness financing worldwide. Suppliers and/or buyers provide inputs to trusted clients against future post harvest repayment. The advantages of supplier and buyer financing include shared transaction costs of lending between a loan and an input sale and reduced default risk since input suppliers and buyers tend to limit credit to trusted clients. All of the input suppliers and commercial buyers interviewed during this assessment provide some level of input financing to their clients/outgrowers. Buyers actually finance two transactions for smallholders: input purchasing and marketing. Buyers provide inputs to their contracted outgrowers at the beginning and sometimes throughout the production season. At harvest, buyers pay cash for their outgrowers' product before the buyers receive payment for the product from their clients. Several buyers interviewed for this assessment indicated that they take out two loans for each production season to cover the cost of both of these transactions. The absence of overdraft facilities available to input suppliers and buyers increases the interest charges applied to this credit.

Buyer credit appears to constrain investment in plant and equipment in both oilseeds and seed multiplication. The leading seed multiplication company, SEMOC, and the largest oilseeds buyer, Optima Industrial, both indicated that their market was constrained by their existing storage and processing capacity. Both firms indicated that they would be unable to service the debt from capital financing and outgrower financing. Their capacity to expand subcontracting to outgrowers is constrained by the inability of outgrowers to access their own funds.

5.3 Opportunities and Constraints to Upgrading, and the Role of Financial Services

The table below summarizes key constraints to increased investment in the Beira Corridor. The set of listed constraints is drawn from participant stakeholders in the horticulture and oilseeds sectors, as well as from an analysis of the financial institutions and the financial sector regulatory environment. In particular, the analysis of upgrading opportunities in the oilseeds and horticulture subsectors found in Tables 2 and 4 (in Section 4.1 and Appendix VIII, respectively) provided the basis for these financial services solutions. For each identified constraint, a solution, a possible provider, and – where possible – initial action steps are proposed.

Constraints, solutions and providers are not ranked in this section. The recommendations section provides guidance in how a donor, in this case USAID, might intervene to facilitate increased financial services delivery to the agribusiness sector. As indicated in the findings section, the assessment team identified the enabling environment as the most important factor in the rate of investment in, and expansion of, the agribusiness corridor.

Table 3: Constraints to Upgrading and Financial Service Solutions for Manica Province

Category	Constraints to Upgrading	Solution(s)	Provider(s)	Action Steps
Institutional	Lack of private sector capital for ag investment Lack of incentives for banks to lend High interest rates	Liberalize government T-bill and bond market	USAID and other donors lobby GoM	Determine revenue impact of liberalization
		Create agricultural bank	Donors, GoM, IFC, banks, Rural Finance Project (assistance)	Identify investors/management, create banks
		Create rural banks	Private Investor	Review rural bank legislation, identify investors/management, create banks
		Work through existing finance cos./create new ones	Banks, insurance cos., leasing cos., MFIs	
	Lack of commercial focus and capital for MFIs	Establishment of incentives for MFI capacity-building	Donors, NGOs, Rural Finance Project	Assess MFI capacity
		Facilitation of MFI access to commercial credit		Establish MFI action plans and performance-based contracts
	Inadequate financial sector HR capacity	Development of curriculum for technical schools and training programs – emphasis on ag lending	Financial institutions, technical schools and universities, donors/NGOs	HR capacity assessment, curriculum design, establishment of certification criteria
	Difficulty of company and association registration	Use of commercial agents	Commercial agents and NGO facilitators	Identification of agent, establishment of incentives and cost-bearing mechanisms
			Donor pressure on GoM	
Service provision /access	Lack of equipment financing	Lease financing	Leasing companies	Formalize agreements with incentives
		Equity investments and subordinated debt	Venture capitalists IFC	Establish broker agent
	Lack of inventory financing	Establishment of overdraft facilities	Commercial banks	Negotiate guarantees
				Formalize agreements with incentives
	Lack of trade financing	Letter of Credit		
	Inadequate smallholder access to inputs	Intermediation between smallholder associations and financial institutions	NGOs, broker	Create broker agency
Farmer-level	Lack of farmer collateral	Inventory financing (warehouse receipts)	Private investors, insurance cos., banks, inspection svcs, donor (USAID) as guarantor	Identify interested parties, study tour (Kenya GWR), establish guarantees and agreements
		Land tenure reform	Donor/GoM	
	Inadequate smallholder investment	Rural savings mobilization	Solidarity groups, village banks, modified ROSCAs, NGO facilitation	

As the actions of a regional governor to attract investment by commercial growers and support service firms has driven much of the growth in the Beira Corridor, current policy concerning T-Bill rates, and limiting T-Bill purchases to commercial banks may be the single most important factor limiting the rate of investment in this important cluster.

6. Principal Findings

a) There is enormous potential for growth in incomes and trade from investment in horticulture and oilseeds.

With only 13 percent of arable land in cultivation in Manica Province, the area can sustain an important expansion of agricultural production. In the horticulture subsector, the potential increase in revenues from such an expansion is approximately $2.7 billion[25]. The greatest potential for the oilseed industry lies in the expansion of the poultry and livestock industry. Other comparative advantages for the region include low labor costs, favorable trade agreements (Lomé Agreement), and substantial market opportunities in domestic, regional and global markets. Markets for niche products such as paprika and chilies are particularly promising due to their high values.

b) Increased investment in the horticulture and oilseed value chains is transforming smallholder agriculture, generating significant increases in income for smallholder farmers.

The majority of commercial farmers recognize the benefits of outgrower schemes, and the growing demand for qualified outgrowers greatly exceeds the capacity of smallholder groups to deliver. Contract farming with processing and trading companies is advantageous to the smallholder, and as this system becomes more widespread there is potential for a significant increase in smallholder incomes. The major firms in the horticulture and oilseeds subsectors use this system, and it is estimated that there is potential for an additional 20,000 outgrowers in the region by 2008. Five companies alone have the potential to generate over $50 million in revenues over the same period: Optima Industrial, V&M, Waluru, Pimenta de Mocambique, and Vilmar (roses).

c) Improvements in the enabling environment over the last five years have been significant in attracting domestic and foreign direct investment in the Beira Corridor.

Manica Province benefits from the leadership of a governor who is responsive, dynamic, and business-oriented, and who has earned the widespread acclaim of commercial farmers and agribusiness firms. There is an election in early December and indications are that the current governor will not be reappointed, no matter who wins the presidency. What impact not having a governor has pro-business and as helpful as this one is of course unknown. Private sector development and investment have also been facilitated by the availability of private, independent agents to assist with company registration and other bureaucratic procedures. An equally important factor is that corruption is diminishing, and is insufficient to discourage investment. For the moment, the Mozambican metical is a stable currency, which is attractive to foreign

[25] Technoserve, 2003.

investors, particularly as the currencies of neighboring countries such as Zimbabwe have soaring inflation rates.

d) Private sector investment in critical agriculture value chains has triggered demand for a wide range of services; and this has led to the emergence of an agribusiness cluster in the Beira Corridor.

The first tier of service providers is composed of the firms that provide services directly to the participants in the value chain, such as transport, machinery/equipment and spares engineering, manufacturing and servicing, veterinary services, and commercial agent services. As economic activity increases in the region, demand for related business services has increased proportionally. Participants in this second tier include telecommunications and courier services, information and communications technology (ICT) companies, construction and building companies, insurance companies, and groups such as the Manica Investors' Association. Finally, as this cluster has developed, third-tier industries have arisen and multiplied as a result of economic growth. These more distantly related firms include garages and service stations, banks, hotels, and restaurants.

e) Current levels of investment still fall far short of the amounts needed to take advantage of existing market opportunities.

The total credit gap within the agribusiness sector in the Beira Corridor is estimated at $10 to 15 million annually. Multinational Companies (MNCs) are the only firms in the horticulture and oilseeds industries that have sufficient access to capital.

f) The financing gap requires increasing the supply of both equity and debt capital – short and long term – but particularly products tailored to the cash flow characteristics of agriculture enterprises.

Interviews with participants throughout the value chain uncovered a high level of unanimity in the identification of principal constraints: everyone from input suppliers to exporters (with the exception of MNCs) faces serious cash flow constraints. These problems have constrained transactions at all levels of the value chain and slowed the rate of expansion and growth. The establishment of overdraft facilities by commercial banks could therefore have a tremendous impact in making the value chain even more dynamic.

g) In spite of relatively rapid growth in investment, remaining enabling environment constraints are the biggest impediment to future growth in employment and incomes in the Beira agribusiness corridor.

i) Banking and securities regulations. Current regulations on the purchase of government securities in particular, are the single greatest constraint to increasing private sector investment in the corridor. Thanks to governmental regulations designed to support banks struggling to recover from the recent failure of two major banks (whose bad debts they have inherited), commercial banks currently have an effective monopoly on the purchase of treasury bills. With their high return rates and low risk factor, these T-Bills are a much more attractive

option to banks than the risky business of lending. As a result, banks have made no effort to expand or promote their lending services.

ii) Land tenure. Although the actual nature of the law is debated, in effect Mozambican law does not allow for private land ownership. Land belongs to the state and cannot be owned by a private individual or firm, which means that it cannot be used as collateral when applying for a loan.

iii) Infrastructure and transportation regulations. The infrastructure within the Beira Corridor remains a constraint, and there is a need for improvements to roads and the airports, as well as a lowering of the landing fees at the Beira airport[26].

h) Coordination and cooperation among all stakeholders – small and large, private, public, and donor – is critical to developing, maintaining, and ensuring the competitiveness of the cluster.

[26] Inadequate investment in transportation and logistics infrastructure is a constraint to expanded investment (see Technoserve, 2003).

7.0 Conclusions

Value chain analysis, with its emphasis on relationships among participants and between participants and service providers, is a useful approach to identifying key bottlenecks to increasing the performance and competitiveness of an industry. In this assessment the value chains that comprise the oilseed and horticulture subsectors were used as the unit of analysis to identify the relationship between constraints to growth in the subsectors and the quality and level of financial services available to the participants in the subsectors and the firms that support them.

There are three advantages to this approach. First, it links financial services to actual demand for services in a rapidly growing industry; financial services are treated as the means to an end – economic growth – rather than the end in itself. Second, it recognizes that optimal levels of investment in a sector require a range of services from a range of service providers. Value chain analysis illustrates that constraints at any point in a value chain limit the total productivity of the whole chain. Third and most important, the rationale and priorities for donor intervention in the financial services sector is defined by the investment needs of firms in high growth value chains; emphasis in product development is shifted from an institutions seeking more market share, to the demand for services by entrepreneurs in high growth markets.

There is also a risk in this approach. A financial sector strategy based on private sector firms' need creates the risk of establishing a supplier driven approach to credit which sidelines the principles critical to establishing viable and sustainable financial institutions. USAID support to financial institutions since the 1990's has been heavily influenced by the financial systems approach, which emphasizes sound financial and operational management practices essential to the establishment and maintenance of sound and sustainable institutions. Industries need sustainable service access to ensure growth and competitiveness. While a value chain approach to identifying financial service gaps may provide richer detail for intervention design, financial sector interventions must always be based on principles of sound financial institution operation and management.

APPENDIX I

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APPENDIX II

Scope of Work

A. AMAP BDS Component: C: Intervention Design and Implementation Research

B. Date Submitted:1/23/04

C. Name of Contractor: ACDI VOCA

D. Key Contact Information:
Olaf Kula, Program Manager, 202-879-0213, okula@acdivoca.org;
Naya Kenman, Deputy Program Manager, 202-383-4988, nkenman@acdivoca.org;

E. List of Deliverables (final & intermediate)

- **Case study** on the identification of financial service constraint to sector growth using a value chain approach. This is a secondary product in the Component C workplan.
- **Report to USAID Mozambique identifying existing financial services and financial service gaps in 1-2 critical subsectors in Manica Province. This deliverable is an intermediate product.**

F. Timeline for Deliverables (final & intermediate)

G. For EACH Deliverable:

Name of Deliverable:	***Rural Financial Services Study***
Description of and Rationale for Research Topic:	A major constraint to rural enterprise development and to achieving significant growth in critical subsectors in Mozambique is the lack of financial services tailored to the needs of the industry and the firms, micro-to medium, operating in it. In recent years, Mozambique's financial system has been transformed from an oligopolistic, state-dominated structure, into a more diversified and potentially more competitive system, better equipped to intermediate resources in support of the enterprise sector. Recent research conducted by the World Bank indicates that the overwhelming bulk of financial services delivered to the rural poor are provided by

	informal providers, private sector firms supplying inputs or purchasing products from smaller firms. Banks and MFIs play an important but far from the dominant role in rural financial service delivery (Kula, Pearce, 2002). Several factors account for this including the geographic distribution of agricultural clients, the lack of registered collateral held by small holders, perissability of poorly handled products and the importance of managing risk. The private sector response to these factors has been to link financial services with other transactions either to equipment under leasing or lease financing, stored commodity under inventory financing, input purchase under supplier credit, or in-kind credit as a form of advance by buyers. The study should obtain the following: 5) Information from key participants in and suppliers to the value chain regarding services that the currently receive, services they provide, and services that they would be willing to pay for if offered. The consultant will query key participants and suppliers about services offered by financial institutions and by other participants and service providers in the value chain. 6) An understanding from the prospective of financial institutions as to the problems they face in delivering financial services in rural areas. Both internal and external factors need to be investigated. Internal factors could be a lack of operating efficiencies to be able to deliver financial services in a profitable manner, poor client management skills, inefficient technologies and systems, lack of training by staff to be able to adequately assess risks and/or a lack of market driven products. External factors could be clients limited financial control capabilities, limitations on collateral provisions, actual market values not representing actual capital cost or replacement values, limited viable long term business' and/or deficiencies in the judiciary system. 7) An understanding from the non-traditional suppliers, what types of credit or loan programs they offer, why they offer these programs, are they successful etc. 8) From both sources, the study should obtain information as

	to what programs are currently available, how much demand is there for these programs, what are the constraints of these programs and what programs are needed. 9) All types of products should be brought up for discussion including both debt (i.e. loan) and equity (i.e. venture capital). The consultant in collaboration with mission technical staff, and the Chief of Party of the **Reinforce Business for Rural Development Project** will identify the value chains (1-2) for the analysis.
Description of Research Methodology:	Using the value chain as the unit of analysis, the consultant will systematically interview participants and service providers at all levels of the value chain from input supply through final markets for selected products. Analyzing financial service needs at all levels of the value chain will provide USAID Mozambique with information on the degree to which lack of services or poor service quality impedes growth throughout the sector including but not limited to rural small scale producers. The consultant will conduct an assessment of the range of financial services critical to growth and expansion of 1-2 agricultural subsectors. This assessment will include services already provided by formal sector financial institutions and non-financial institutions financing the sector. The assessment will inventory and evaluate existing services and identify critical service gaps. The consultant will use the financial product as the unit of measurement and the value chain as the unit of analysis. Using the financial product as the unit of measurement means that the consultant will first identify financial products and services critical to growth in the selected subsectors. S/he will then recommend institutional options for the delivery of those services. These options will give priority to existing

	institutions. Recommendations to create a new institution can be made if and when it can be established that current institutions are and will continue to be unable to meet the demand for services. USAID Mozambique and/or the Chief of Party of the current financial services program will accompany the contractor for some or all of the interviews.
Relevance to Research Agenda and Mission Programming	This activity contributes to the understanding of business and financial services linkages and research hypotheses 2 and 3 under the Component C research agenda. The result of this activity and subsequent studies will result in the development of an assessment tool which can be used to identify a range of financial products that respond to growth constraints in selected value chains. The proposed activity will provide the USAID mission in Mozambique with an assessment of financial service constraints in selected value chains and posit a range of products to address those constraints. USAID mission personnel can integrate these recommendations into existing or future programming. This product will not be used as the basis for a new procurement.
Country Selection & Rationale:	The location for the research will be in the Chimoio area of Manica Province. This location has been chosen because of its rural location, strong agriculture base and potential and recent influx of new businesses. This area offers banks, microfinance institutions, NGO's, PVOs, agro-processors, input suppliers, provincial government officials, smallholder and commercial farmers, agriculture support industries, associations and others to interview to obtain the necessary information. Additional interviews may be conducted outside of the region if key service providers are identified operating from centers outside of Chimoio. ACDI/VOCA has an office in Chimoio that will be able to offer logistical support. It is recommended that the ACDI/VOCA office schedule interviews, before the person doing the work arrives, so that time is not wasted trying to schedule interviews.

Proposed LOE:	**TOTAL LOE: 35 days** **Lead Consultant, Olaf Kula – 13 days total**: 11 days in the field, 2 days to draft report **ACDI/VOCA** Microenterprise Strategic Planning Specialist Level Three. 11 days data collection; **11 days total** **Local Consultant(s)-**1 local consultant x tbd @ 11 days = **11 days total**
Consultant Selection & Rationale:	ME Strategic Planning Specialist Level One, **Olaf Kula**. Mr. Kula is the AMAP BDS IQC Project Manager. He will provide on going technical leadership to ACDI/VOCA's contribution to AMAP BDS Knowledge and Practice. As the former director of the GEMINI project's non-financial services unit, Mr. Kula managed task orders, consultants, and conducted multiple project design and research, and evaluation assignments including a gender assessment of the GEMINI project. Mr. Kula has strong research and research methodology experience. He has published a number of articles and reports with the GEMINI project and earlier as a research economist for the Economic Research Service. Mr. Kula is a recognized advocate for a strong commercial approach to microenterprise development whether by NGOs associations, cooperatives or private commercial service providers. With a long and diverse background in both microfinance and microenterprise BDS delivery, Mr. Kula has the experience to facilitate stronger linkages between financial services and BDS providers. **Local consultant: TBD** Consultants will have at least 5 years field experience in agricultural marketing and or finance. Strong field interviewing techniques required. English proficiency desired.
Intermediate products	The written report will provide a profile of rural finance as to where the main areas of concern lie in relation to bringing

specified:	additional rural finance to businesses in rural areas. These conclusions should bring out the problems including chain or ripple effects brought upon rural finance because of other factors outside the immediate constraints linked to the difficulties in rural finance availability. It should also provide a critical analysis and an opinion as to where intervention needs to occur to provide additional rural finance.
Secondary products specified: (response from Component C research plan)	**Financing for Growth**: lays out the case for integration of BDS and financial services as a precondition for significant enterprise growth and will identify a range of financial services that contribute to both enterprise and sector growth linked to other business services. Stakeholder participants in value chains other than commercial financial institutions offer many if not most of these. Case studies will summarize approaches to increasing MSE access to financial services including contractor and input finance, lease financing, grain warehouse receipting and rural and ag. financial institutions. This product responds to questions in Hypothesis categories 3 and 4
Expected Submission Date:	Assuming work begins 15 February, 2004, intermediate product submission will be 30 days later. The secondary case study will be submitted by April 15th, 2004.

APPENDIX III

Participant Profiles

A. Input Suppliers

- **SEMOC**

A member of the Seed Company Group (Zimbabwe), *Sementes Moçambique Limitada* (SEMOC) is one of the largest suppliers of seed in Manica Province. Its stated mission is to "guarantee agricultural development in the country through marketing of seed adapted to different agro-ecological regions of Mozambique, in the quantity and quality necessary to satisfy the needs of the country."

SEMOC produces seed for maize, beans, sunflower, and sesame, which the company finances through sales of fertilizer (bought in bulk on credit from Omnia in South Africa and repackaged for retail) through agents. Smallholders produced virtually all (95%) of the 1,200 tons of seed grown in 2003. In 2004, the proportion of smallholder production is anticipated to be smaller (75%), but this is due to a large increase in production thanks to improved inputs: 4,000 tons of seed are being grown this year. SEMOC reports having a high degree of control over the production that is contracted by them, and can ensure that the fertilizer they provide to producers is applied to the right crops.

SEMOC identified its largest constraint as being a lack of finance. At the time of the interview in April 2004, SEMOC had 4,000 tons of seed to buy and no cash with which to make such a purchase. This lack of financing, which could be easily solved through a six-month overdraft facility, has inhibited the company's expansion.

- **Savon Trading Company**

Savon Trading Company is an input supplier that began operations in Chimoio in 2003. The company sells chemicals, fertilizers (from South Africa and Zimbabwe), insecticides, dips, and veterinary supplies, and is in the process of becoming a John Deere distributor. Most of their clients are commercial farmers, although they are trying to target smallholders with 5g bags of seed (for a yield of 50kg) and 4kg packages of fertilizer. They also sell to area stockists on discount (agreed terms). Other important customers include tobacco and paprika farmers, who come together to buy in bulk and then provide inputs to smallholders. The company currently operates only in Chimoio, although they have plans to open regional offices in other parts of the country. Omnia handles pre-season export orders, and makes most deliveries directly to the farmers.

Director Tom McKay is an agronomist who offers extension advice to farmers on request, which the company view as a key component of its marketing strategy. The sales department has marketing trainers who train the sales staff on advising customers.

Savon Trading, which obtains financing from Standard Bank, does not offer credit to its customers, although the company does take post-dated checks of up to 30 days. Several buyers have difficulties meeting the 30-day requirement. Savon operates on 30-day lines with suppliers.

Savon Trading identified its greatest challenge as the import of commodities from South Africa or Zimbabwe (through dispatchers): goods can be delayed at the border for a week. The company's primary competitor is Agrifocus, which runs a shop in Chimoio and has been operating in Mozambique for many years.

- **Agrifocus**

Agrifocus is an input supplier that has been operating since 1996, and currently runs 6-7 branches throughout Mozambique. The company sees its potential for growth in the horticultural subsector, although the future is uncertain.

Agrifocus imports most of its products from South Africa (through its headquarters branch in Maputo, to which it sends monthly inventory reports and orders), and sells larger seed packets than Savon Trading. The company is linked with companies in South Africa (in particular Syngenta, a producer of generic chemicals) and Zimbabwe, and supplies mainly generic products. Most of its sales are of chemicals, although it also sources equipment, mainly to order. Most of its sales are to smallholders, and 97% of sales are cash sales. Credit sales have a maximum period of 90 days.

Although smallholders make the largest number of purchases, it is commercial farmers who make up the highest volume of sales. Many of them pre-order 2-3 months in advance. Tobacco companies Mozambique Leaf Tobacco (MLT) and Dimon purchase inputs in bulk for their outgrowers (they split their order between Savon Trading and Agrifocus). Other clients include Asmas in Manica (processor of maize and tobacco), Casa de Agricultura, and Santo Savalho (a small-scale oil processor in Sussundenga).

B. <u>Producers</u>

- **Sussundenga UDAC**

The Sussundenga UDAC is now a legally registered union of 55 associations. The UDAC does not obtain cash credit, but does obtain inputs on credit from SEMOC and V&M. The UDAC intends to provide credit to one association this year, for the production of maize on contract to Mobeira.

Currently, the UDAC pays the government for the storage of maize in the government-owned warehouses. For this activity, the UDAC needs a two-month rolling loan, but the loan it currently has from GAPI, the union can only start repayment after six months: this is not a real credit line, since the debtor cannot reduce the balance.

Associations retain 40% of any profits it makes in a time deposit account (which is often used for purchasing the following year's inputs) and disburses 60% to its members.

The Sussundenga UDAC's strategic plan is to facilitate ADIPSA credit to associations to build storage units (each measuring 15x12 m, with a capacity of 500MT) at different points in the district. The UDAC hopes to obtain $9,000 in financing for the associations: the loan itself will be at the association level, and the UDAC will notarize it. The DDA, ACDI/VOCA (RENDER Project) and the local Administrator will all give recommendations for the loan, and agree to pressure the association to fulfill its repayment obligations. Seven UDAC member associations have completed the registration process: one in Sussundenga, one in Manica, four in Gondola, and one in Chimoio.

The UDAC may consider cleaning its own maize, but say that currently Mobeira offers the same price for cleaned or uncleaned maize.

- **Senhor Issufo Valy Adam, Commercial Farmer**

Valy Adam, a commercial farmer in Gondaza area, owns several 500-ha and 2,500-ha farms near Chimoio, on which he keeps sheep, goats, and 120 heads of livestock (including 2 bulls), both dairy and beef cattle. He buys feeding supplements for his cattle from a molasses factory and from Beira (soya seed cake). He does not purchase any cake from Optima Industrial because it is small and is developing an exclusive contract with poultry producer Abilio Antunes. Adam pays V&M 4-5,000 Mts/kg of soya bran feed. He plans to export beef in approximately five years.

Adam also has fruit trees (litchis, bananas, pineapple), potatoes (800 MT this year, up from 400 MT in 2003), and maize (both hybrid and open-pollinated), and plans to start growing tobacco soon, which he will then teach to other farmers. Tobacco is the most profitable crop (his highest export earner this year), followed by potatoes. Access roads to his farm were repaired, thanks to the help of donors like ADIPSA.

Adam produces mainly for the local wholesale market, but he also uses his own trucks to transport produce as far as Nampula. Last year he contracted with nine farmers for several crops (including potatoes), but had difficulty training them since they had no experience, and the initiative was unsuccessful. However, Adam is considering trying again in the near future with a more organized group. Adam also helps small banana farmers, and sometimes buys sesame from small farmers to sell to V&M.

His farms use sprinkler irrigation. The pivot was ordered from the US; the rest of the materials are from an agent in Zimbabwe. He purchases more than half of his inputs from savings, and the rest is on credit. Adam spent 1 billion Mts this year, up from 300 million at the beginning. SEMOC allows him to purchase seed and fertilizer on a six-week credit basis.

Challenges:

- Seed quality. Obtaining potato seed is a serious problem, as the quality is uncertain. He used to buy from Zimbabwe at 40 cents/kg, which was the right variety for the growing conditions, but this is no longer available. Now Adam imports from South Africa at $1/kg (because of high transport costs), and it is not the right variety.
- Cost of finance. Adam receives credit from GAPI. It is easy and quick for him to obtain credit because he has a good credit rating, and does not need all his credit all at once, since he has many crops. Other farmers have more difficulty. Credit cannot be obtained in tranches. The cost of credit is 20% p.a., plus 3% signing fee, plus notary costs, guarantees, and valuations.
- Marketing: the local market has no buying power.
- Theft (of seedlings, batteries, etc.) is a major problem.
- Selling prices are high because of a lack of transporters due to poor access roads. Mr. Adam has to operate his own transport (two trucks, each of 10 tons).
- No machinery standardization.

- **Joaquim Almeida, Commercial Farmer**

A young Portuguese commercial farmer, Almeida grows tomatoes and potatoes, and just started producing paprika this year. He works with his own cash (no credit), but is waiting for financing from *Pimenta de Moçambique* (which works mostly with small growers). Many farmers are moving into tobacco cultivation, but Almeida considers this too much work, and prefers the ease of drying paprika. He favors growing on contract for companies he knows.

Coming from a family of commercial farmers producing for the Beira market (which could absorb everything), Almeida owns large expanses of land which are left uncultivated due to distance and risk of theft from hired laborers since he cannot monitor activities daily.

There are 3-4 equipment rental companies in Chimoio, and Almeida rented machinery from them to build a dam, at a rate of $70/hour. However, the dam is leaking. The cost of building another dam could be around 200-300 million Mts. Almeida currently uses sprinkler irrigation. If the financing comes through, he will electrify his irrigation system, as diesel is expensive. He also wants to purchase a pivot as well as a tractor (possibly financed by MLT).

Challenges:

- Careful supervision of workers is necessary due to very low labor skill, the high cost of hybrid tomato seed, and the threat of theft.
- Spares parts from Beira are expensive.

C. <u>Processors</u>

- **Santo Savalho, Sussundenga Oil Processor**

Santo Savalho owns the only electric-powered oil press in the area, which can process 150-200 liters of sunflower oil a day, compared to the 20 liters/day from a manual press. The machine

cost $1,700 (which he paid for with profits from his sale of manual oil presses), but the monthly electricity charges for running it are only $12.

Filtering the oil takes twice as long as pressing, so Savalho currently only operates his press every other day. However, he is building more (simple) filtering stations, with the goal of running the press every day. Savalho intends to upgrade his installation and build an office for accounting and management (with a tight control system to continue minimizing theft), as well as purchase a lorry for his own transport.

Savalho started operations as a farmer, then began selling seeds for Agrifocus, Panaar, and SEMOC. Now, as an agricultural technician, he sells seed to farmers (on credit) and teaches them about inputs, production, etc., in collaboration with the DDP extension network, Africare, and ACDI/VOCA. Savalho works with associations rather than individual farmers in order to control side-selling, and encourages farmers to create associations by offering higher premiums for associations' products (4,000 Mts/kg for association sunflower or sesame; 3,500 Mts/kg for product purchased from an individual farmer). He currently has 6 full-time workers who sell seed and buy and sell oil (giving bonuses on volume).

In 2003, he processed 140 MT of sunflower oil and 12 MT of sesame oil.
In 2004, he plans to process 150 MT of sunflower oil, and uncertain amounts of red sesame oil (because production has been low).

Savalho buys 200 MT of seed to get through the "dead" season. Three kilograms of seed produce one liter of oil and one and a half kilograms of cake (by-product of the oil processing). Cake sells for 2,500-3,000 Mts/kg, and Savalho transports this with his own pickup truck. Sunflower oil sells for 25,000 Mts/liter, and sesame oil for 30,000 Mts/liter on the local retail market.

Challenges:

- Savalho has difficulties obtaining containers to sell oil, and does not label his products. Customers bring their own containers.
- Purchasing: Savalho must pay cash when purchasing seed
- With a 40 million Mts/month turnover, Savalho needs an overdraft facility. Savalho has a bank account in Chimoio with *Banco Austral*, which he can access online from Sussundenga.

- **Optima Industrial**

The director of Optima Industrial (previously Sagrev) is Pine Panaar, a South African farmer who has lived in Mozambique for 12 years. Optima sells its oil to wholesalers (such as *Mafuia Comercial* and *Chimoio Mercantil*), who distribute it to retailers in five-liter jerrycans for the local market only. The company's aim is to register its brand name (it currently has a label but not a brand name) and reach regional markets, although it faces competition from the import of cheap palm oil.

In 2003, Optima Industrial contracted with 2,400 smallholder farmers for sunflower seed for oil processing, and provided technical assistance and training on quality and standards at the association level. The company continues to provide these services, although the number of smallholders on contract has dropped to 1,800 in 2004 due to cash flow constraints (as Optima is required to finance seed up-front) and the doubling of hybrid seed price from South Africa. The farmers that received technical assistance and training have planted comparatively more sunflower, so that the yields produced this year are the same as last year. Optima provides mostly SEMOC seed, which it distributes in February and finishes recuperating costs on by October. To finance sunflower production in 2003, Optima borrowed $90,000 from GAPI and two private individuals affiliated with Technoserve. Optima has the capacity to process 2,500 tons of sunflower seeds for oil, and plans on establishing primary satellite processing units at association collection points to carry out primary processing in the field. Optima would then collect the oil for final processing at its factory in Chimoio. Additionally, Optima wants to contract with the associations for the production of soya, which would be rotated in with sunflowers during the next harvest phase. Optima processed 1,200 tons of sunflower in 2003, operating at 50% capacity. No sesame was processed, as this would require different equipment for processing. An expeller would be required for soya.

Side-selling is a perpetual problem, but it is declining due to work with the associations, and current recovery on seed is approximately 80%. Optima offers a premium price for its seed (4,500 Mts compared to 3,200 the smallholders would receive from V&M). Offering a premium price is necessary because they are competing with the tobacco producers for smallholders' production.

Optima wishes to expand their contracts with associations to reserve the sunflower cake, as milled sunflower cake can be used as poultry feed. Optima exports cake to South Africa and Zimbabwe (280 tons out of 400 currently, with potential for export of all cake) at a factory door price of $100/ton (which is then sold in South Africa for $200/ton) – Abilio Antunes poultry had signed a letter of intent for the purchase of the cake, but decided to focus on purchasing soya instead.

Soya would be produced mainly for the local cake market – poultry (Antunes) as well as abattoirs and feed lots. The livestock industry is growing, but there is currently no feed. Soya extraction rates with a manual press are 12% (which is considered low fat, since soya oil rate is 18%). Soya can be purchased at $240-250/ton and be profitable to the processor. Farmers are interested in growing soya, as they will need a leguminous rotation crop for their tobacco fields. Competition will be strong from local traders (V&M). Optima would need 5 to 7-year financing for a soya operation.

Challenges

- In terms of financial needs, an overdraft facility would be ideal – overdraft account of $100,000 over 180 days. This would be better than working capital loans.

- High interest rates: GAPI is under pressure from the Mozambique central bank not to dollarize the economy, so the institution will not give USD loans at the 8% rate, but only lend Mts loans at 24% (a rate which is likely to drop to 19% next year).
- Equipment expansion: Optima needs a leasing company or venture capital. They have leased a truck through BIM Leasing (at an 8% interest rate), which has saved thousands of dollars. Insurance premiums on this truck run at about 5-6%.
- IFC is starting to invest, but with a small number of companies.
- Optima had a problem last year supplying its market for several months, during which its clients imported cheap palm oil from Malaysia. It took a long time for the market to exhaust this supply and start buying Optima oil again, especially as the market tends to differentiate by price and not quality. The government has imposed a 35% import duty on refined oil, but only a 5% duty on unrefined oil.

- **Mobeira Mills**

Mobeira, a large American-owned wheat and maize miller, does not currently purchase or process oilseeds, but is looking into processing animal feed. To do this, the company needs to source soya locally, because it is cheaper. Abilio Antunes buys his maize (for poultry feed) from Mobeira in Beira. There are three milling companies in Macala, three in Maputo, and one in Beira (another one is being built).

Mobeira uses local Mozambican transport, which is cheaper because most of the traffic is going in the other direction as traders are buying flour. Traders have an agent system.

Owned by Seaboard, Mobeira has access to an overdraft facility. However, access to finance is not always easy, as the Mozambique branch has to convince the Kansas office that a particular venture (such as importing concentrates for feed formulation) would be profitable. Mobeira plans to source soya from smallholders, but also needs a soya extruder for processing.

- **Abilio Antunes Poultry**

Abilio Antunes is the largest poultry producer in Manica Province, with a total of 300 employees. According to his wife and son, who help manage one of his poultry farms, he owns 57,000 layers and 18,000 broilers, sells 420,000 eggs a week, and slaughters and freezes his own chickens (with a flash-freezing facility) for the Beira market. Antunes imports soya seed cake and other feed ingredients from Zimbabwe, and mixes the various components, along with maize from his farm. He has financed expansions in operations with his own funds, but has used BIM, BCI, and GAPI for equipment financing.

- **Sunsmile**

Sunsmile's goal is to train smallholders to produce bird's eye chilies (for organic *piri-piri)* for the growing market in Europe (with Holland as the largest importer/exporter). In 2003, Sunsmile supplied smallholders with $30,000 worth of seed, but production was very low. Sunsmile has 3 district extension supervisors (each working with 10 key farmers, who themselves have farmer groups).

60% of Sunsmile's budget is capital equipment (which was a condition of the Dutch government grant that enabled de Wolff to start operations) – the budget provides for warehouse construction, a processing (i.e. cleaning) line, and vehicles.

As it was operating under capacity with chilies, Sunsmile is diversifying into beans and sesame, aiming at 40 MT of chilies, 380 MT of sesame, and four containers each of pigeon peas and cow peas.

The Dutch government approved Sunsmile's extension proposal through the end of 2004, to work with ACDI/VOCA-assisted associations. Nevertheless, Sunsmile is seeking outside funding for the warehouse, from BIM, GAPI, and a venture capitalist in Maputo (Barata). The budget will finance 50% of the warehouse.

D. Retail

- **Shoprite**

Shoprite is a South African supermarket chain with a retail outlet in Chimoio. Shoprite is expanding throughout Mozambique, with 5 new branches set to open soon. Shoprite does not have its own transport branch, but hires transporters.

Fumo, RENDER's training coordinator, introduced Jay de Toit (Chimoio Shoprite manager) to smallholders. De Toit gave the smallholders seed for import substitution crops (spinach, radish, carrots, butternut squash, James squash), but "if you give inputs, you have to almost grow the crops for them." Smallholder production is advantageous in that it reduces waste (Shoprite's sales of fruits and vegetables are relatively small, so importing them is not cost effective), but these are new crops for the farmers, and climatic conditions are not ideal for the production of certain crops (such as broccoli and cauliflower).

Shoprite buys 300-400 kgs of fruits and vegetables per week from smallholders, and their sales of fruit and vegetables have doubled since last year (while other grocery sales have remained stable due to their high prices). Volume of sales is 50% imports, 50% local products, but the value is 80% imports, 20% local products.

Each Shoprite runs as its own cost and profit center, although the division manager oversees all of the stores. Freshmark, Shoprite's fresh fruits and vegetables section, has an account is in Maputo. All money is sent to Guernsey. Many of the products Shoprite sells are imported, and it takes Shoprite 3 months to pay their suppliers. De Toit is not sure how the financing is structured, but says the cash flow is predictable.

E. Service Providers

- **Bain Agrico**

Bain Agrico, a local farm equipment provider, sources 90% of farmers' implements (tractors, equipment and parts), and operates as an agent for some companies. The company has 7 full-time employees, as well as contractors. The company plans on starting to manufacture simple equipment locally. Bain Agrico will manufacture its own steel window frames, and is currently manufacturing fencing. Their competitor is Agri Chair, but Bain offers more products.

Bert Hill (*gerente*) provided the service of packaging loans for farmers with the UDC (bank), with repayment schedules based on crops. These are the kinds of brokers that BIM leasing needs – people with experience, to package loans based on trust and knowledge.

Challenges

- Financing: "Banks here don't seem to know anything about loans."
- Liquidity: Bain Agrico gives credit to all its customers. Most farmers obtain tranches of payments from tobacco companies every 90 days, so Bain is eventually repaid, but in the meantime its liquidity is reduced, so that his ability to purchase inputs is diminished. Bain Agrico imports its products from South Africa (no longer importing from Zimbabwe), and therefore needs to pay cash up front. A rollover system is needed.
- Centralization of banking services: Bain Agrico currently has an account with Standard Bank, but has been frustrated by the time-consuming process of having every transaction authorized in Maputo. Therefore, Bain Agrico is currently in the process of opening an account with *Banco Austral*, with which it can make payments directly. They have a great need for financial lending flexibility – a $50,000 rollover account (through an overdraft facility) would be ideal.
- Leasing: The expansion of commercial farming in the area faces an equipment leasing problem. Payments are required in equal monthly installments (with no balloon payment financing), which are scheduled when tobacco producers have no money.
- Only one supplier for irrigation equipment.

"Every farmer's aim is to get rid of the yoke of the tobacco companies," although it will take them several years to pay them off. It is these tobacco companies who are currently paying for tractors and farm implements.

- **Banks**

Total Mozambique savings and credit are approximately $1 billion annually, shared between 4 institutions: *Banco Austral*, Standard Bank, *Banco Internaçaonal de Moçambique* (BIM) Group, and BCI Group. The finance sector is concentrated around Maputo (with secondary centers in Nampula and Beira). Financial institutions are not moving into the rural areas, as those locations cannot meet their conditions:

- Low management costs
- Low risk
- Profitable, well-managed businesses

- High collateral (10%)
- High interest rates

One of the greatest challenges facing financial institutions in Mozambique is the lack of institutional capacity – banks do not have agricultural experts, and have done a poor job of packaging and following up on agricultural loans. There is no agricultural bank.

Banks tend to offer short-term loans, rather than medium- or long-term loans, due to farmers' lack of liquidity. Hence, potential for farmers lies less in investment, and more in areas such as equipment leasing. Risk-sharing may help make rural lending a possibility for financial institutions. This has been implemented by BIM Leasing Company, but is a complex arrangement necessitating legal documentation.

- ***Banco Austral***

Formerly the People's Development Bank, *Banco Austral* used to lend money to low-income population (including farmers), and is therefore one of the rare commercial banks with significant agricultural experience. However, the bank does not currently have any agricultural loans outstanding, although it claims to be very interested in getting back into agricultural lending, and has four agricultural loans in process.

The loan selection process is based on capacity – the technical aspect and guarantees offered as well as the borrower's asset base – rather than land size. Loan mechanisms are ensuring that there is a guarantee and conviction that it will be carried out. Zimbabwean farmers are very committed, but are considered high-risk because they have no asset base.

Banco Austral currently has 40 outstanding loans (compared to 20,000 deposits), with a minimum loan size of around 30 million. To get a loan, potential borrowers must present their business/production plan, after which the bank will make a site visit to see if they have sufficient technical capacity. Would-be borrowers must then produce a pro forma invoice of equipment you intend to buy. The bank then establishes a repayment plan based on the whole cash flow (don't have to make interest payments in between) and income base. Loan approval takes under 2 weeks. The maximum period for a loan is usually 36 months, although a grace period is possible for fruit trees.

Banco Austral claims to offer an overdraft system (*discuberto autorizado*), based on the borrowers' cash flow.
Puts 50% of loan amount into client's account as a guarantee
The plan for 2004 if for a total loan portfolio of 10 billion Mts (USD 400,000)

Interest rates:

- 29-31% for Mts overdraft, on a daily declining balance
- 29% interest rate for Mts
- 5-6% interest rate in $
- No minimum limit for average balance

The bank is looking to apply lower interest rates for agriculture – senior management are looking at this.

- **Standard Bank**

Standard Bank is a completely private commercial bank. The bank has some experience in agriculture, but currently has no clients in the agricultural sector. Standard Bank claims that the reason they have steered clear of the agricultural sector is *Banco Austral's* financial problems in this sector and collapse due to low repayment rates. Even outside of the agricultural sector, Standard Bank's credit portfolio is very small. The Chimoio branch currently has seven staff, and hasn't grown in years, although it may hire one more employee for agricultural lending.

The Chimoio branch has over 1,000 depositors, with 56 billion Mts in current deposits (only 4 billion Mts in time deposits), for a total of 60 billion Mts. Clients (i.e. depositors) range from small farmers to commercial farmers (including 40 English-speaking farmers), to large enterprises such as MLT and Dimon, Coca-Cola and Shoprite. The minimum deposit to open a demand deposit account is 2.5 million Mts (approximately USD 100), and the minimum average monthly balance is 2.5 million Mts. No interest is paid on demand deposits. The minimum deposit for a time deposit account is 10 million Mts, with interest rates paid based on a rate table. The bank does not offer mobile savings.

Standard Bank currently has only four outstanding loans (mostly to traders), for a total of 500 million Mts (USD 20,000). The maximum length for a loan is one year, and the average interest rate is 42%. The bank takes external guarantees, and charges a 2% penalty on the remaining balance for late payments. In the short term, Standard Bank wants to offer overdraft facilities and supplier-buyer financing; in the long term, the bank wants to get into lease financing.

The credit department is centralized in Maputo (even for tiny loans) – branches can analyze loans and give opinions, but cannot make decisions. The bank is hiring an agricultural expert from Stanbic Bank, who will be based in Chimoio and will assist with agricultural lending decisions for Tete, Beira, and Chimoio. All of the bank's client information is online, and can be accessed by Maputo and the bank's other branches. Standard Bank anticipates changes as the new management from South Africa takes over (Bank Standard Totta was bought out by Standard Chartered last month). Portuguese culture has contributed to the centralized nature of decision-making at BSTM.

- **BIM Group**

Grupo Banco Internaçaonal de Moçambique (BIM) offers services to all sectors of the economy, including the agricultural sector (mainly through loans to Zimbabwean farmers). Like many banks, it provides salary payment services to a large number of companies, as well as bill-paying services (electricity, water, phone lines). The BIM ATM in Chimoio has 3,000 operations a day – people are starting to learn the system.

BIM Investment: loan decisions are based on risk rather than value – if the risk is considered low (however, there is no stated formula for measuring this), the branch is authorized to make the decision; otherwise, the decision must be made in Maputo. The bank also offers salary lending, which is considered a low-risk activity. Interest rates are negotiable, depending on the size of the investment. Their index of interest rates is as follows:

- Foreign currency loans are LIBOR-based (usual minimum LIBOR+5%)
- Local currency loans are MIBOR-based (usual minimum MIBOR+5%). MIBOR on April 16 is 29%.
- The *Gerente of Grupo* BIM was not willing to disclose loan figures.

Agricultural lending has a different kind of cash flow: investment up to 5 years, with a 2-year grace period (depending on the guarantee). Different terms can be negotiated case by case, demonstrating a certain level of flexibility. BIM outsources specialists from *Ferrera Construçoes* (which is authorized by the Ministry of Public Works) for agricultural loan risk evaluation – although these specialists do not have to be agronomists.

BIM has a group that recovers bad debt. The bank seized a brick factory when it went under, and is trying to sell it. The bank lost a lot of money (through the merger with BCM) when Textafrica went under.

Finally, BIM claims to have an overdraft facility, extending even to 90-120 days, but no-one in the area seems to be aware of this.

- **Finance Companies**
    - **GAPI**

GAPI is a finance institution that operates in Chimoio and throughout Mozambique, and is willing to make agricultural loans, although their interest rates remain high and even their excessive operating costs prevent them from offering small loans.

GAPI directly assists the Sunflower and Sesame Association in Sussundenga, as well as other associations (Merera and Chicanga), including a fruit producers' association, which is very organized (although they are not officially registered). RENDER helped to prepare an agreement with this unregistered association, and the District Administrator and Area Regional Office signed the agreement. GAPI prefers to lend to associations rather than through the UCAMA, as such direct loans are easier to control and monitor for repayment. The advantage of lending to associations is that all members share risk in self-regulating mechanisms.

Most recently, GAPI's problems have centered around a decrease in reimbursement rates due to a lack of rain. In case of weather problems, GAPI's strategy is to reprogram the loans, and sometimes finance more.

- **Micro-finance Institutions**

Mozambique's MFI portfolio stands at only $8.5 million, shared between 15 institutions (not all of which are business-oriented) and 52,000 clients. One of the largest MFIs is *Novo Banco*, which holds 34% of the business and 15% of the clientele. It has a $200,000 loss, but could be profitable. Although it currently operates only in urban areas (and hence does not have a branch in Manica Province), it has the potential of easily reaching the peri-urban population.

Challenges:

- Financial
- Legal
- Management capacity
- Markets
- Institutional

  - **Cresce**

Cresce is a microfinance institution operating in the Chimoio area, with one main office, and the greater Beira Corridor, with two smaller branches in Manica Province. Funded by CARE and DFID, the institution lends to small groups and associations with a clientele comprised of artisans, manufacturers, and small retailers. Cresce charges a low interest rate of 3%, and has three different types of repayment plans: weekly, monthly, and bi-monthly (every two weeks). These loans are not suited for agricultural lending, and Cresce does not lend to farmers.

Cresce's outstanding portfolio is $217,000, distributed between 2,649 clients, although the number of actual loans is smaller since many loan recipients are actually small associations. Hence average loan size is less than $100. Minimum loan size is $50, and maximum is $850.

Cresce offers credits to two types of borrowers: individuals (from whom the institution requires more collateral), and groups of five people. Loan repayments are made weekly, and the institution reports a 97% on-time repayment rate. With a computerized database keeping track of outstanding loans, the nine Chimoio-based loan officers are able to visit potential clients and make a case to the institution for a loan, which is decided by a committee. These officers receive a bonus when their clients have good repayment rates. When clients die, Cresce forgives 50% of the loan.

Cresce reports that its challenges lie mainly on the level of human resource capacity: it is very difficult to find qualified staff, and particularly staff with high standards of honesty and integrity.

The institution is currently seeking funding from other NGOs to cover its 200 million Mts/month (approximately USD10,000) operating costs.

- **ADIPSA, Chimoio**

ADIPSA looks forward to Iven Ose's consultancy from Cape Verde in May 2004 (through the RENDER project) – he will give recommendations on how to create solidarity groups.

Proposed creation of a brokerage institution (see recommendation number 4):
Celia agrees that one person in each district can monitor credit – take commission from the financial institution and the client. The farmer must share the risk, so that all have a stake in the repayment. This will also help give banks confidence.

ADIPSA can support training of promoters through financing, but promoters currently have no capacity and are in desperate need of training (with an NGO facilitating the training). This would not solve every problem, as decisions are still centralized in Maputo.

It is possible to get land titles, but farmers do not have the necessary funds for this. The *Agencia* would create an advisory board. Agent needs to know all the risk. The agency would start with the lowest-risk loans, where production is done on contract and under irrigation.

ADIPSA would be interested in helping to create this type of structure, but needs the proposal for approval from the steering committee in Maputo in June-July 2004.

APPENDIX IV

List of Interviewees

TABLE 4: INTERVIEW LIST (APRIL 12-20)

Interview	Name	Institution	Title	Date	Location	City
1	Carvalho Neves	Ctr for the Promotion of Rural Fin. Svcs (D&T)		12-Apr	Deloitte & Touche	Maputo
2	Philip Tonks	USAID-Maputo		12-Apr	Deloitte & Touche	Maputo
3	Todd Thompson	USAID-Maputo		12-Apr	USAID	Maputo
	Elsa Mapilele	USAID-Maputo		12-Apr	USAID	Maputo
4	John Kingman Walter	Technoserve-Maputo		12-Apr	Technoserve	Maputo
5	Antonio Souto	GAPI	Managing Dir.	12-Apr	GAPI	Maputo
6	Bodo Lieberam	Novo Banco		13-Apr	Novo Banco	Maputo
	Jennifer McDonald	Novo Banco		13-Apr	Novo Banco	Maputo
7	Sr. Issufo Valy Adamo	Commercial Farmer	Farmer	14-Apr	ACDI/VOCA	Chimoio
8	Rui Santana Afonso	Technoserve	Counselor	14-Apr	Technoserve	Chimoio
9	Alex Tendai	Savon Trading Company	Accountant	15-Apr	Savon Trading	Chimoio
10	Ashley Bilben	Zim Commercial Farmer	Farmer	15-Apr	Savon Trading	Chimoio
11	Bert Hill	Baim Agrico	Gerente	15-Apr	Bain Agrico	Chimoio
12	Joaquim Almeida	Commercial Farmer	Farmer	15-Apr	Restaurant	Chimoio
13	Samuel Sitoe	Standard Bank (formerly BSTM)	Gerente	15-Apr	Standard Bank	Chimoio
14	Bernard Hacking ("Ox")	Manica Investors' Association	Farmer	16-Apr	ACDI/VOCA	Chimoio
	Brendan Evans	Manica Investors' Association	Farmer, VP	16-Apr	ACDI/VOCA	Chimoio
15	Joaquim Oliveirar	Magariro	Executive Director	16-Apr	Magariro	Chimoio
16	John Smith ("Porky")	Mozambique Leaf Tobacco (MLT)		16-Apr	MLT	Chimoio
17	Angela Magalhaes	Banco Austral	Gerente	16-Apr	ACDI/VOCA	Chimoio
18	Ricardo Brige	Grupo BIM	Gerente	16-Apr	BIM	Chimoio
19	Philippa Wrench	Agrifocus		16-Apr	Agrifocus	Chimoio
	Alberto Rafael Panicela	Agrifocus		16-Apr	Agrifocus	Chimoio
20	Farmer	Sussundenga UDAC		17-Apr	UDAC	Sussundenga
	Pascal (Gaspar) Alves	ACDI/VOCA		17-Apr	UDAC	Sussundenga
21	Santos Savalho	Oil press owner	Processor	17-Apr	Oil press	Sussundenga
22	Farmer	Medium-scale farmer, Sussundenga UDAC	Farmer	17-Apr	Farm	Sussundenga
23	Bruno Leonardo	ACDI/VOCA		19-Apr	ACDI/VOCA	Chimoio
24	Bernhardt Van Dyk	SEMOC	Director Geral	19-Apr	SEMOC	Chimoio
	Brenda Van Dyk	SEMOC		19-Apr	SEMOC	Chimoio
	Antonio Jeremias Majate	SEMOC	Director Comercial	19-Apr	SEMOC	Chimoio
	Simon Munakamwe	SEMOC	Seed Prod Mng	19-Apr	SEMOC	Chimoio
25	Pine Panaar	Optima Industrial	Processor	19-Apr	ACDI/VOCA	Chimoio
26	Jay de Toit	Shoprite		19-Apr	Shoprite	Chimoio
27	Francisco Lino Junior	GAPI	Gerente	19-Apr	GAPI	Chimoio
	Salomao	GAPI	Regional Manager	19-Apr	GAPI	Chimoio
28	Celia Ribeiro	ADIPSA		19-Apr	ADIPSA	Chimoio
29		DPADR		19-Apr	DPADR	Chimoio
30	Sheila Antunes	Abilio Antunes poultry		19-Apr	Poultry Farm	Chimoio
31	Goswin Arendsen de Wolff	Sunsmile		19-Apr		Chimoio
32	Peter and Vicky Bowen	Zim Commercial Farmer	Farmer	19-Apr		Chimoio
33	Peter Nel	Pimenta de Mocambique		20-Apr		Chimoio
34	Domingo Luis	Cresce (MFI)		20-Apr	Cresce	Chimoio
35	David Maylor	Mobeira Mill		20-Apr		Chimoio

APPENDIX V

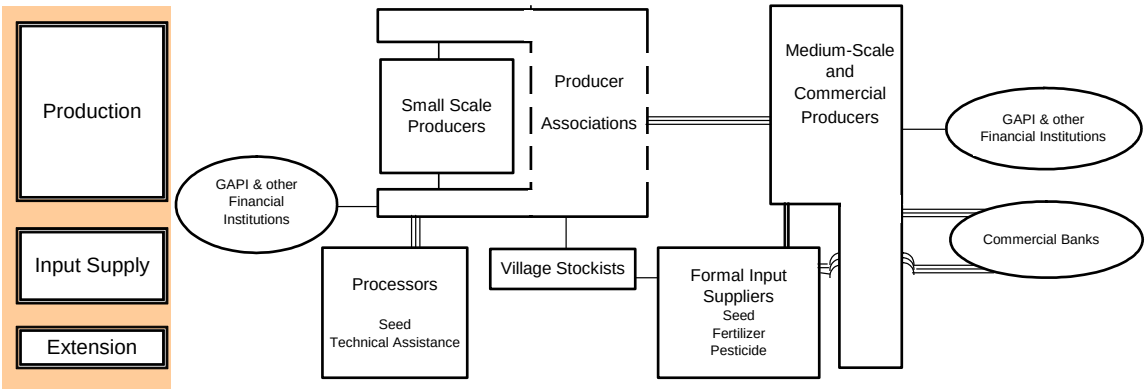
PowerPoint Presentation to USAID/Mozambique

This attachment will be presented as a separate attachment in MS PowerPoint format.

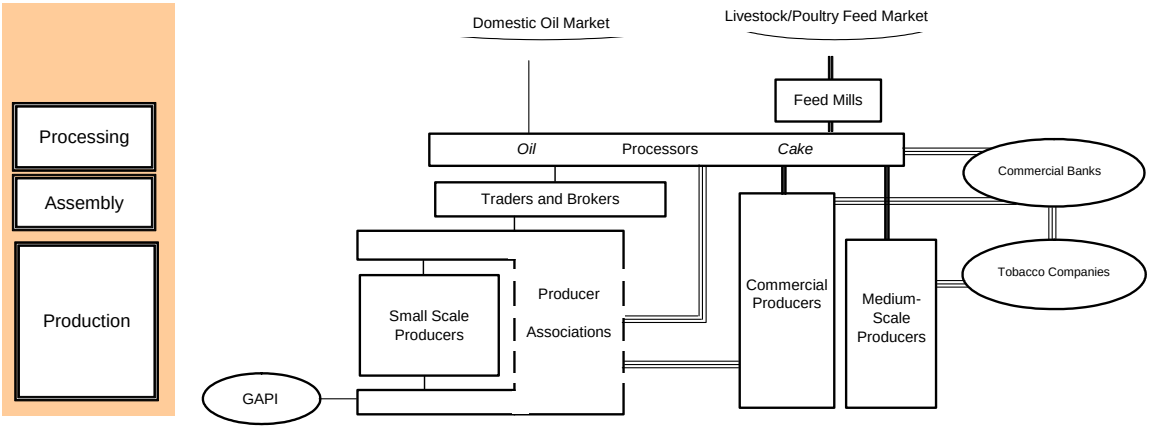
APPENDIX VI
Subsector Map Breakouts

The following 'zoom-ins' on the oilseeds subsector map are provided as a tool to illustrate the complex relationships between different participants in the different market functions of the value chain.

Zoom in on Extension and Input Supply to Production



Zoom in on Production to Processing



APPENDIX VII
Financial Services Value Chain

The following subsector maps focus on the financial relationships within (and into) the oilseeds value chain. Each map focuses on the provision of a specific financial service: a) input credit, b) commercial bank lending, and c) lease financing. The shaded boxes indicate the value chain members who participate in these financial service transactions.

Figure 1a: Mozambique Oilseeds Input Credit

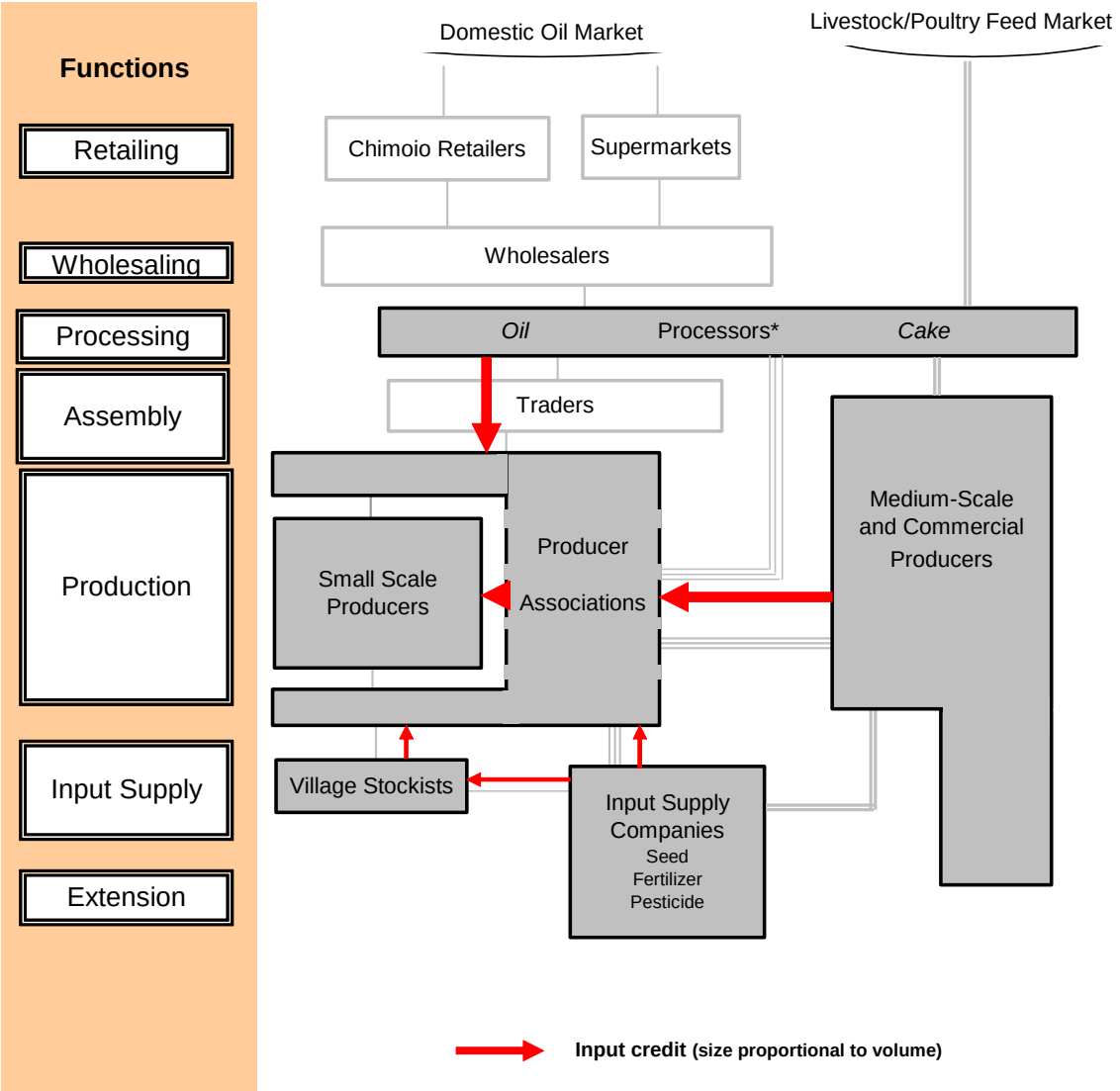


Figure 1b: Mozambique Oilseeds Commercial Bank Lending

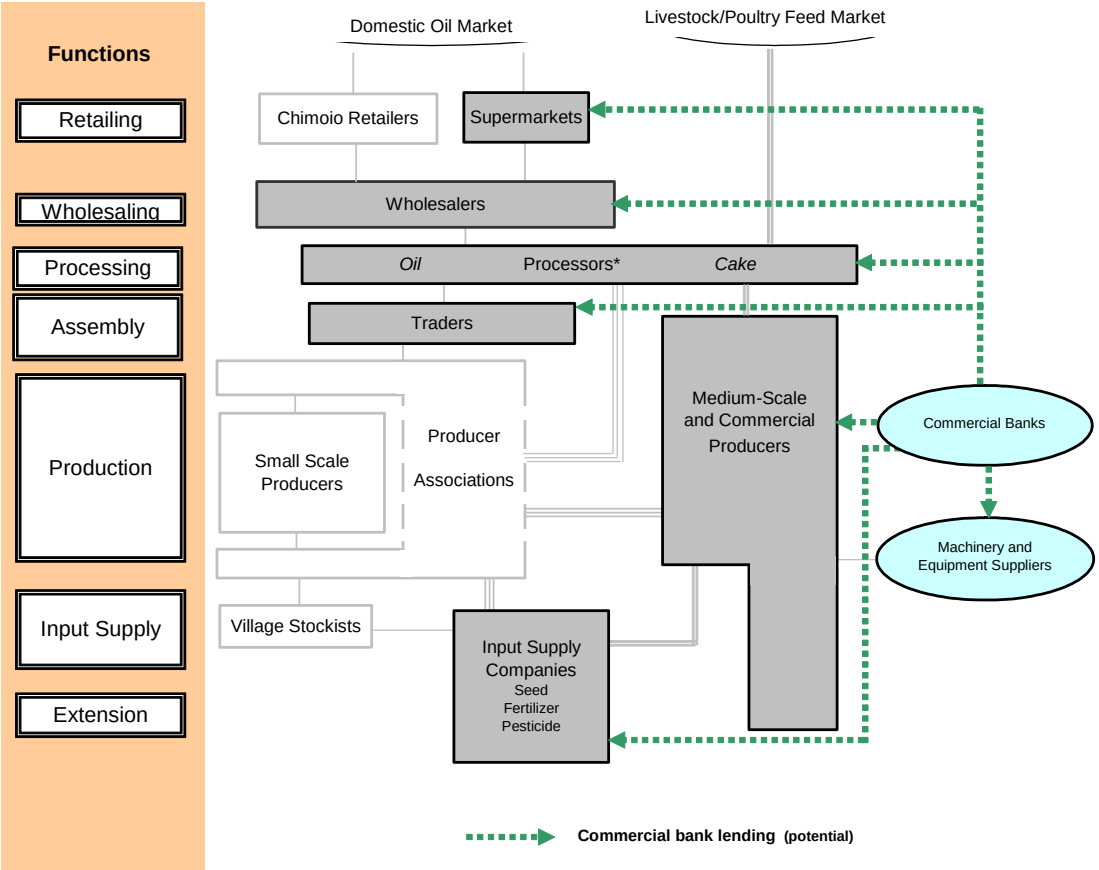
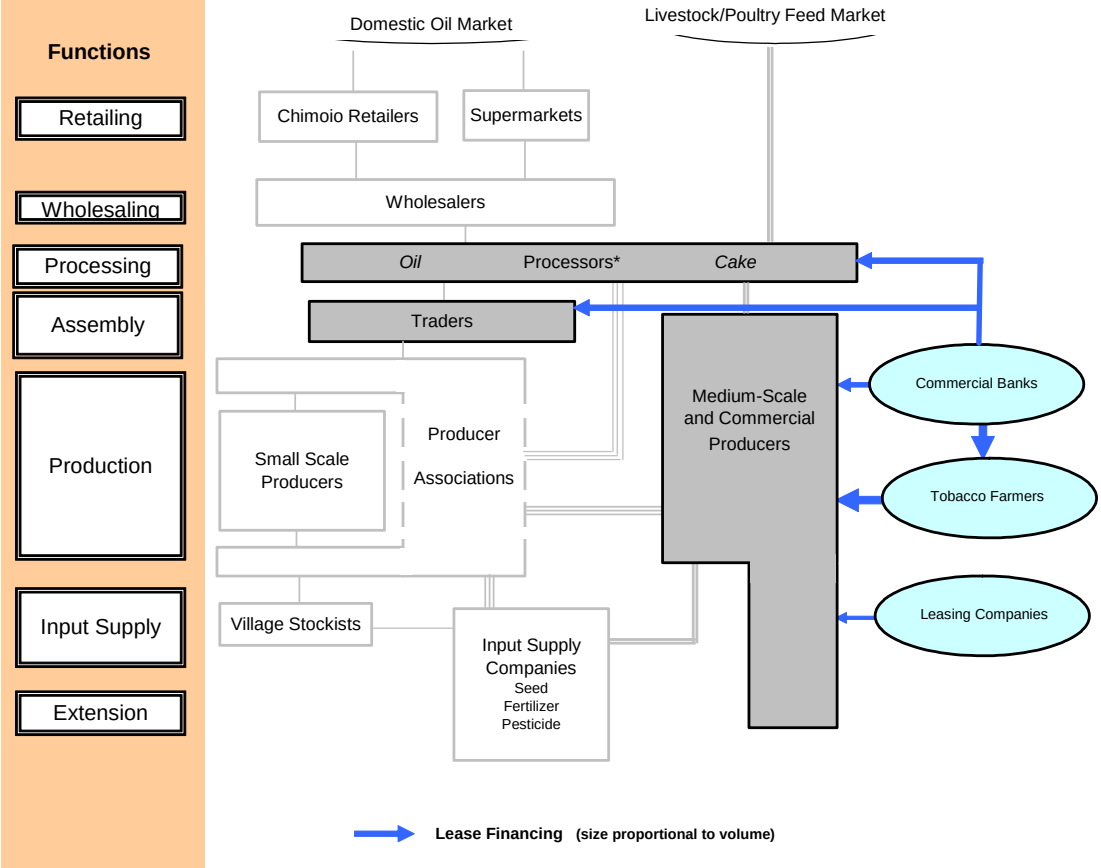


Figure 1c: Mozambique Oilseeds Lease Financing



APPENDIX VIII

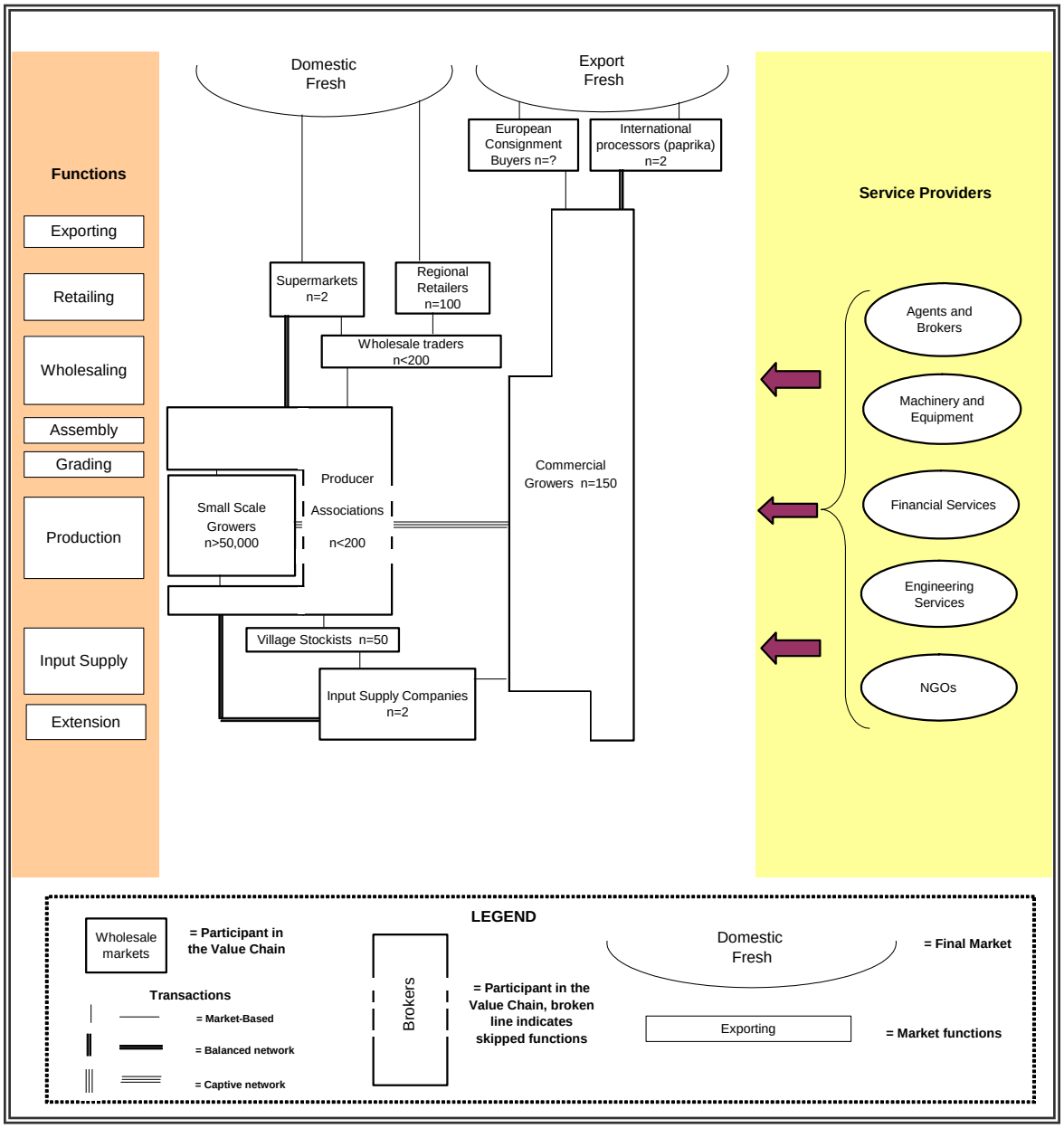
The Horticulture Subsector[27]

Summary and Subsector map

As the map below (Figure 6) indicates, the horticulture subsector is comprised of two chains, one leading to the domestic market and the other ending in the export market. Principal functions in both chains include extension, input supply, production, assembly and grading, wholesaling, retailing and exporting, primarily to the EU market. The subsector provides income for over 10,000 households in the Chimoio District, which is the production hub or *cluster* for the subsector. As indicated above, the horticulture subsector is expanding rapidly, and is expected to account for almost half of the likely $16 million in exports in 2005. This rapid growth has altered governance relationships between firms, which are summarized in the following section, along with principal functions and participants. For each function the study team interviewed participants (several of which overlapped with participants in the oilseeds value chain) to identify the critical constraints to growth and the degree to which improved financial services access was critical to resolving identified constraints. These constraints are summarized below.

[27] For a more detailed analysis of this subsector and its opportunities see Technoserve, "Assessing the Competitiveness of the Horticultural Sector in Manica Province." International Finance Corporation, 2003.

Figure 6: Mozambique Horticulture Subsector Map



Subsector Participants, Market Functions, and Governance

- ***Extension***

Extension services in horticulture are provided primarily by NGOs, commercial farmers who subcontract with smaller farmers, and producer associations. Public extension services do not play a significant role in extension in the horticulture value chain, even as they are largely absent from the oilseeds value chain. As can be found in many countries, public sector extension services may never be as adept and agile as private sector participants in the value chain at

turning market signals into training in production and post-harvest technology[28]. Commercial farmers provide extension support as an embedded service, recovering the cost of service delivery when they purchase the final product from the outgrowers or their associations. Associations are still relatively weak, particularly in their capacity to deliver quality extension and product control services. This, combined with the fact that commercial horticulture production is still new to smallholders, means that commercial farmers have to provide a higher level of extension services to improve the quality of production and post harvest handling than can be sustained in the longer term. NGOs are trying to help close the skills gap by strengthening the capacity of smallholder associations to provide extension services and control for product quality, quantity, and timing to their members. Buyers, whether processors, larger growers, or exporters, will continue to dominate the delivery of extension services to smallholders.

- ***Input Supply***

The input suppliers participating in the horticulture value chain are identical to the input suppliers in the oilseeds value chain, and the dynamics and governance relationships to other participants are similar. See point 3.1 above.

- ***Production***

Production of horticulture products along the Beira Corridor is dominated by smallholders who produce predominantly for their own consumption and local markets, but also sell to wholesalers who supply regional Mozambican markets. A small but rapidly expanding number of smallholders, organized into associations, produce on contract for commercial farmers, who supply regional and export markets. Rough estimates of the number of smallholders producing horticultural crops in the area exceed 50,000.

The second, quickly growing group of producers, is the commercial farmers. This group consists of 15-30 Mozambican nationals who produce for regional Mozambican markets, as well as Zimbabwean nationals who were forced out of Zimbabwe because of the Zimbabwean Government's land reform program, and are reestablishing themselves in the Beira Corridor. These Zimbabwean commercial Zimbabwean nationals producing in Mozambique produce for regional and export markets. Most of the Zimbabwean émigrés interviewed for this study believe that their future is dependent on their ability to contribute to economic growth that benefits smallholders and commercial producers as well as processors. As a result, most work extensively with outgrowers, although some are more efficient than others at assisting smallholders to form functioning producer groups.

[28] A notable exception to this is where private-public partnerships are developed in which agricultural extension agents are seconded to private producers who enter into production contracts with large numbers of smallholders. The backward linkages to smallholders is considered a quasi-public good because of the employment benefits; private producers or exporters have access to the information on the attributes demanded by the final consumer. In a number of countries, seconded extension officers and performance based incentives for these agents have been successful at accelerating the integration of smallholders into competitive markets.

As is the case in the oilseeds subsector, much of the growth and expansion in commercial horticultural production results from a favorable enabling environment.

There are currently close to 100 commercial farmers in Manica Province who are either farming or have registered for a farm. It is difficult to assess how many more might arrive in the future since the majority of commercial farmers have already been force out of farming in Zimbabwe. There are also just a few who have come from South Africa, but a large number of new commercial farmers is not foreseen from South Africa at this time.

Along with the commercial farmers that are establishing themselves, there are a number of non-commercial farming businesses that have established themselves in Manica Province too. These include not only agriculture related, but also non-agriculture related. The best number that could be obtained was in the range of 25 businesses.

Those involved in agriculture are very interested in using the smallholder sector in out-grower schemes. These companies, along with various out-grower schemes coordinated by the commercial farming sector is expected to expand until it numbers somewhere between 10,000 and 20,000 smallholders.

The principal constraint to expansion for these commercial farmers and for the smallholders with whom they contract is inadequate access to capital. Larger commercial producers need access to both working capital for inputs as well as investment capital to upgrade their production and post-harvest systems to meet EU market requirements, which necessitates investment in drip irrigation systems, packhouses, and cool chain facilities. These same producers also need access to short-term capital for the purchase of inputs for their own and their subcontract outgrowers' production requirements. Since commercial outgrower relationships are relatively new in Mozambique and many commercial growers are also newly arrived in-country, smallholders generally require cash payment for their crops at the point of delivery, which creates an additional short term financing need for the commercial growers. Smallholder producers also lack facilities through which they can mobilize their savings for production needs and/or borrow working or investment capital for inputs and improved and appropriate irrigation and cool store facilities.

Currently smallholders are highly dependent on contract buyers to supply inputs, extension services, and cash payments at harvest. Although this relationship has the potential to create smallholder dependency, the number of commercial growers who are competing for high quality outgrowers, the fact that market demand far exceeds current capacity, and the potential political cost to commercial growers who do not treat their subcontract growers well, all weigh against a severe imbalance of power in production transactions. Interdependency best describes the relationship between small-scale and larger producers and buyers: smallholders need information on how to produce for new markets and access to inputs, and commercial buyers and growers

need the additional production base that smallholders provide and must demonstrate that they are investing in a manner that benefits the local economy.

- ***Processing***

There is currently very little processing of horticulture products in Mozambique. One exception is the processing of paprika for industrial buyers, primarily in Spain. International paprika buyers provide input financing through *Pimenta de Moçambique*. Another firm, Waluru Enterprises, has obtained financing to invest in a post-harvest handling facility but this was not yet operational at the time of this study. Processing of horticulture products (particularly fruits and tomatoes) for domestic and regional markets is an investment opportunity with considerable potential (Technoserve 2004). Investors in processing are likely to face the same constraints as those identified above for oilseed processors.

- ***Wholesale and retail***

With very few exceptions[29], horticulture wholesalers serve the domestic market. Traders purchase from village producers directly or through dedicated buying agents, generally paying cash on delivery. Traders prefer working with growers with whom they have been buying from for some time. When production exceeds domestic demand, wholesalers are able to take product on consignment, paying growers only after they sell their inventories. Growth potential in this market channel is limited in the short term because of slow income growth.

The domestic retail market is dominated by small-scale vegetable retailers operating in cities, and regional market centers. Retailers generally purchase from wholesale traders; a small number of retailers purchase directly from growers. This market channel has very limited potential for growth.

A very small but rapidly expanding market participant at the retail level is the supermarket. There are two supermarkets operating in the Beira Corridor, only one of which (Shoprite, a South African chain) is in Manica Province. The supermarkets are an urban center phenomenon. Currently they purchase fresh horticulture products from wholesalers, their South African suppliers, and in increasing measure from local small-scale growers. The Shoprite buyer interviewed expressed interest in purchasing from smallholders through their associations, but smallholder sales to supermarkets are as yet insignificant. Supermarkets also sell processed fruits and vegetables, and juices. Most of these are imported from South Africa.

Supermarkets purchase from local producers for cash. They have not yet begun contracting with local growers, although this mechanism to ensure quality is likely to emerge in the next few years as supermarkets gain increasing market share.

[29] The study team was told that there are occasional cross-border sales into Malawi when price gaps warrant the transport of produce to markets with short term deficits.

- ***Import*** (global market buyers)

No horticulture exporter in Mozambique was selling directly to specialty or supermarket buyers at the time of this assessment.[30] Several commercial growers were selling into the consignment buyer market in Europe. The consignment market is the entry market for many exporters, as quality standards lag behind EUREPGAP requirements. Consignment buyers pay after they sell the delivered product; they do not pre-finance. All production costs and risks are borne by the producers.

Higher end international buyers, particularly the large UK and Netherlands supermarkets, do not pre-finance their suppliers. They do provide detailed specifications on production and post harvest controls to their suppliers.

Analysis of Upgrading in the Horticulture Sector

The biggest growth opportunity in the horticulture sector in the Beira Corridor is contract production for the fresh and processed markets. Commercial growers will continue to need to contract with smallholder producers to maintain an adequate production base and sufficient political capital to offset the risk of operating as foreigners in Mozambique. Specialization will result in commercial growers, processors, and exporters shedding more production to smallholders – if smallholders are able to access the inputs and organize themselves into functioning groups to achieve post-harvest economies of scale. Increasing contract production opportunities will require significant investments in post-harvest handling infrastructure: cold-chain facilities, packhouses, and processing facilities including packaging infrastructure. Today significant expansion in contract production is constrained by a lack of credit. Contract buyers generally provide input financing and technical assistance, and then purchase production from their growers before final sale.

The table below summarizes key upgrading opportunities and constraints in the horticulture subsector. Upgrading opportunities constrained by inadequate or insufficient access to financing are summarized in Table 3 in section 4.4.

Table 4: Analysis of Upgrading Opportunities in the Horticulture Subsector

Function/ Participant	Upgrading Opportunity	Constraints to Upgrading
Input supply	Expand input distribution through short term financing	No overdraft facilities
Smallholder Production	Strengthen association capacity to assemble, and control for quality Increase smallholder access to production and marketing finance	Inadequate smallholder-contract buyer experience Inadequate smallholder access to savings and credit services; lack of overdraft facilities for buyers and input suppliers.

[30] The exception is paprika. Paprika producers grow on contract for *Pimenta de Moçambique*, which sells to two international processors, through which the company obtains pre-financing.

Commercial Production	Establish EUREPGAP-certified packing facilities Establish cold chain facilities	Lack of collective action by Beira commercial producers to bring leasing and venture capital facilities
Processing	Establish processing plants for fruit and vegetables	Need for expansion of the subsector in the next couple of years as precursor to investment; inadequate access to leasing and venture capital

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Task Order: Knowledge and Practice
Contractor: **ACDI/VOCA**